PLANNING AND ZONING BOARD/LOCAL PLANNING AGENCY

SPECIAL MEETING AGENDA

THURSDAY, APRIL 24, 2025 - 5:30 PM

CITY HALL - COMMISSION CHAMBERS

1126 EAST STATE ROAD 434, WINTER SPRINGS, FLORIDA

CALL TO ORDER
Roll Call
Invocation
Pledge of Allegiance
Agenda Changes

AWARDS AND PRESENTATIONS

INFORMATIONAL AGENDA

PUBLIC INPUT
Anyone who wishes to speak during Public Input on any Agenda Item or subject matter will need to fill out a "Public Input" form. Individuals will limit their comments to three (3) minutes, and representatives of groups or homeowners' associations shall limit their comments to five (5) minutes, unless otherwise determined by the City Commission.

CONSENT AGENDA

PUBLIC HEARINGS AGENDA

400. Sutton Crossings Phase 1 (Ace Hardware) – Final Engineering and Development Plans, Waivers, and Development Agreement.
SC AH Staff Report PZB 04.24.2025 FINAL.pdf
Sutton Crossings EPB Engineering Development Agreement_Draft_PZB04242025.pdf
SC AH Application for Final Engineering Development Plans.pdf
SC AH Application for Development Agreement.pdf
SC AH Application for Waiver - Drive Thru Window Side Yard.pdf
SC AH Application for Waiver - Lot Size.pdf
SC AH Application for Waiver - SR434 Master Monument Sign.pdf
SC AH Application for Waiver - Statistical Tree Survey.pdf
SC AH Application for Waiver Specimen Tree Removal.pdf
SC AH Applicatrion for Waiver - Tuskawilla Rd Master Monument Sign.pdf
SC AH Approved Aesthetic Review Plans 2023.pdf
SC AH Civil Plans DSS Final Engineering.pdf
SC AH Community Workshop Flyer.pdf
SC AH Drainage Report Sutton Crossings.pdf
SC AH Environmental Species and Wetland Report.pdf
SC AH Geotechnical Report.pdf
SC AH Landscape Plans.pdf
SC AH Phase 1 Environmental Report Sutton Crossings.pdf
SC AH Sutton Crossings Master Development Plans.pdf
SC AH TIA.pdf
SC AH Tree Survey Aborist Memo.pdf

SC AH Sutton Crossings Re-plat and Legal Description.pdf

401. Chick-Fil-A, S.R. 434 and Michael Blake Boulevard – Final Engineering and Development Plans, Aesthetic Review, Waivers, and Development Agreement.
Chik-Fil-A Staff Report PZB 04.24.2024 FINAL.pdf
Development Agreement _ Blue Orange Holdings LLC_Draft_PZB04042025.pdf
CFA Application for Final Engineering and Development Plan.pdf
CFA Application for Aesthetic Review.pdf
CFA Application for Development Agreement.pdf
CFA Application for Waivers.pdf
CFA Building Elevations A.pdf
CFA Building Elevations B.pdf
CFA Civil Plans DSS Final Engineering Plans.pdf
CFA Community Workshop Flyer.pdf
CFA Drainage Report Sutton Crossings.pdf
CFA Environmental Species and Wetland Report.pdf
CFA Geotech Other.pdf
CFA Landscape Plans.pdf
CFA Overall Traffic Impact Analysis.pdf
CFA Phase 1 Environmental Report Sutton Crossings.pdf
CFA Queue Study Traffic Study Final.pdf
CFA Sutton Crossings Master Development Plans.pdf
CFA Sutton Crossings Re-plat and Legal Description.pdf

REGULAR AGENDA

PUBLIC INPUT

Anyone who wishes to speak during Public Input on any Agenda Item or subject matter will need to fill out a "Public Input" form. Individuals will limit their comments to three (3) minutes, and representatives of groups or homeowners' associations shall limit their comments to five (5) minutes, unless otherwise determined by the City Commission.

ADJOURNMENT

PUBLIC NOTICE

This is a Public Meeting, and the public is invited to attend and this Agenda is subject to change. Please be advised that one (1) or more Members of any of the City's Advisory Boards and Committees may be in attendance at this Meeting, and may participate in discussions.

Persons with disabilities needing assistance to participate in any of these proceedings should contact the City of Winter Springs at (407) 327-1800 "at least 48 hours prior to meeting, a written request by a physically handicapped person to attend the meeting, directed to the chairperson or director of such board, commission, agency, or authority" - per Section 286.26 Florida Statutes.

"If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based" - per Section 286.0105 Florida Statutes.

PUBLIC HEARINGS AGENDA ITEM 400

PLANNING AND ZONING BOARD/LOCAL PLANNING AGENCY AGENDA | APRIL 24, 2025 SPECIAL MEETING

TITLE

Sutton Crossings Phase 1 (Ace Hardware) – Final Engineering and Development Plans, Waivers, and Development Agreement.

SUMMARY

The Community Development Department requests that the City Commission hold a Public Hearing to consider the Final Engineering/Site Plan Review, Waiver, and Development Agreement in order for the applicant to construct a ±23,517 square foot (SF) hardware store with three additional tenant spaces.

FUNDING SOURCE

RECOMMENDATION

The Community Development Department requests that the City Commission hold a Public Hearing to consider the Final Engineering/Site Plan Review, Waiver, and Development Agreement in order for the applicant to construct a ±23,517 square foot (SF) hardware store with three additional tenant spaces.

PUBLIC HEARINGS AGENDA ITEM

PLANNING & ZONING BOARD

Thursday, April 24, 2025 | REGULAR MEETING

TITLE

Sutton Crossings Phase 1 (Ace Hardware) – Final Engineering and Development Plans, Waiver, and Development Agreement.

SUMMARY

The Community Development Department requests that the City Commission hold a Public Hearing to consider the Final Engineering and Site Plans, Waivers, Specimen Tree removal, and Development Agreement in order for the applicant to construct a ±23,517 square foot (SF) hardware store with three additional tenant spaces and to construct all supporting infrastructure for the Sutton Crossings shopping center.

General Information				
Applicant	EPB Engineering & Construction PLLC			
Property Owner(s)	EPB Engineering & Construction PLLC			
Location	Northeast corner of Tuskawilla Road and Michael Blake Road			
Tract Size	±5.88 Acres			
Parcel ID Number	01-21-30-501-0000-0010; 26-20-30-5AR-0A00-008D; and 26-20-30-5AR-0A00-008H			
Zoning Designation	Town Center District (T-C) | T5 Transect | Urban Center Zone			
FLUM Designation	Town Center District			
Adjacent Land Use	North: Vacant East: Vacant		South: Vacant West: Tuskawilla Rd.	
Principle building setbacks (from property line)	Front/principle plane: 25 ft. min. - 50 ft. max (from front property line)	Rear: 15 ft. (from rear property line)	Side: 5 ft. min, 100 ft. max. (from side property line)	Frontage buildout: 20% min. (at front setback)
Development Standards	Lot Width: 18 ft. min., 180 ft. max.	Lot Depth: 30 ft. min., 160 ft. max.	Lot Coverage: 100% max.	2 stories minimum 3 stories maximum
Development Permits	Not applicable			

Development Agreement	Development Agreement | Pending
Code Enforcement	Not applicable
City Liens	Not applicable

Background:
On April 24, 2023, the City Commission approved the Aesthetic Plan for the Ace Hardware. The applicant is intending for the Ace Hardware to be Phase 1 of a greater development referred to as Sutton Crossings. The Ace Hardware (with three additional attached retail suites) is intended to be constructed on the eventual Lot 1 of the Sutton Crossings shopping center, which is intended to have five lots when the final plat is approved. The proposed applications provide for the clearing and grading and installation of all common infrastructure for the Sutton Crossings shopping center, along with the site plan specific to Ace Hardware with the three attached tenant spaces. Future development in the Sutton Crossings shopping center will require further City Commission approval of individual site plans.

The subject property consists of three parcels totaling approximately 5.88 acres located on the northeast corner of Tuskawilla Rd. and Michael Blake Blvd. The property is currently bounded on the north and east sides by city right-of-way. The applicant has requested that the city abandon the right-of-way to allow for the Sutton Crossing development which includes this site. The request to vacate the existing right-of-way will be presented to the City Commission for a decision.

The applicant is proposing a hardware store (Ace Hardware) with three additional tenant spaces. The proposed use of a hardware store is a permitted use in the T-5 transect of the Town Center District. The additional tenant spaces are intended to be retail or restaurants, both of which are generally permitted uses in the T-5 transect.

Public Notices:
Public Hearing Notices were mailed to all owners of real property adjacent to and within approximately five-hundred feet (500) of the subject property and all Homeowner's Associations within ½ mile (28 notices) on October 25, 2023 for a Community Workshop held on November 14, 2023. There were no objections raised at the Community Workshop regarding the proposed development. Public hearing notices were mailed April 15, 2025.

Analysis of Final Engineering (Sec. 20-33.1) Criteria:

(a) Site and final engineering plans and the subdivision of land shall also be subject to the technical requirements set forth in Chapter 9 of the City Code. It is the intent of this section to apply to applications for site and final engineering plans and to any subdivision of land requiring a plat, if applicable, and does not include review and approval of a lot split application. Please see discussion below regarding technical requirements of Chapter 9. The Final Engineering Plans have been reviewed by the

City's engineer, concluding that the Plans satisfy the technical requirements provided the conditions of approval set forth below are met.

(b) Except in situations involving one (1) single-family home, the planning and zoning board shall be required to review all site and final engineering plan and subdivision of land applications and make a written recommendation to the city commission. Such recommendation shall include the reasons for the board's recommendation and show the board has considered the applicable criteria set forth in this section.

(c) Upon receipt of the planning and zoning board's recommendation, the city commission shall make a final decision on the application. If the city commission determines that the planning and zoning board has not made a recommendation on an application within a reasonable period of time, the city commission may, at its discretion, consider an application without the planning and zoning board's recommendation.

(d) Except in situations involving one (1) single-family home, all site and final engineering plan and subdivision recommendations and final decisions shall be based on whether the site and final engineering plan and subdivision of land complies with all the technical requirements set forth in chapter 9 of the City Code and the following criteria to the extent applicable:

(1) Whether the applicant has demonstrated the site and final engineering plan and subdivision of land, including its proposed density, height, scale and intensity, hours of operation, building and lighting design, setbacks, buffers, noise, refuse, odor, particulates, smoke, fumes and other emissions, parking and traffic-generating characteristics, number of persons anticipated using, residing or working under the plan, and other off-site impacts, is compatible and harmonious with adjacent land uses, and will not adversely impact land use activities in the immediate vicinity.

Analysis: The project proposes a ±23,517 SF Ace Hardware with three (3) additional tenant spaces as well as all common infrastructure for a multiple-lot shopping center. The proposed Ace Hardware building will include a faux second two-story and include buffers and is consistent with adjacent uses. The proposed daily hours of operation are consistent with typical retail commercial uses and are not anticipated to have any adverse effects on the surrounding neighborhoods. The proposed use will not cause added noise, refuse, odor, particulates, smoke, fumes and other emissions, as the proposed use is a hardware store. The applicant has demonstrated that the parking and traffic-generating characteristics of the proposed use will not adversely impact the site and surrounding area. A traffic impact study for the entire Sutton Crossings shopping center has been submitted.

(2) Whether the applicant has demonstrated the size and shape of the site, the proposed access and internal circulation, and the design enhancements to be adequate to accommodate the proposed density, scale and intensity of the site and final engineering plan requested. The site shall be of sufficient size to accommodate

design amenities such as screening, buffers, landscaping, open space, off-street parking, safe and convenient automobile, bicycle, and pedestrian mobility at the site, and other similar site plan improvements needed to mitigate against potential adverse impacts of the proposed use.

Analysis: The size and shape of the site, the proposed access and internal circulation, and the design enhancements are adequate to accommodate the proposed development. The development proposes to provide three points of access: one along Tuskawilla Road and two along Michael Blake Boulevard. Proposed on-site improvements to mitigate against potential adverse impacts of the proposed use include off-street parking, pedestrian mobility accommodations, and landscaping. The streetscape along Tuskawilla Road and other landscaping on-site will provide appropriate screening and aesthetics to mitigate potential off-site impacts. Parallel on-street parking and landscaping will also be provided on Michael Blake Boulevard consistent with the Town Center thoroughfare standards.

(3) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on the local economy, including governmental fiscal impact, employment, and property values.

Analysis: The development and subdivision of land is not anticipated to have an adverse impact on the local economy. The development of vacant land within the Town Center District is anticipated to provide an increase to the City's taxable value. Additional land along SR 434 has begun the application process for development as a result of this project. Employment and property value with the subject site are anticipate to increase.

(4) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on the natural environment, including air, water, and noise pollution, vegetation and wildlife, open space, noxious and desirable vegetation, and flood hazards.

Analysis: The subject site is currently vacant and wooded. Adherence to the tree removal mitigation requirements under the City's code will be required. The applicant has requested a waiver for the removal of a specimen tree east of the subject site, but within the overall development area. The proposed design incorporated pervious pavements and underground filtration of stormwater in addition to an on-site stormwater pond that encompasses a shared draining system throughout the overall Sutton Crossings property. Downstream flows are designed to flow offsite to the Tuskawilla Crossings Subdivision Pond 1 that is undergoing the review of a repair and rehabilitation project through St. Johns River Water Management District permit number 148395-4 through the City's consultant, Pegasus Engineering. The permit encompasses the August 31, 2023 berm failure with a modification request to increase the project area to include this development (Sutton Crossings). The permit's status at the time of this report is a request for additional information. The proposed development is not anticipated to have an impact on air, water, and noise pollution, vegetation and wildlife, open space, or noxious and desirable vegetation.

(5) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on historic, scenic, and cultural resources, including views and vistas, and loss or degradation of cultural and historic resources.

Analysis: It is not anticipated that the proposed development will have an adverse impact on any historic, scenic, or cultural resources, including views and vistas, and loss or degradation of cultural and historic resources.

(6) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on public services, including water, sewer, stormwater and surface water management, police, fire, parks and recreation, streets, public transportation, marina and waterways, and bicycle and pedestrian facilities.

Analysis: The proposed development will be designed in accordance with the Town Center District Code, which will include the following public services; water, sewer, stormwater and surface water management, police, fire (Seminole County Fire Department). Water service is available along Tuskawilla Road and sanitary sewer service is available along Michael Blake Boulevard, and there is sufficient capacity to accommodate the proposed development. Stormwater management has been addressed above.

(7) Whether the site and final engineering plan and subdivision of land, and related traffic report and plan provided by the applicant, details safe and efficient means of ingress and egress into and out of the neighborhood and adequately addresses the impact of projected traffic on the immediate neighborhood, traffic circulation pattern for the neighborhood, and traffic flow through immediate intersections and arterials.

Analysis: The Traffic Impact Analysis submitted by the applicant projected that a total of 3,354 net new daily trips will occur, with a morning peak of 293 trips and an evening peak of 285 trips. The analysis concluded that all existing road segments would continue to have adequate capacity to continue to operate satisfactorily with their adopted LOS standard with the projected traffic generation. The SR 434 434/Tuskawilla Road intersection, and SR 434/ Michael Blake Boulevard intersection, were analyzed as part of this project and is projected to operate at an adequate level-of-service (LOS). The intersection of SR 434/Michael Blake Boulard is currently signalized and is anticipated to experience delays for some approaches in the AM and/or PM peak hours due to background traffic at the intersections. This project's projected trips does trigger the need for one (1) Mobility Credit as required in the Transportation Element of the City's Comprehensive Plan; the Mobility Credit is, in this case, being satisfied with the inclusion of bicycle parking.

Overall, this project is not expected to cause undue impact on the surrounding neighborhood or intersections. Adequate ingress and egress will be provided. The project traffic generation from this project is negligible compared to the total traffic volumes of SR 434 and Tuskawilla Road and as such will not substantially impact those roadways or their intersections.

(8) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on housing and social conditions, including variety of housing unit types and prices, and neighborhood quality.

Analysis: The proposed development is not anticipated to have an adverse impact in this manner.

(9) Whether the proposed site and final engineering plan and subdivision of land avoids significant adverse odor, emission, noise, glare, and vibration impacts on adjacent and surrounding lands regarding refuse collection, service delivery, parking and loading, signs, lighting, and other sire elements.

Analysis: Adverse odors, noise, glares, or vibrations are not anticipated. Staff requested modifications to accommodate adequate parking, delivery staging, and refuse collection.

(10) Whether the applicant has provided an acceptable security plan for the proposed establishment to be located on the site and final engineering plan and subdivision of land that addresses the safety and security needs of the establishment and its users and employees and minimizes impacts on the neighborhood, if applicable.

Analysis: Security The development is to be secured through standard industry practices to include, but is not limited to, alarm systems, locks, exterior lighting, employee designated areas, customer/patron designated areas, etc. The site has been designed to minimize impacts on the adjoining neighborhood.

(11) Whether the applicant has provided on the site and final engineering plan and subdivision of land an acceptable plan for the mass delivery of merchandise for new large footprint buildings (greater than twenty thousand (20,000) square feet) including the hours of operation for delivery trucks to come into and exit the property and surrounding neighborhood, if applicable.

Analysis: Staff directed the project to accommodate areas within the development to accommodate the delivery of goods away from primary ingress/egress drive areas. The proposed hours of operation for delivery trucks to come into and exit the property and surrounding neighborhood are outside of morning and evening peak trip generation periods.

(12) Whether the applicant has demonstrated that the site and final engineering plan and subdivision of land have been designed to incorporate mitigative techniques and plans needed to prevent adverse impacts addressed in the criteria stated herein or to adjacent and surrounding uses and properties.

Analysis: Staff finds that subject to the Conditions of Approval, the site and final engineering plans have been designed to incorporate mitigative techniques and

plans needed to prevent the adverse impacts mentioned in the criteria on adjacent and surrounding uses and properties.

(13) Whether the applicant has agreed to execute a binding development agreement required by city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code.

Analysis: The applicant has agreed to execute a binding Development Agreement and it is attached hereto as an Exhibit.

Water and Sewer:
Water service is available from the City's 12-inch water main located along Tuskawilla Road. Tie-ins will be run to the northeast corner of the Ace Hardware site to allow for future development on the remainder of the parcel. The development is projected to utilize 1,306 gallons of water per day encompassing Ace Hardware, and three attached retail spaces. Additionally, the development will utilize reclaimed water for irrigation purposes.

Stormwater:
The stormwater from this development will be handled by a detention pond constructed on the west side of the site, north of the parking area from the Ace Hardware. The parking spaces on site will be made of pervious pavement which will further help in reducing stormwater runoff.

Transportation:
The development provides access from Tuskawilla Road and Michael Blake Boulevard. Michael Blake Boulevard and State Road 434 is now a signalized intersection. The proposed internal transportation circulation was reviewed, and modifications were recommended by staff, and plans revised to reflect modifications.

Parking Analysis:
Per Section 20-324 of the City's Land Development Code (LDC), there are no minimum parking requirements in the Town Center. The City required the applicant to provide a traffic study and a parking study which was prepared by the applicant based from the 10th Edition Institute of Transportation Engineers (ITE) Parking Generation Manual.

For comparison purposes, Section 9-277 of the City's LDC defines off-street parking requirements for specific land uses. The following minimum parking ratios for the proposed land use is defined in the Code:

- General Business: One (1) parking space for each three hundred (300) SF of floor space in the building exclusive of storage space.

If this development were outside the Town Center, and therefore required to meet the requirements of Sec. 9-277 of the City Code, there would be 78 parking spaces

required. The applicant is proposing 82 parking spaces, including 4 handicap spaces. The applicant is also proposing 10 on-street parking spaces along Michael Blake Blvd.

Aesthetic Review:
The applicant previously applied for Aesthetic Review. The proposed aesthetics were reviewed by staff and the City Commission. The aesthetics for this proposed project were approved on April 24, 2023.

Reports:
The Final Engineering submittal is required to include the following reports.

Reports	
October 13, 2022	Geotechnical Report | Native Geoscience, Inc.
October 18, 2022	Phase 1 Environmental Site Assessment | Native Geoscience, Inc.
October 19, 2022	Environmental Species and Wetland Report | Atlantic Ecological Services
May 24, 2023	Arborist Report | Mary L. Edwards Consulting Arborist Services
August 29, 2023	Drainage Report | Weinberg Engineering

Procedural History:	
September 2023	Site Plan Review Application | SP2023-0052 FEDP-2024-0005
November 14, 2023	Community Workshop
March 11, 2025	Waiver Application | WA2024-0002
April 24, 2025	Planning & Zoning Board/Local Planning Agency | Recommendation on Waivers, Final Engineering, and Development Agreement
May 12, 2025	City Commission | Consideration of Waivers, Final Engineering, and Development Agreement

Waiver Review: Pursuant to Section 20-34, Any real property owner may file a waiver application requesting a waiver(s) for their real property from any term and condition of this chapter (except from the list of permitted, conditional and prohibited uses set forth in any zoning district category). The Planning and Zoning Board shall be required to review all waiver applications and make a written recommendation to the City

Commission. Such recommendation shall include the reasons for the board's recommendation and show the board has considered the applicable waiver criteria set forth and analyzed below. Upon receipt of the Planning and Zoning board's recommendation, the city commission shall make a final decision on the application. If the city commission determines that the planning and zoning board has not made a recommendation on an application within a reasonable period, the city commission may, at its discretion, consider an application without the planning and zoning board's recommendation.

Waiver I: A waiver to Section 20-324(6), Town Center District Code, General Provisions, to allow a drive-thru window in the side yard of the property (western side of building) where this section requires drive-thru windows to be located the rear yard or alley of a site.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Staff finds that the applicant does not demonstrate that the applicable term and condition clearly created an illogical, impossible, impractical or patently unreasonable result related to the proposed development. The proposed drive-through window would be located facing Tuskawilla Road and would serve the end tenant suite in the Ace Hardware building. Prior waivers granted for drive-throughs in the Town Center have provided for the window to be located on the side of a building not facing a major thoroughfare. This end tenant suite is labeled as a retail use on the site plan (Retail Suite C), not a quick-serve restaurant. Further, the TIA included with the application for Final Engineering and Development Plans does not include the proposed street-facing pick-up window and drive-through lane, nor has a queuing analysis been submitted for review. As such, a recommendation for waiver approval cannot be made at this time.
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the proposed development plan is otherwise substantially compliant with the design standards for the Town Center Code, with removal of the drive-through window on the Retail Suite C. As stated above, the location of the drive-through window is not consistent with the Town Center Code.
3.	The proposed development plan will significantly enhance real property. **Analysis:** Staff finds that the proposed development plan will significantly enhance the subject property and the Town Center, without the proposed drive-through. It will add to the pedestrian/bicycle nature of the Town

	Center by adding retail/ shopping options within walking or biking distance to the many residents already residing within the Town Center.
4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff does not find that the design and aesthetics of this project with the drive-through for Retail Suite C included will serve the public health, safety, and welfare of area residents. While the proposed development will contribute to tax revenues and job creation, and enhancement of retail available to Winter Springs, the applicant has nor demonstrated the impacts of the drive-thru on traffic and congestion internal to the project site.
	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver may diminish the essential character of the surrounding neighborhood. While the applicant proposes landscaping along Tuskawilla Road to help buffer the drive-thru its vehicular activity, currently there is not another example demonstrated in the Town Center District.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. **Analysis:** Staff finds that this is not the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. Staff has not determined that this design best suits traffic flow while keeping all restaurant vehicular parking to the rear and out of site.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the development plan is compatible with the surrounding Sutton Crossings subdivision, and the Town Center without the inclusion of the drive-through on Retail Suite C.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The Applicant is working on and has agreed to a binding Development Agreement to incorporate terms and conditions deemed necessary by the City Commission.

Waiver II: A waiver to Section 20-325, Town Center District Code, Transect Standards, to allow larger lot sizes in lieu of lot sizes with a maximum width of 180 ft and maximum depth of 160 ft.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Staff finds that the applicant does demonstrate that the applicable term and condition clearly created an illogical, impossible, impractical or patently unreasonable result related to the proposed development. The application has proposed a re-plat under submitted subdivision application SBD-2024-0002 for Sutton Crossings that would accommodate the proposed sites for Ace Hardware (1.836 acres), Chick-Fil-A (1.66 acres), Bank (0.924 acres) and Early Learning Academy (1.132 acres).
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the proposed development plan is substantially compliant with the design standards for the Town Center Code.
3.	The proposed development plan will significantly enhance real property. **Analysis:** Staff finds that the proposed development plan will significantly enhance the subject property and the Town Center. It will add to the pedestrian/bicycle nature of the Town Center by adding retail/ shopping options within walking or biking distance to the many residents already residing within the Town Center.
4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the design and aesthetics of this project will serve the public health, safety, and welfare of area residents, and will contribute to tax revenues and job creation, and enhancement of retail available to Winter Springs.
	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish the essential character of the surrounding neighborhood.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter.

	Analysis: Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the development plan is compatible with the surrounding Sutton Crossings subdivision, and the Town Center.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The Applicant is working on and has agreed to a binding Development Agreement to incorporate terms and conditions deemed necessary by the City Commission.

Waiver III: A waiver to Section 16-57, Prohibited Signs, to allow a freestanding master monument sign in lieu of not allowing a freestanding sign on SR 434.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Staff finds that the applicant does demonstrates that the applicable term and condition clearly created an illogical, impossible, impractical or patently unreasonable result related to the proposed development. The applicant proposes that Sutton Crossings is a planned commercial development that requires a master monument sign to effectively inform passing traffic of the businesses within the shopping center. Staff agree that without such signage, visibility for tenants would be severely limited, creating an impractical and unreasonable burden on the businesses trying to attract customers.
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the proposed development plan otherwise substantially compliant with the design standards for the Town Center Code.
3.	The proposed development plan will significantly enhance real property. **Analysis:** Staff finds that the proposed development plan will significantly enhance the subject property and the Town Center. It will add to the pedestrian/bicycle nature of the Town Center by adding retail/ shopping options within walking or biking distance to the many residents already residing within the Town Center.

4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the design and aesthetics of this project will serve the public health, safety, and welfare of area residents, and will contribute to tax revenues and job creation, and enhancement of retail available to Winter Springs.
	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish the essential character of the surrounding neighborhood.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. **Analysis:** Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the development plan is compatible with the surrounding Sutton Crossings subdivision, and the Town Center.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The Applicant is working on and has agreed to a binding Development Agreement to incorporate terms and conditions deemed necessary by the City Commission.

Waiver IV: A waiver to Section 16-57, Prohibited Signs, to allow a freestanding master monument sign in lieu of not allowing a freestanding sign on Tuskawilla Road.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Staff finds that the applicant does demonstrates that the applicable term and condition clearly created an illogical, impossible, impractical or patently unreasonable result related to the proposed development. The applicant proposes that Sutton Crossings is a planned commercial development that requires a master monument sign to

	effectively inform passing traffic of the businesses within the shopping center. Staff agree that without such signage, visibility for tenants would be severely limited, creating an impractical and unreasonable burden on the businesses trying to attract customers.
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the proposed development plan otherwise substantially compliant with the design standards for the Town Center Code.
3.	The proposed development plan will significantly enhance real property. **Analysis:** Staff finds that the proposed development plan will significantly enhance the subject property and the Town Center. It will add to the pedestrian/bicycle nature of the Town Center by adding retail/ shopping options within walking or biking distance to the many residents already residing within the Town Center.
4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the design and aesthetics of this project will serve the public health, safety, and welfare of area residents, and will contribute to tax revenues and job creation, and enhancement of retail available to Winter Springs.
	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish the essential character of the surrounding neighborhood.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. **Analysis:** Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the development plan is compatible with the surrounding Sutton Crossings subdivision, and the Town Center.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code.

	Analysis: The Applicant is working on and has agreed to a binding Development Agreement to incorporate terms and conditions deemed necessary by the City Commission.

Waiver V: A waiver to Section 5-6(a)(1),Tree Protection and Preservation, Permit Application, to allow a statistical survey for trees between 4" DBH and 9" DBH in lieu of and inventory and location survey for all trees 4" DBH and greater.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Staff finds that the applicant does demonstrates that the applicable term and condition clearly created an illogical, impossible, impractical or patently unreasonable result related to the proposed development. The applicant has proposed that the property contains a dense and excessive quantity of trees in the 4" to 9" DBH range and as such requiring a full location tree survey of every three within this class would be logistically infeasible, financially burdensome, and duplicative given the ecological intent of the code. Staff finds that the nationally accepted statistical sampling methodology to assess trees within the 4" to 9" DBH category aligns with best management practices outlined by the International Society, ensuring scientific accuracy and ecological sensitivity while maintaining regulatory intent. All trees 10" DBH and larger were individually surveyed and assessed, reflecting practical feasibility and higher ecological value of larger, more mature trees. . Recommended mitigation for trees 4" to 9" DBH has been assessed at 179 credits ($52,800). Recommended mitigation for trees 10" and larger has been assessed at 89 credits ($26,700).
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the proposed development plan otherwise substantially compliant with the design standards for the Town Center Code.
3.	The proposed development plan will significantly enhance real property. **Analysis:** Staff finds that the proposed development plan will significantly enhance the subject property and the Town Center. It will add to the pedestrian/bicycle nature of the Town Center by adding retail/ shopping options within walking or biking distance to the many residents already residing within the Town Center.

4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the design and aesthetics of this project will serve the public health, safety, and welfare of area residents, and will contribute to tax revenues and job creation, and enhancement of retail available to Winter Springs.
	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish the essential character of the surrounding neighborhood.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. **Analysis:** Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the development plan is compatible with the surrounding Sutton Crossings subdivision, and the Town Center.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The Applicant is working on and has agreed to a binding Development Agreement to incorporate terms and conditions deemed necessary by the City Commission.

Waiver VI: A waiver to Section 5-16, Tree Protection and Preservation, Waivers; incentive program and appeals, to allow a specimen tree removal in lieu of obstructing a building footprint.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Staff finds that the applicant does demonstrates that the applicable term and condition clearly created an illogical, impossible, impractical or patently unreasonable result related to the proposed development. The applicant proposes that the specimen tree located in the

	proposed Chick-Fil-A building footprint, makes its removal necessary to accommodate the restaurant's structure, parking, and drive-thru layout. Preserving the tree in int's current location would render the site unusable for its intended purposed, preventing the development from proceeding as planned. Staff followed up with the applicant regarding relocation of the tree, an finds doing so unfeasible. Recommended mitigation for removal of a specimen tree has been assessed at 8 credits ($2,400).
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the proposed development plan otherwise substantially compliant with the design standards for the Town Center Code.
3.	The proposed development plan will significantly enhance real property. **Analysis:** Staff finds that the proposed development plan will significantly enhance the subject property and the Town Center. It will add to the pedestrian/bicycle nature of the Town Center by adding retail/ shopping options within walking or biking distance to the many residents already residing within the Town Center.
4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the design and aesthetics of this project will serve the public health, safety, and welfare of area residents, and will contribute to tax revenues and job creation, and enhancement of retail available to Winter Springs.
	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish the essential character of the surrounding neighborhood.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. **Analysis:** Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the development plan is compatible with the surrounding Sutton Crossings subdivision, and the Town Center.

8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The Applicant is working on and has agreed to a binding Development Agreement to incorporate terms and conditions deemed necessary by the City Commission.

Applicable Law, Public Policy, and Events:
Florida Statutes 163.2511-163.3246: Growth Policy; County and Municipal Planning; Land Development Regulation (Provides that land development regulations for municipal planning be consistent with the Comprehensive Plan).
Home Rule Powers
City of Winter Springs Comprehensive Plan
City of Winter Springs Code of Ordinances
Ch20, Sec. 20-1. Definitions.
Ch20, Sec. 20-34 Waivers
Ch20, Sec. 20-601. – Streetscape Requirements.
Ch20, Division 12. - Town Center District Code
City of Winter Springs Comprehensive Plan.
Future Land Use Element, Policy 1.1.6

Fiscal Impact:
Development of the subject property as a hardware store and retail space is anticipated to provide an increase to the City's taxable value, as well as serve as a catalyst for future commercial development in the surrounding area.

Development Agreement:
The applicant has agreed to a binding Development Agreement which is attached hereto as an exhibit.

Staff Recommendation:

Staff recommends that the Planning and Zoning Board recommend approval of the Waivers II-VI, Specimen Tree Removal, Final Engineering Plans, and Development Agreement to allow a hardware store with three (3) additional tenant spaces and construction of the Sutton Crossings shopping center infrastructure in the Town Center District, subject to the following conditions:

1. Proposed uses for the additional tenant spaces will be a permitted use in the T-5 Town Center Transect or shall receive a Conditional Use approval from the City Commission.

2. Approval of both the St. Johns River Water Management District Environmental Resource Permit for the Project as well as the City's Environmental Resource Permit application No. 148395-4 to repair and make improvements to the Tuskawilla Crossings pond, including accommodating

the Sutton Crossings Project, shall be required prior to commencement of site clearing and construction.

3. Prior to final plat approval, the applicant/owners shall record covenants and restrictions for the property owner's association that will be responsible for perpetual maintenance of the common infrastructure for the Sutton Crossings shopping center. The owner shall include a provision in the covenants and restrictions acknowledging and advising that the parking lot may flood and serve as a retention area for water impoundment during both the 25year/24hour and 100year/24hour storm events. The covenants and restrictions shall contain a release, hold harmless, and indemnification provision for all claims related to flooding of the parking area as a result of the design of the approved engineering plans against the City of Winter Springs.

4. An Economic Impact Analysis Report as required by the Town Center Design standards shall be reviewed and approved by staff prior to being heard before the City Commission.

5. The applicant shall be required to revise the final engineering plans to remove the drive-through land and window for Retail Suite C and continue the streetscape for Michael Blake Boulevard.

6. The P&Z recommendation of approval is contingent upon the City Commission's approval of the right-of-way vacation.

7. The applicant shall be required to pay($52,800) for removal of trees 4" DBH – 9" DBH, and 89 mitigation credits ($26,700) for removal of trees 10" DBH and greater, excluding specimen tree(s), prior to the issuance of the tree removal and land clearing permit.

8. The applicant shall be required to pay 8 mitigation credits ($2,400) for removal of the specimen tree, prior to the issuance of the tree removal and land clearing permit.

9. Execution of Development Agreement prior to the issuance of the tree removal and land clearing permits.

10. There shall be no retail sales, manufacturing, or compounding of any products derived from the hemp plant or cannabis plant, including CBD (cannabidiol).

11. All grass on the Property shall be Bahia grass. No St. Augustine grass or grass types with low drought tolerance shall be permitted.

Attachments:

Community Workshop Flyer

Drainage Report for Sutton Crossings

Environmental Species and Wetlands Report.

Phase I Environmental Site Assessment, Sutton Crossings

Traffic Impact Analysis

Sutton Crossings/ Ace Hardware Final Engineering and Development Plans

Replat for Sutton Crossings

Application for Final Engineering and Development Plan

Application for Aesthetic Review

Application for Development Agreement

Approved Aesthetic Review Plans

THIS INSTRUMENT WAS PREPARED BY
AND SHOULD BE RETURNED TO:

Anthony A. Garganese
City Attorney of Winter Springs
Garganese, Weiss, D'Agresta & Salzman, P.A.
111 N. Orange Avenue, Suite 2000
Orlando, FL 32802

(407) 425-9566

FOR RECORDING DEPARTMENT USE ONLY

DRAFT

DEVELOPMENT AGREEMENT

EPB ENGINEERING & CONSTRUCTION, PLLC

AND

BLUE ORANGE HOLDINGS, LLC

(Sutton Crossings Shopping Center)

THIS DEVELOPMENT AGREEMENT ("Agreement") is made and executed this _____ day of _____, 2025, by and between the **CITY OF WINTER SPRINGS**, a Florida Municipal Corporation ("City"), whose address is 1126 East S.R. 434, Winter Springs, Florida 32708, and **EPB ENGINEERING & CONSTRUCTION, PLLC,** a Florida limited liability company, whose address is 3440 Edgewater Drive, Orlando, FL 32804; and **BLUE ORANGE HOLDINGS, LLC,** a Florida limited liability company, whose address is 3440 Edgewater Drive, Orlando, FL 32804 (hereinafter collectively referred to as "Developer").

WITNESSETH:

WHEREAS, EPB Engineering & Construction, PLLC is the owner of approximately 3.58 acres, more or less, of real property located in the W1 Winter Springs tax district, generally located on the Northeast corner of Tuskawilla Road and Michael Blake Boulevard, in Winter Springs, Seminole County, Florida, more particularly described herein ("EPB Property"); and

WHEREAS, Blue Orange Holdings, LLC is the owner of approximately 2.3 acres, more or less, of real property located in the W1 Winter Springs tax district, generally located on the Northwest corner of SR 434 and Michael Blake Boulevard, in Winter Springs, Seminole County, Florida, more particularly described herein ("Blue Orange Property"); and

WHEREAS, Developer has applied for a Final Engineering/Site Plan Approval, Waivers, and Specimen Tree Removal from the City Code in order to construct the common

infrastructure for the Sutton Crossings shopping center plaza as well as a hardware store with three attached tenant suites on one portion of the Property; and

WHEREAS, pursuant to Chapter 20 Zoning, Article II, Division 1, Section 20-29.1 of the Winter Springs City Code ("City Code"), public Hearing Notices were mailed to all owners of real property adjacent to and within approximately five-hundred (500) feet of the subject property and all Homeowner's Associations on file within the City of Winter Springs on April 15, 2025, and a Community Workshop for the Project was held on October 25, 2023; and

WHEREAS, Section 20-29(c) of the City Code requires that all site plans and waivers shall be binding on the use of the subject property and, further, that as a condition of approval by the City Commission, all development projects requiring a community workshop pursuant to Section 20-29.1 of the City Code shall be required to be memorialized in a binding Development Agreement; and

WHEREAS, this Development Agreement shall be recorded against the property so that the terms and conditions of approval related to the Project shall run with the land; and

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties mutually agree as follows:

1.0 **Recitals.** The foregoing recitals are true and correct and are hereby incorporated herein by this reference.

2.0 **Authority.** This Agreement is entered into pursuant to the Florida Municipal Home Rule Powers Act.

3.0 **The Property.** The real property subject to this Agreement consists of tax parcel identification numbers of 01-21-30-501-0000-0010; 26-20-30-5AR-0A00-008D and 26-20-30-5AR-0A00-008H and is legally described in **EXHIBIT "A"**, attached hereto and fully incorporated herein by this reference (the "Property").

4.0 **Project Description and Requirements.** Developer shall, at its expense, design, permit and construct a ±23,517 square-foot hardware store with three (3) additional tenant spaces as well as all common infrastructure for a multiple-lot shopping center on the Property, located in the City of Winter Springs Town Center. The hardware store building and supporting infrastructure for the entire shopping center shall be constructed in a single phase.

(Hereinafter the project description and requirements are referred to as the **"Project"**).

The Developer shall construct the Project in a manner consistent with the approved Final Engineering/Site Plans, Aesthetic Plans, Waivers that are on file with the City with the following file numbers and consistent with the requirements contained in this Agreement:

File No. FEDP-2024-0005

File No. WAIV-2024-0002

File No. AERV-2024-0003[1]

File No. DVAG-2024-0002

For convenience, a copy of the Overall Site Plan is attached hereto and fully incorporated herein by this reference as **EXHIBIT "B."** Specific conditions of approval for the above-referenced Plans and Waivers include the following, which are also addressed in the staff report for the Final Engineering/Site Plans, Aesthetic Plans, Waivers:

A. Proposed uses for the additional tenant spaces will be a permitted use in the T-5 Town Center Transect or shall receive a Conditional Use approval from the City Commission.

B. Approval of both the St. Johns River Water Management District Environmental Resource Permit for the Project as well as the City's Environmental Resource Permit application No. 148395-4 to repair and make improvements to the Tuskawilla Crossings pond, including accommodating the Sutton Crossings Project, shall be required prior to commencement of site clearing and construction.

C. Prior to final plat approval, the applicant/owners shall record covenants and restrictions for the property owner's association that will be responsible for perpetual maintenance of the common infrastructure for the Sutton Crossings shopping center. The owner shall include a provision in the covenants and restrictions acknowledging and advising that the parking lot may flood and serve as a retention area for water impoundment during both the 25year/24hour and 100year/24hour storm events. The covenants and restrictions shall contain a release, hold harmless, and indemnification provision for all claims related to flooding of the parking area as a result of the design of the approved engineering plans against the City of Winter Springs.

D. An Economic Impact Analysis Report as required by the Town Center Design standards shall be reviewed and approved by staff prior to being heard before the City Commission.

E. The applicant shall be required to revise the final engineering plans to remove the drive-through land and window for Retail Suite C and continue the streetscape for Michael Blake Boulevard.

F. Project approval is contingent upon the City Commission's approval of the right-of-way vacation.

G. The applicant shall be required to pay ($52,800) for removal of trees 4" DBH – 9" DBH, and 89 mitigation credits ($26,700) for removal of trees 10" DBH and greater,

[1] Previously approved by the City Commission on April 24, 2023.

excluding the specimen tree(s), prior to the issuance of the tree removal and land clearing permit.

H. The applicant shall be required to pay 8 mitigation credits ($2,400) for removal of the specimen tree, prior to the issuance of the tree removal and land clearing permit.

I. There shall be no retail sales of alcohol and no retail sales, manufacturing, or compounding of any products derived from the hemp plant or cannabis plant, including CBD (cannabidiol).

J. All grass areas on the Property shall use Bahia grass. No St. Augustine grass or grass types with low drought tolerance shall be permitted.

C. [INSERT ANY OTHER CONDITIONS AS PROVIDED BY CITY COMMISSION]

5.0 Future Permitting. Developer shall be required to receive building permits and substantially commence vertical construction of buildings, which shall at minimum include building foundations, for the Project within two (2) years of the Effective Date of this Agreement.

6.0 Representations of the Parties. The City and Developer hereby each represent and warrant to the other that it has the power and authority to execute, deliver and perform the terms and provisions of this Agreement and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. This Agreement will, when duly executed and delivered by the City and Developer, constitute a legal, valid and binding obligation enforceable against the parties hereto. Upon recording of this Agreement in the Public Records of Seminole County, Florida, the Agreement shall be a binding obligation upon the Property in accordance with the terms and conditions of this Agreement. Developer represents that it has voluntarily and willfully executed this Agreement for purposes of binding himself and the Property to the terms and conditions set forth in this Agreement.

7.0 Successors and Assigns. This Agreement shall automatically be binding upon and shall inure to the benefit of the City and Developer and their respective successors and assigns. The terms and conditions of this Agreement similarly shall be binding upon the Property, and shall run with title to the same upon being duly recorded against the Property by the City.

8.0 Applicable Law; Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. The venue of any litigation arising out of this Agreement shall be in Seminole County, Florida or, for federal court actions, in Orlando, Florida.

9.0 Amendments. This Agreement shall not be modified or amended except by written agreement duly executed by both parties hereto (or their successors or assigns) and approved by the City Commission.

10.0 Entire Agreement; Exhibits. This Agreement and all attached exhibits hereto supersede any other agreement, oral or written, regarding the Property and contain the entire agreement between the City and Developer as to the subject matter hereof. The Exhibits attached hereto and referenced herein are hereby fully incorporated herein by this reference.

11.0 Severability. If any provision of this Agreement shall be held to be invalid or unenforceable to any extent by a court of competent jurisdiction, the same shall not affect in any respect the validity or enforceability of the remainder of this Agreement.

12.0 Effective Date. This Agreement shall become effective upon approval by the City Commission and execution of this Agreement by both parties hereto.

13.0 Recordation. Upon full execution by the Parties, this Agreement shall be recorded in the Public Records of Seminole County, Florida by the City. The Developer shall be responsible for all recording fees associated with this Agreement.

14.0 Relationship of the Parties. The relationship of the parties to this Agreement is contractual and Developer is an independent contractor and not an agent of the City. Nothing herein shall be deemed to create a joint venture or principal-agent relationship between the parties, and neither party is authorized to, nor shall either party act toward third persons or the public in any manner, which would indicate any such relationship with the other.

15.0 Sovereign Immunity. The City intends to avail itself of sovereign immunity and other applicable limitations on City liability whenever deemed applicable by the City. Therefore, notwithstanding any other provision set forth in this Agreement, nothing contained in this Agreement shall be construed as a waiver of the City's right to sovereign immunity under section 768.28, Florida Statutes, or other limitations imposed on the City's potential liability under state or federal law. As such, the City shall not be liable under this Agreement for punitive damages or interest for the period before judgment. Further, the City shall not be liable for any claim or judgment, or portion thereof, to any one person for more than two hundred thousand dollars ($200,000.00), or any claim or judgment, or portion thereof, which, when totaled with all other claims or judgments paid by the State or its agencies and subdivisions arising out of the same incident or occurrence, exceeds the sum of three hundred thousand dollars ($300,000.00).

16.0 City's Police Power. Developer agrees and acknowledges that the City hereby reserves all police powers granted to the City by law. In no way shall this Agreement be construed as the City bargaining away or surrendering its police powers.

17.0 Interpretation. The parties hereby agree and acknowledge that they have both participated equally in the drafting of this Agreement and no party shall be favored or disfavored regarding the interpretation to this Agreement in the event of a dispute between the parties.

18.0 Third-Party Rights. This Agreement is not a third-party beneficiary contract and shall not in any way whatsoever create any rights on behalf of any third party.

19.0 Specific Performance and Enforcement. Strict compliance shall be required with each and every provision of this Agreement. The parties agree that failure to perform the obligations provided by this Agreement shall result in irreparable damage and that specific performance of these obligations may be obtained by a suit in equity. The failure to timely comply with any mandatory condition of this Agreement shall further constitute a violation of the City's Code of Ordinances and shall be subject to enforcement action as described therein including, but not limited to, enforcement before the City's Code Enforcement Board under Chapter 2, Article III, Division 2. – Code Enforcement.

20.0 Attorney's Fees. In connection with any arbitration or litigation arising out of this Agreement, each party shall be responsible for their own attorney's fees and costs.

21.0 Development Permits. Nothing herein shall limit the City's authority to grant or deny any development permit applications or requests subsequent to the effective date of this Agreement in accordance with the criteria of the City Code and the requirements of this Agreement. The failure of this Agreement to address any particular City, County, State and/or Federal permit, condition, term or restriction shall not relieve Developer or the City of the necessity of complying with the law governing said permitting requirement, condition, term or restriction. Without imposing any limitation on the City's police powers, the City reserves the right to withhold, suspend or terminate any and all certificates of occupancy for any building, trailer, structure or unit if Developer is in breach of any term and condition of this Agreement.

22.0 Default. Failure by either party to perform each and every one of its obligations hereunder shall constitute a default, entitling the non-defaulting party to pursue whatever remedies are available to it under Florida law or equity including, without limitation, termination of this Agreement, an action for specific performance, and/or injunctive relief. Prior to any party filing any action as a result of a default under this Agreement, the non-defaulting party shall first provide the defaulting party with written notice of said default. Upon receipt of said notice, the defaulting party shall be provided a thirty (30) day opportunity in which to cure the default to the reasonable satisfaction of the non-defaulting party prior to filing said action.

23.0 Termination. The City shall have the unconditional right, but not obligation, to terminate this Agreement, without notice or penalty, if Developer fails to receive building permits and substantially commence vertical construction of buildings, which shall at minimum include building foundations, for the Project within two (2) years of the effective date of this Agreement. The Developer may apply to the City Commission for an extension of this Agreement, which may be granted upon good cause shown. In addition, the City shall have the right, but not obligation, to terminate the Agreement if Developer permanently abandons construction of the Project, provided, however, the City shall first deliver written notice and an opportunity to cure to the defaulting party as set forth in Section 22 above. If the City terminates this Agreement, the City shall record a notice of termination against the Property in the public records of Seminole County, Florida.

24.0 Indemnification and Hold Harmless. Developer shall be solely responsible for designing, permitting, constructing, operating and maintaining this Project. As such, Developer

hereby agrees to indemnify, release, and hold harmless the City and its commissioners, employees and attorneys from and against all claims, losses, damages, personal injuries (including, but not limited to, death), or liability (including reasonable attorney's fees and costs through all appellate proceedings), directly or indirectly arising from, out of, or caused by Developer and Developer's contractor's and subcontractor's performance of design, permit and construction, and maintenance activities in furtherance of constructing the Project and maintaining the improvements of this Project. This indemnification shall survive the termination of this Agreement.

25.0 Force Majeure. The parties agree that in the event that the failure by either party to accomplish any action required hereunder within a specified time period ("Time Period") constitutes a default under the terms of this Agreement and, if any such failure is due to acts of God, acts of government authority (other than the City's own acts), acts of public enemy or war, riots, civil disturbances, power failure, shortages of labor or materials, injunction or other court proceedings beyond the control of such party, or severe adverse weather conditions ("Force Majeure Event"), then, notwithstanding any provision of this Agreement to the contrary, that failure shall not constitute a default under this Agreement and any Time Period proscribed hereunder shall be extended by the amount of time that such party was unable to perform solely due to the Force Majeure Event. The extended Time Period shall be agreed to in writing by the parties and said agreement shall not be unreasonably withheld by either party. The City Manager shall have the authority to grant an extended Time Period. An extension of any Time Period for reasons of a Force Majeure Event shall be requested solely as provided in this Section. Developer hereby waives and relinquishes the right to notify the City of the intent to exercise the tolling and extension of any permit related to the Project, including Time Periods under this Agreement, development orders, and building permits, available under Section 252.363, Florida Statutes, as the result of a declaration of a state of emergency issued by the Governor for a natural emergency.

26. Notice. Whenever either party desires to give notice to the other, notice shall be sent by hand delivery or certified mail, return receipt requested, and shall be sent to:

For the City:

City Manager
City of Winter Springs
1126 East S.R. 434
Winter Springs, Florida 32708

With additional notice to:

Anthony A. Garganese, City Attorney
Garganese, Weiss, D'Agresta & Salzman, P.A.
111 N. Orange Avenue, Suite 2000
Orlando, FL 32802

For Developer:

EPB Engineering & Construction, PLLC

Attn: _____

3440 Edgewater Drive

Orlando, Florida 32804

Phone: _____

Email: _____

Blue Orange Holdings, LLC

Attn: _____

3440 Edgewater Drive

Orlando, Florida 32804

Either party may freely modify their respective contact person and address contained in this Paragraph by providing written notice of the modification to the other party. Any Notice given as provided herein shall be deemed received as follows: if delivered by personal service, on the date so delivered; and if mailed, on the third business day after mailing.

27.0 **Assignment.** Prior to completing the construction of the Project and reaching final build-out of the Project, Developer shall not assign this Agreement without the prior written consent of the City. Such assignment shall require the written approval of the City by amendment to this Agreement, which shall not require a public hearing and shall not be unreasonably withheld. However, Developer shall be entitled to assign its rights and obligations under this Agreement to a parent, subsidiary, or affiliated entity in which Developer or its members are members or interest holders without City consent, provided that the City is given notice of such assignment in accordance with Section 26.0 herein. Any assignment authorized by this subparagraph shall require the assignee to be a formal signatory to this Agreement and fully assume all of Developer's obligations, commitments, representations, and warranties under this Agreement. In any assignment, the rights and obligations contained herein shall be binding on successors in interest to the Property, and the terms and conditions of this Agreement shall bind and inure to the benefit of the parties hereto and any respective successors and assigns.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seal on the date first above written.

CITY OF WINTER SPRINGS

By: _____
Kevin McCann, Mayor

ATTEST:

By: _____
Christian Gowan, City Clerk

APPROVED AS TO FORM AND LEGALITY
For the use and reliance of the City of Winter Springs, Florida only.

CITY SEAL

Date: _____
By: _____
Anthony A. Garganese, City Attorney for the City of Winter Springs, Florida

DRAFT

Signed, sealed and delivered in the presence of the following witnesses:

EPB ENGINEERING & CONSTRUCTION, PLLC, a Florida limited liability company

_____
Signature of Witness

_____
Printed Name of Witness

_____
Address of Witness

_____

_____
Signature of Witness

_____
Printed Name of Witness

_____
Address of Witness

_____

_____
Print name: _____

Title:_____

Date: _____, 2025

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of (___) physical presence or (___) online notarization, this _____ day of _____, 2025, by_____, the _____of EPB ENGINEERING & CONSTRUCTION, PLLC, a limited liability company, on behalf of the company, who is personally known to me or produced _____ as identification.

(NOTARY SEAL)

_____
(Notary Public Signature)

_____
(Print Name)
Notary Public, State of _____
Commission No.: _____
My Commission Expires: _____

DRAFT

Signed, sealed and delivered in the presence of the following witnesses:

BLUE ORANGE HOLDINGS, LLC, a Florida limited liability company

_____
Signature of Witness

_____
Printed Name of Witness

_____
Address of Witness

_____

_____
Signature of Witness

_____
Printed Name of Witness

_____
Address of Witness

_____

_____
Print name: _____

Title:_____

Date: _____, 2025

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of (___) physical presence or (___) online notarization, this _____ day of _____, 2025, by_____, the _____of BLUE ORANGE HOLDINGS, LLC, a limited liability company, on behalf of the company, who is personally known to me or produced _____ as identification.

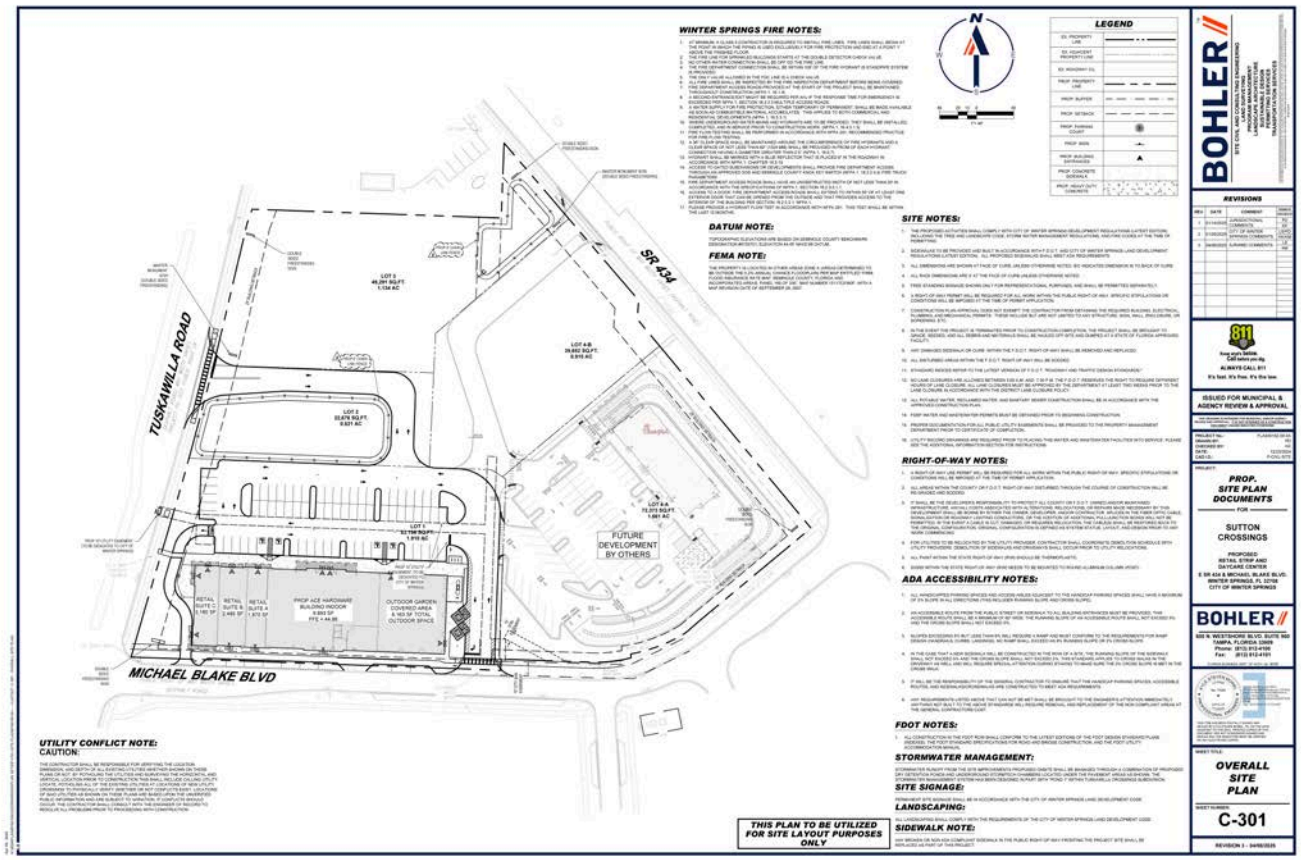
(NOTARY SEAL)

_____
(Notary Public Signature)

_____
(Print Name)
Notary Public, State of _____
Commission No.: _____
My Commission Expires: _____

DEVELOPER IS HEREBY ADVISED THAT SHOULD DEVELOPER FAIL TO FULLY EXECUTE, AND DELIVER TO THE CITY, THIS AGREEMENT WITHIN THIRTY (30) DAYS FROM THE DATE THAT THE CITY COMMISSION APPROVES THIS

AGREEMENT, THIS AGREEMENT, AND THE DEVELOPMENT PERMIT APPROVALS REFERENCED HEREUNDER, SHALL AUTOMATICALLY BE DEEMED NULL AND VOID.



JOINDER AND CONSENT

For and in consideration of the mutual covenants, terms, and conditions and restrictions contained herein, together with other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, PATTI ANN SCHOEN, as holder of that certain Mortgage, and Security Agreement which is recorded in Official Records Book 10482, Page 605, of the Public Records of Seminole County, Florida, (the "Mortgage") hereby joins in and consents to the foregoing Development Agreement by and between the City of Winter Springs, a Florida municipal corporation, and EPB Engineering & Construction, PLLC, a Florida limited liability company, and further acknowledges and agrees that its Mortgage shall be subordinated to such Development Agreement and the obligations contained therein.

Dated this _____ day of _____, 2025.

Signed and sealed in the presence of:

_____ By: _____

Print Name: _____ Patti Ann Schoen

_____

Print Name: _____

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of (___) physical presence or (___) online notarization, this _____ day of _____, 2025, by Patti Ann Schoen who is personally known to me or produced _____ as identification.

DRAFT

(NOTARY SEAL)

_____
(Notary Public Signature)

_____
(Print Name)
Notary Public, State of _____
Commission No.: _____
My Commission Expires: _____

DRAFT

EXHIBIT A

PROPERTY LEGAL DESCRIPTION

Parcel Identification Number: 01-21-30-501-0000-0010 (EPB Property)

Lots 1 and 2 and that part of Lots 3 and 4 East of Goldenrod Road, TUSKAWILLA, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, according to the map or plat thereof as recorded in Plat Book 1, Page 5, Public Records of Seminole County, Florida.
TOGETHER WITH: The North Half (1/2) of the vacated right-of-way adjacent on the South, as described in Resolution recorded in O.R. Book 1050, Page 401, Public Records of Seminole County, Florida.
LESS AND EXCEPT: Those portions taken in Warranty Deed recorded in O.R. Book 2440, Page 489, and Order of Taking recorded in O.R. Book 3326, Page 1162, Public Records of Seminole County, Florida.

(legal description continued on following pages)

DRAFT

Parcel Identification Numbers: 26-20-30-5AR-0A00-008D and 26-20-30-5AR-0A00-008H (Blue Orange Property)

THAT PART OF LOT 8 BLOCK "A", OF TUSKAWILLA, ACCORDING TO THE PLAT OF MITCHELL'S SURVEY OF THE LEVY GRANT AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWESTERN MOST CORNER OF LOT 31 ST. JOHNS LANDING AS RECORDED IN PLAT BOOK 53, PAGES 45 THRU 49 OF SAID PUBLIC RECORDS, SAID POINT BEING A RECOVERED CONCRETE MONUMENT ON THE EASTERLY RIGHT OF WAY LINE OF TUSKAWILLA ROAD (FORMERLY BRANTLEY AS RECORDED IN OFFICIAL RECORDS BOOK 3225, PAGE 1829 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 59°31'38" WEST ALONG THE WESTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 31 FOR A DISTANCE OF 15.00 FEET; THENCE RUN SOUTH 30°04'55" WEST ALONG SAID EASTERLY RIGHT OF WAY LINE FOR A DISTANCE OF 5.00 FEET; THENCE CONTINUE SOUTH 30°04'55" WEST A DISTANCE OF 35.00 FEET; THENCE SOUTH 59°31'38" EAST, A DISTANCE OF 1132.34 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT HAVING A RADIUS OF 150.00 FEET; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE AT 60°36'00" FOR AN ARC DISTANCE OF 158.65 FEET TO THE POINT OF TANGENCY; THENCE SOUTH 01°04'22" WEST A DISTANCE OF 146.91 FEET; THENCE SOUTH 24°59'41"WEST, A DISTANCE OF 318.72 FEET; THENCE SOUTH 00°00'00" EAST A DISTANCE OF 115.48 FEET; THENCE SOUTH 36°55'21" EAST A DISTANCE OF 217.54 FEET; THENCE SOUTH 15°19'53" EAST A DISTANCE OF 140.49 FEET; THENCE SOUTH 02°23'00 WEST A DISTANCE OF 556.34 FEET; THENCE SOUTH 07°25'15" WEST A DISTANCE OF 272.61 FEET; THENCE SOUTH 29'30'05" WEST A DISTANCE OF 231.32 FEET; THENCE SOUTH 50°31'58" WEST A DISTANCE OF 1475.69 FEET TO THE NORTHEASTERLY RIGHT OF WAY LINE OF STATE ROAD 434 ACCORDING TO FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 77070-2516; THENCE CONTINUE SOUTH 50°31'58" WEST FOR A DISTANCE OF 143.34 FEET TO A FOUND 1/2" IRON ROD & CAP (LB6723) ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF SAID STATE ROAD 434; THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY NORTH 39°47'08"WEST, 741.99 FEET TO THE POINT OF BEGINNING; THENCE DEPARTING SAID SOUTHWESTERLY RIGHT OF WAY SOUTH 50°22'25"WEST, 153.21 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071); THENCE SOUTH 49°13'20"WEST, 22.84 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 21°33'57", AND A CHORD BEARING AND DISTANCE OF SOUTH 68°52'35"WEST, 63.61 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 63.99 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON THE WESTERLY RIGHT OF WAY OF C.S.X TRANSPORTATION., INC "LAKE CHARM BRANCH" RAIL CORRIDOR; SAID POINT BEING ON A NON-TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°28'47", AND A CHORD BEARING AND DISTANCE OF SOUTH 01°55'26"EAST, 31.04 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AND SAID WESTERLY RIGHT OF WAY, A DISTANCE OF 31.04 FEET TO A FOUND 4"X4" CONCRETE MONUMENT (LB 220) ON THE EASTERLY EXTENSION OF THE

NORTH LINE OF LOT 17 OF SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID WESTERLY RIGHT OF WAY, ALONG SAID EASTERLY EXTENSION OF NORTH LINE, NORTH 87°52'13" WEST, 143.10 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID EASTERLY EXTENSION OF THE NORTH LINE, ALONG SAID EASTERLY RIGHT OF WAY, NORTH 02°44'06"EAST, 510.43 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID EASTERLY RIGHT OF WAY, ALONG SAID NORTHERLY RIGHT OF WAY, NORTH 87°56'41"WEST, 21.83 FEET TO THE EASTERLY BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2152, PAGE 533 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE DEPARTING SAID NORTHERLY RIGHT OF WAY, ALONG SAID EASTERLY BOUNDARY, NORTH 02°03'02"EAST, 65.81 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT OF WAY OF AFORESAID STATE ROAD 434; THENCE DEPARTING SAID EASTERLY BOUNDARY, ALONG THE SAID SOUTHWESTERLY RIGHT OF WAY THE FOLLOWS THREE (3) COURSES: 1) THENCE SOUTH 40°37'45"EAST, 224.63 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°18'00", AND A CHORD BEARING AND DISTANCE OF SOUTH 06°37'29"WEST, 19.42 FEET; 2) THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 19.42 FEET TO THE END OF SAID CURVE; 3) THENCE S.39°47'08"E., 293.27 FEET TO THE POINT OF BEGINNING.

LESS (OFFICIAL RECORDS BOOK 8943, PAGE 877):

A PORTION LOT 8, BLOCK A, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, LYING IN SECTION 6, TOWNSHIP 21 SOUTH, RANGE 31 EAST BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE RESERVE AT TUSCAWILLA PHASE II, AS RECORDED IN PLAT BOOK 50, PAGES 3 THROUGH 9 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE RUN SOUTH 00°45'33" EAST ALONG THE WESTERLY LINE OF SAID RESERVE AT TUSCAWILLLA, PHASE II, ALSO BEING THE EAST LINE OF BLOCK A, GARDENA FARMS TOWN SITES, AS RECORDED IN PLAT BOOK 6, PAGE 39, OF THE SAID PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, FOR A DISTANCE OF 810.29 FEET TO A POINT ON THE NORTHEASTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS AS RECORDED IN OFFICIAL RECORDS BOOK 3177, PAGE 632 OF SAID PUBLIC RECORDS; THENCE DEPARTING SAID WEST LINE AND SAID EAST LINE, RUN NORTH 55°28'13" WEST ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 593.50 FEET TO THE SOUTHEAST CORNER OF BLOCK C, OF SAID GARDENA FARMS TOWN SITES; THENCE CONTINUE NORTH 55°28'13" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 800.00 FEET TO A POINT ON A NON-TANGENT CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1815.35 FEET, A CHORD BEARING OF NORTH 39°53'20" WEST AND A CHORD DISTANCE OF 974.43 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL

ANGLE OF 31°08'12" FOR AN ARC DISTANCE OF 986.53 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 2148.74 FEET, A CHORD BEARING OF NORTH 22°10'05" WEST AND A CHORD DISTANCE OF 162.34 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 04°19°47" FOR AN ARC DISTANCE OF 162.38 FEET TO A POINT ON THE NORTHWESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, AS RECORDED IN OFFICIAL RECORDS BOOK 3988, PAGE 1075 OF THE AFORESAID PUBLIC RECORDS OF SEMINOLE COUNTY; THENCE RUN NORTH 49°31'30" EAST, ALONG SAID NORTHWESTERLY RIGHT OF WAY LINE, NON-TANGENT TO SAID CURVE, FOR A DISTANCE OF 250.50 FEET; THENCE RUN NORTH 39°49°55" WEST, DEPARTING SAID NORTHWESTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 659.48 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, ACCORDING TO THE AFORESAID OFFICIAL RECORDS BOOK 3177, PAGE 632, LYING ON A NON-TANGENT CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 4008.02 FEET, A CHORD BEARING OF NORTH 03°01'14" WEST AND A CHORD DISTANCE OF 96.30 FEET; THENCE RUN NORTHERLY ALONG SAID WESTERLY RIGHT OF WAY LINE AND ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 01°22'36" FOR AN ARC DISTANCE OF 96.30 FEET TO A NON-TANGENT POINT AND THE POINT OF BEGINNING; THENCE RUN NORTH 87°58'38" WEST, ALONG THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 17 OF TUSKAWILLA, ACCORDING TO THE PLAT OF D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, NON—RADIAL WITH SAID CURVE AND DEPARTING SAID WESTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 142.88 FEET TO THE EASTERLY LINE OF THAT CERTAIN THIRTY FOOT (30') WIDE UNNAMED RIGHT OF WAY ACCORDING TO THE AFORESAID PLAT OF D.R. MITCHELL'S SURVEY OF THE LEVY GRANT; THENCE RUN NORTH 02°41'39" EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 27.00 FEET; THENCE RUN SOUTH 87°58'38" EAST, DEPARTING SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 99.57 FEET TO A POINT ON A NON—TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 151.67 FEET, A CHORD BEARING OF NORTH 83°10'19" EAST AND A CHORD DISTANCE OF 41.09 FEET; THENCE RUN NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 15°34'11" FOR AN ARC DISTANCE OF 41.22 FEET TO A POINT ON THE AFORESAID WESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, LYING ON A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 4008.02 FEET, A CHORD BEARING OF SOUTH 02°05'36" EAST AND A CHORD DISTANCE OF 33.41 FEET; THENCE RUN SOUTHERLY ALONG SAID WESTERLY RIGHT OF WAY LINE AND ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 00°28'39" FOR AN ARC DISTANCE OF 33.41 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED TRACT OF LAND LIES IN SEMINOLE COUNTY, FLORIDA, AND CONTAINS 3,918 SQUARE FEET OR 0.09 ACRES MORE OR LESS.

EXHIBIT B
OVERALL SITE PLAN

DRAFT

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per all applicable City Codes and the City Comprehensive Plan. The sufficiency review shall be completed within thirty (30) calendar days per FL Statue 166.033. Once the application is deemed sufficient, the applicant shall move forward with the Community Workshop, required per Chapter 20–Zoning Sec.20-29.1.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Development Agreement is quasi-judicial in nature. Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Development Agreement recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Development Agreements and may impose reasonable conditions on any approved Development Agreement to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan.

REQUIRED INFORMATION:

Applicant(s):	EPB Engineering & Construction, PLLC
Applicant Signature:	_____ Date: 9/11/2023
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC
Mailing Address:	P.O. BOX 1013 OAKLAND, FL. 34760
Email:	WESSMCMILLAN@CENTRALFLORIDAACE.COM
Phone Number:	407-509-7098
Property Address:	Tuskawilla Rd. Winter Springs Fl. 32708
Parcel ID(s):	01-21-30-501-0000-0010

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

Parcel Size: 3.42 acre (Combined Lots Total 5.72 Acres + ROW Abandonment)

Existing Use: Raw Land

Future Land Use: Commercial Shopping Center

Zoning District: T5

Community Workshop Date: _____

A general description of the relief sought under this division.

Applicant is requesting to build a 17,200 sf retail center as Phase 1 for the Sutton Crossings Site. The remainder of the site will be developed in separate phases.

A brief explanation, with applicable supporting competent substantial evidence and documents, as to why the application satisfies the relevant criteria set forth in the City Zoning Code and City Comprehensive Plan.

Current retail center for phase 1 has undergone aesthetic review with the city and has been approved.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

John W McMillan

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

A site plan and 3D renderings for the strip center will be provided to the City Commission. All other material will be available on request.

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing.

REQUIRED DOCUMENTATION:

- A complete Application and Fee ($1000.00 (new), $800.00 (modification to existing DA))
- An Electronic copy of the most recent survey of the subject property.
- An Electronic copy of the Legal Description of the subject property.
- Documentation and Data supporting the request.

* Fees are as shown above plus actual costs incurred for advertising or notification, and for reimbursement for technical and/or professional services which may be required in connection with the review, inspection or approval of any development (based on accounting submitted by the city's consultant) , payable prior to approval of the pertinent stage of development.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Development Agreement for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): John W. McMillan EPB Engineering and Construction, PLLC

Applicant Signature: _____ Date: 9/12/2023

Business Name: EPB ENGINEERING & CONSTRUCTION, PLLC

Address: P.O. BOX 1013, OAKLAND FL. 34760 Parcel ID: 01-21-30-501-0000-0010

STATE OF MS COUNTY OF Jackson

The foregoing instrument was acknowledged before me this 12 day of September, 2023, by John McMillan who is personally known to me or who has produced MS Driver License as identification and who did/did not take an oath.

_____ Date: 9/12/2023 (seal):

Notary Public Signature: _____

My Commission expires: 12-4-2026

STATE OF MISSISSIPPI
MATEO ESCANER
NOTARY PUBLIC
Jackson County
My Commission Expires December 4, 2026
COMMISSION NUMBER 346322

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF_____COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____as identification and who did/did not take an oath.

_____Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

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All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Development Agreement is quasi-judicial in nature. Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Development Agreement recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Development Agreements and may impose reasonable conditions on any approved Development Agreement to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan.

REQUIRED INFORMATION:

Applicant(s):	EPB Engineering & Construction, PLLC
Applicant Signature:	Date: 9-11-2023
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	Schrimsher Land Fund V Ltd. Schrimsher Land Fund 1986-II fka & Schrimsher Land Fund 1985 LTD & Schrimsher Land Fund VI LTD
Mailing Address:	600 E Colonial Dr. Suite 100 Orlando Fl. 32803
Email:	schrimsherprop@aol.com
Phone Number:	407-810-3515
Property Address:	Tuskawilla Rd. Winter Springs Fl. 32708
Parcel ID(s):	26-20-30-5AR-0A00-008D; 26-20-30-5AR-0A00-008H

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

Parcel Size: 2.3 acre (Combined Lots Total 5.72 Acres + ROW Abandonment)

Existing Use: Raw Land

Future Land Use: Commercial Shopping Center

Zoning District: T5

Community Workshop Date: _____

A general description of the relief sought under this division.

Applicant is requesting to build a 17,200 sf retail center as Phase 1 for the Sutton Crossings Site.

The remainder of the site will be developed in separate phases.

A brief explanation, with applicable supporting competent substantial evidence and documents, as to why the application satisfies the relevant criteria set forth in the City Zoning Code and City Comprehensive Plan.

Current retail center proposed for phase 1 has undergone aesthetic review with the city and has been approved.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

John W McMillan

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

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All other material will be available on request.

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REQUIRED DOCUMENTATION:

- A complete Application and Fee ($1000.00 (new), $800.00 (modification to existing DA))
- An Electronic copy of the most recent survey of the subject property.
- An Electronic copy of the Legal Description of the subject property.
- Documentation and Data supporting the request.

* Fees are as shown above plus actual costs incurred for advertising or notification, and for reimbursement for technical and/or professional services which may be required in connection with the review, inspection or approval of any development (based on accounting submitted by the city's consultant) , payable prior to approval of the pertinent stage of development.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
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Application – Development Agreement

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Development Agreement for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): _____

Applicant Signature: _____ Date: _____

Business Name: _____

Address: _____ Parcel ID: _____

STATE OF _____ COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by _____ who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____ Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property. Schrimsher Land Fund V Ltd.

Property Owner's Name (Print): Schrimsher Land Fund 1986-II fka & Schrimsher Land Fund 1985 LTD & Schrimsher Land Fund VI LTD

Property Owner Signature: Michael A Schrimsher Date 9-11-23

STATE OF Florida COUNTY OF Orange

The foregoing instrument was acknowledged before me this 11th day of September, 2023 by Michael A. Schrimsher who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____ Date: 9/11/23 (seal):

Notary Public Signature: Wanda R Penland

My Commission expires: _____

Notary Public State of Florida
Wanda L Penland
My Commission
HH 262068
Exp. 7/30/2026

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

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- May be sworn-in as a witness in order to provide testimony to the City Commission;
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The City Commission (CC) shall render all final decisions regarding Development Agreements and may impose reasonable conditions on any approved Development Agreement to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan.

REQUIRED INFORMATION:

Applicant(s):	EPB Engineering & Construction, PLLC
Applicant Signature:	_____ Date: 9/11/2023
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC
Mailing Address:	P.O. BOX 1013 OAKLAND, FL. 34760
Email:	WESSMCMILLAN@CENTRALFLORIDAACE.COM
Phone Number:	407-509-7098
Property Address:	Tuskawilla Rd. Winter Springs Fl. 32708
Parcel ID(s):	01-21-30-501-0000-0010

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

Parcel Size: 3.42 acre (Combined Lots Total 5.72 Acres + ROW Abandonment)

Existing Use: Raw Land

Future Land Use: Commercial Shopping Center

Zoning District: T5

Community Workshop Date: _____

A general description of the relief sought under this division.

Applicant is requesting to build a 17,200 sf retail center as Phase 1 for the Sutton Crossings Site.

The remainder of the site will be developed in separate phases.

A brief explanation, with applicable supporting competent substantial evidence and documents, as to why the application satisfies the relevant criteria set forth in the City Zoning Code and City Comprehensive Plan.

Current retail center for phase 1 has undergone aesthetic review with the city and has been approved.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

John W McMillan

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

A site plan and 3D renderings for the strip center will be provided to the City Commission.

All other material will be available on request.

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_

REQUIRED DOCUMENTATION:

- A complete Application and Fee ($1000.00 (new), $800.00 (modification to existing DA))
- An Electronic copy of the most recent survey of the subject property.
- An Electronic copy of the Legal Description of the subject property.
- Documentation and Data supporting the request.

* Fees are as shown above plus actual costs incurred for advertising or notification, and for reimbursement for technical and/or professional services which may be required in connection with the review, inspection or approval of any development (based on accounting submitted by the city's consultant) , payable prior to approval of the pertinent stage of development.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Development Agreement for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): John W. McMillan EPB Engineering and Construction, PLLC

Applicant Signature: _____ Date: 9/12/2023

Business Name: EPB ENGINEERING & CONSTRUCTION, PLLC

Address: P.O. BOX 1013, OAKLAND FL. 34760 Parcel ID: 01-21-30-501-0000-0010

STATE OF MS COUNTY OF Jackson

The foregoing instrument was acknowledged before me this 12 day of September, 2023, by John McMillan who is personally known to me or who has produced MS Driver License as identification and who did/did not take an oath.

_____ Date: 9/12/2023 (seal):

Notary Public Signature: _____

My Commission expires: 12-4-2026

STATE OF MISSISSIPPI
MATEO ESCANER
NOTARY PUBLIC
Jackson County
My Commission Expires December 4, 2026
COMMISSION NUMBER 346322

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF_____COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____as identification and who did/did not take an oath.

_____Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per all applicable City Codes and the City Comprehensive Plan. The sufficiency review shall be completed within thirty (30) calendar days per FL Statue 166.033. Once the application is deemed sufficient, the applicant shall move forward with the Community Workshop, required per Chapter 20–Zoning Sec.20-29.1.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Development Agreement is quasi-judicial in nature. Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Development Agreement recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Development Agreements and may impose reasonable conditions on any approved Development Agreement to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan.

REQUIRED INFORMATION:

Applicant(s):	EPB Engineering & Construction, PLLC
Applicant Signature:	Date: 9-11-2023
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	Schrimsher Land Fund V Ltd. Schrimsher Land Fund 1986-II fka & Schrimsher Land Fund 1985 LTD & Schrimsher Land Fund VI LTD
Mailing Address:	600 E Colonial Dr. Suite 100 Orlando Fl. 32803
Email:	schrimsherprop@aol.com
Phone Number:	407-810-3515
Property Address:	Tuskawilla Rd. Winter Springs Fl. 32708
Parcel ID(s):	26-20-30-5AR-0A00-008D; 26-20-30-5AR-0A00-008H

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

Parcel Size: 2.3 acre (Combined Lots Total 5.72 Acres + ROW Abandonment)

Existing Use: Raw Land

Future Land Use: Commercial Shopping Center

Zoning District: T5

Community Workshop Date: _____

A general description of the relief sought under this division.

Applicant is requesting to build a 17,200 sf retail center as Phase 1 for the Sutton Crossings Site.

The remainder of the site will be developed in separate phases.

A brief explanation, with applicable supporting competent substantial evidence and documents, as to why the application satisfies the relevant criteria set forth in the City Zoning Code and City Comprehensive Plan.

Current retail center proposed for phase 1 has undergone aesthetic review with the city and has been approved.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

John W McMillan

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

A site plan and 3D renderings for the retail center will be provided to the City Commission.

All other material will be available on request.

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing.

REQUIRED DOCUMENTATION:

- A complete Application and Fee ($1000.00 (new), $800.00 (modification to existing DA))
- An Electronic copy of the most recent survey of the subject property.
- An Electronic copy of the Legal Description of the subject property.
- Documentation and Data supporting the request.

* Fees are as shown above plus actual costs incurred for advertising or notification, and for reimbursement for technical and/or professional services which may be required in connection with the review, inspection or approval of any development (based on accounting submitted by the city's consultant) , payable prior to approval of the pertinent stage of development.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Development Agreement for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): _____

Applicant Signature: _____ Date: _____

Business Name: _____

Address: _____ Parcel ID: _____

STATE OF _____ COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by _____ who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____ Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property. Schrimsher Land Fund V Ltd.

Property Owner's Name (Print): Schrimsher Land Fund 1986-II fka & Schrimsher Land Fund 1985 LTD & Schrimsher Land Fund VI LTD

Property Owner Signature: Michael A Schrimsher Date 9-11-23

STATE OF Florida COUNTY OF Orange

The foregoing instrument was acknowledged before me this 11th day of September, 2023 by Michael A. Schrimsher who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____ Date: 9/11/23 (seal):

Notary Public Signature: Wanda R Penland

My Commission expires: _____

Notary Public State of Florida
Wanda L Penland
My Commission
HH 262068
Exp. 7/30/2026

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

Waiver - Street Facing Pickup Window

REQUIRED INFORMATION

Applicant(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 3/11/25
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Project Name:	Sutton Crossings Development
Property Address:	Raw Land Near West of intersection of Michael Blake Blvd and SR434 and East of intersection of Michael Blake Blvd and Tuskawilla Rd
Parcel ID(s):	01213050100000010 , 2620305AROA00008D, 2620305AROA00008H
Parcel Size:	6.2 Acres
Existing Use:	Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): Street Facing Pickup Window

A waiver is requested from Winter Springs City Code per "Section 20-324(6)" to allow "a street facing drive thru" in lieu of "only allowing a drive through window in the rear and alley"

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

The regulation prohibiting a street-facing pickup window imposes an impractical and unreasonable constraint on the proposed development. Situated at the intersection of Michael Blake Blvd and Tuskawilla Rd, the property's layout makes a street-facing pickup window the most logical and functional choice. Positioned at the end cap of a shopping center, relocating the window to another location is not a feasible option. To address aesthetic considerations, the developer is enhancing the area with additional landscaping in front of the pickup window, ensuring visual appeal while maintaining the character of the surrounding environment.

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossings Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features an early learning academy, an Ace Hardware, Tropical Café, a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

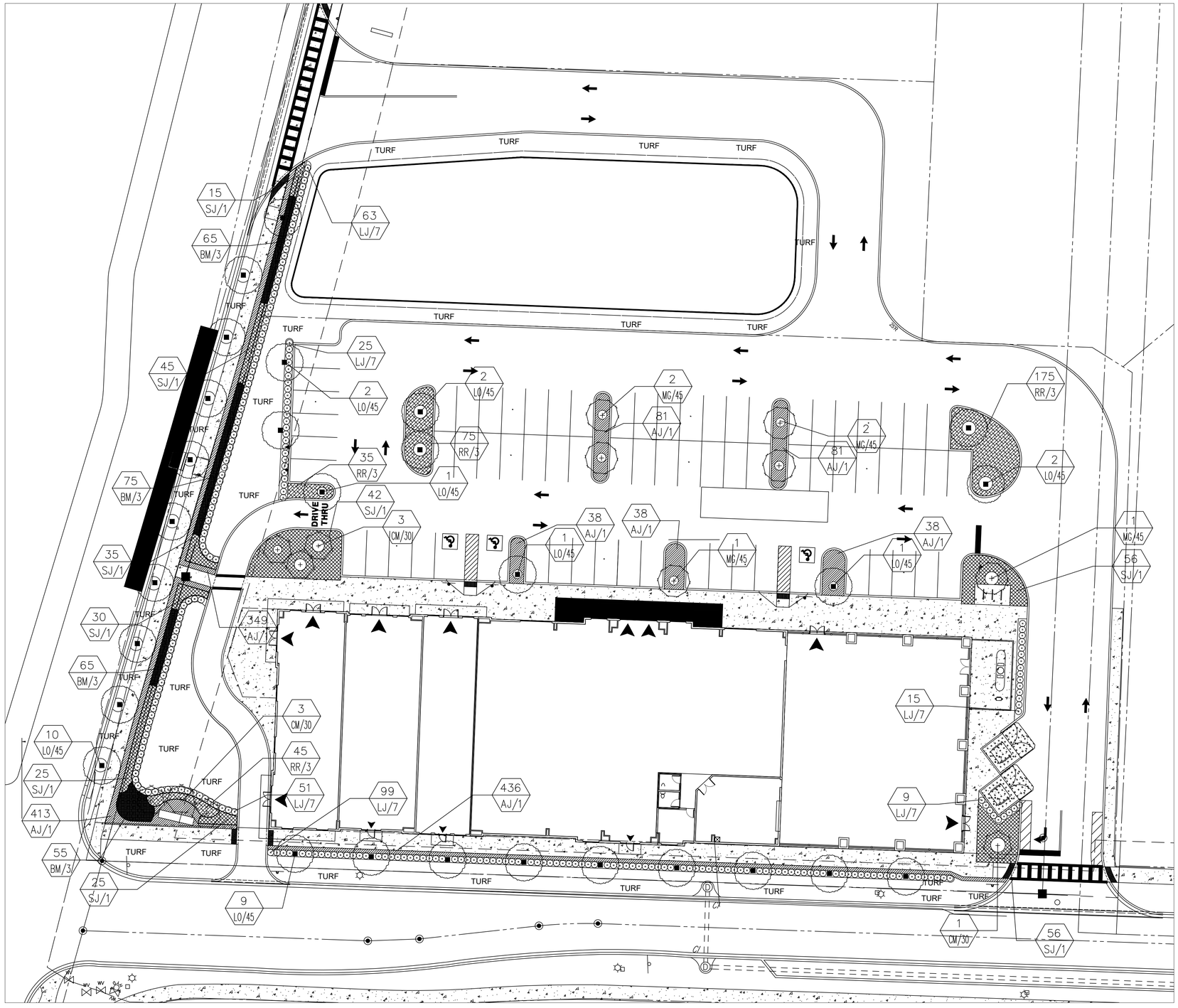
Wess McMillan - Developer, Owner, and Operator for Ace Hardware

Marlon Champion - Developer for Chick-fil-a

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Conceptual site plan, landscaping plan

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_



Plant Legend

Symbol	Qty	Name	Spec
		TREES	
MG/45	*6*	*Souther Magnolia*	*45 Gallon, 8'ht x 4' sprd x 2" cal - Per Plan*
LO/45	*27*	*Live Oak*	*45 Gallon, 8'ht x 4' sprd x 2" cal - Per Plan*
CM/30	*7*	*Crepe Myrtle - Pink*	*30 Gallon, 6'ht x 3' sprd x Multi Trunk 2" cal - Per Plan*
		SHRUBS and GROUND COVER	
LJ/7	*268*	*Sweet Viburnum*	*7 Gallon, 30" ht x 24" sprd - 30" O.C*
BM/3	*260*	*Box Wood*	*3 Gallon, 18" ht x 8" sprd - 18" O.C*
RR/3	*330*	*Red Ruffel Azela*	*3 Gallon, 18" ht x 8" sprd - 24" O.C*
AJ/1	*1474*	*Asiatic Jasmine*	*1 Gallon, 3 Runners per Pot, 12" Min Lenght - 18" O.C*
SJ/1	*329*	*Shore Juniper*	*1 Gallon, 8" Sprd x 4" ht - 24" O.C*
TURF		*St. Augustine Sod*	*Per Plan Solid Sod*

REVISIONS	BY
REV A - CC 11/28/23	SLD
REV D - SC 02/3/2025	SLD
REV E - CC 3/3/25	SLD

Winter Springs Ace Hardware
LANDSCAPE PLAN

DOBSON'S WOODS & WATER, INC.
Landscape, Maintenance, Pest Control, & Irrigation Contractors
Registered Landscape Architects # LC26000283
Certified General Contractors # CGC1515628
851 Maguire Rd.
Ocoee, Fl 34761
Phone: 407-841-0030
FAx: 407-843-7546
WWW.dobsonsww.com

LARRY DOBSON, L.A.
State Of Florida
Reg.# LA938

DRAWN BY	Sheldon Dean
CHECKED	Larry K. Dobson
DATE	June 8, 2023
SCALE	1"=20'
JOB NO.	WSA-001
SHEET	L.01
	1 OF 2 SHEETS

C:\Sdean\Side Work\DWW\Winter Springs Ace Hardware_Utilities Site Plan - Standard\220336 WINTER SPRINGS FL-TOPO-TREES-TABLE - Standard (1)\Winter Springs Ace Landscape3-REV E.dwg

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

Waiver - Lot Size

REQUIRED INFORMATION

Applicant(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 3/11/2025
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Project Name:	Sutton Crossings Development
Property Address:	Raw Land Near West of intersection of Michael Blake Blvd and SR434 and East of intersection of Michael Blake Blvd and Tuskawilla Rd
Parcel ID(s):	01213050100000010 , 2620305AROA00008D, 2620305AROA00008H
Parcel Size:	6.2 Acres
Existing Use:	Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): Lot Size Waiver

A waiver is requested from Winter Springs City Code "Section 20-325" to allow "larger lot sizes" in lieu of "lot sizes with a maximum width of 180ft and maximum depth of 160ft."

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

For this site it is impractical to have the maximum lot size of 28,800sf (180ftx160ft). See proposed re-plat submitted under SUBD-2024-0002. The Proposed sites are Ace Hardware Anchored Commerce Center is 1.836 AC, Chick-Fila 1.661AC Bank .924 AC, Early Learning Academy (School) 1.132

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossings Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features an early learning academy, an Ace Hardware, Tropical Café, a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

Wess McMillan - Developer, Owner, and Operator for Ace Hardware

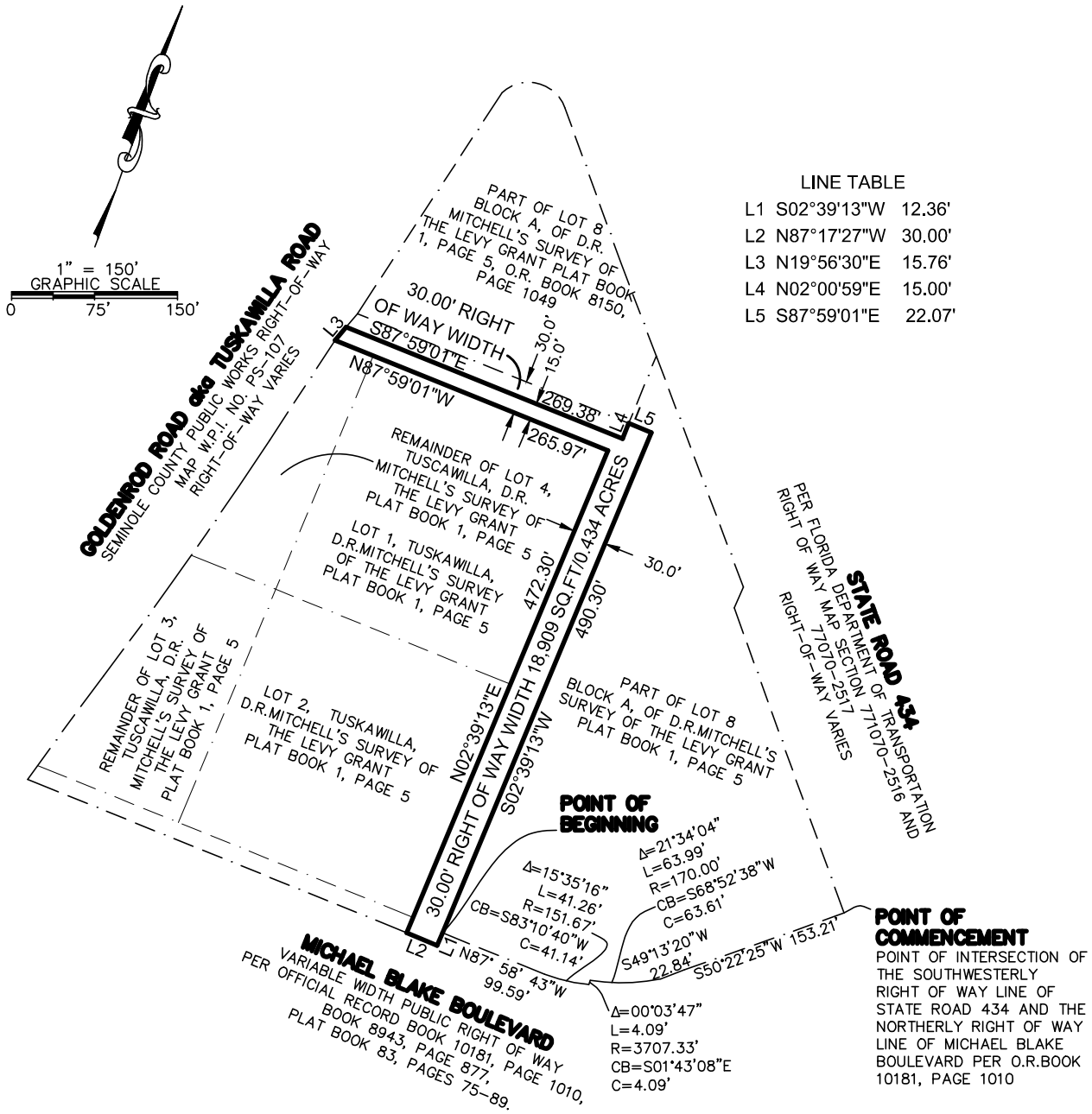
Marlon Champion - Developer for Chick-fil-a

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Conceptual site plan, proposed re-plat

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_

SKETCH OF DESCRIPTION



LINE TABLE

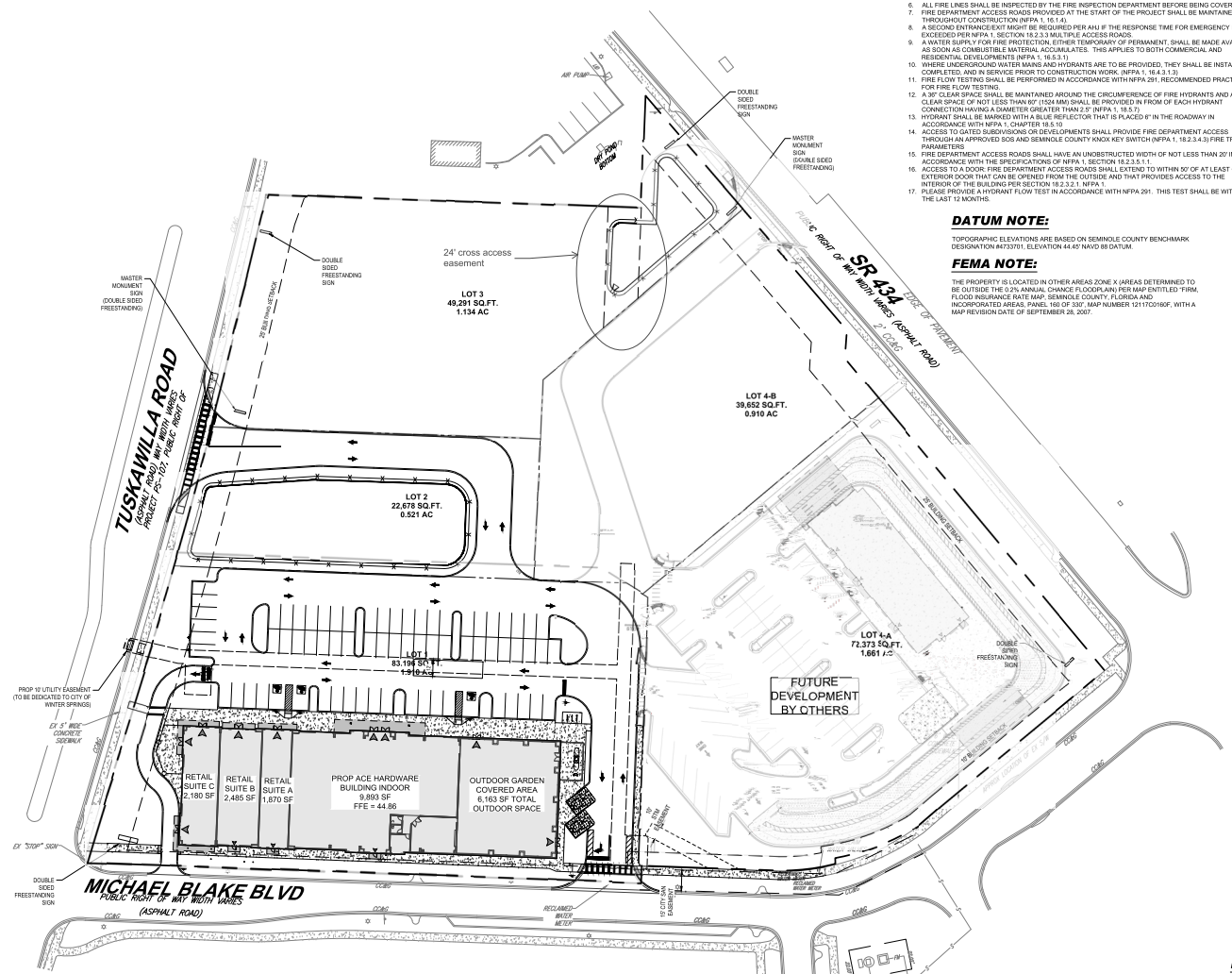
L1	S02°39'13"W	12.36'
L2	N87°17'27"W	30.00'
L3	N19°56'30"E	15.76'
L4	N02°00'59"E	15.00'
L5	S87°59'01"E	22.07'

THIS IS NOT A BOUNDARY SURVEY SHEET 2 OF 2

JOB NUMBER: 220336 DATE:02/12/25	
SCALE: 1"=150'	
DRAWN BY: MMJ	
APPROVED BY: MWS	
DATE	REVISION HISTORY

REPUBLIC NATIONAL

480 NEEDLES TRAIL
LONGWOOD, FLORIDA 32779
PHONE: (407) 862-4200
FAX: (407) 862-6229



WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS (NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 30' CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60' (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

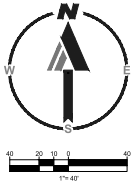
THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

UTILITY CONFLICT NOTE:

CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION THIS SHALL INCLUDE CALLING UTILITY LOCATE. POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY



LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	1
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE, SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
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15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

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5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (RW) SHOULD BE THERMOPLASTIC.
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BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LANDSCAPE ARCHITECTURE
PROGRAM MANAGEMENT
PERMITTING SERVICES
TRANSPORTATION SERVICES

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHTED WORK OF BOHLER AND OPERATING COMPANIES AND ARE NOT TO BE USED FOR ANY PROJECT OTHER THAN THE ONE SPECIFICALLY INDICATED HEREIN. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY BOHLER FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO BOHLER AND OPERATING COMPANIES. USER SHALL INDEMNIFY AND HOLD HARMLESS BOHLER AND OPERATING COMPANIES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

811 Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVIL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MORO, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

C-301

REVISION 2 - 01/28/2025

Feb 06, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\SP-CIVIL-SITE-FLA240162.00-0A.dwg —— LAYOUT: C-301 - OVERALL SITE PLAN

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

Waiver - SR434 Master Monument Sign

REQUIRED INFORMATION

Applicant(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 3/11/2025
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Project Name:	Sutton Crossings Development
Property Address:	Raw Land Near West of intersection of Michael Blake Blvd and SR434 and East of intersection of Michael Blake Blvd and Tuskawilla Rd
Parcel ID(s):	01213050100000010 , 2620305AROA00008D, 2620305AROA00008H
Parcel Size:	6.2 Acres
Existing Use:	Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): SR434 Monument Sign Waiver

A waiver is requested from Winter Springs City Code "Section 16-57" to allow

"a freestanding master monument sign" in lieu of "not allowing a freestanding sign"

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

Sutton Crossings is a planned commercial development that requires a master monument sign to effectively inform passing traffic of the businesses within the shopping center. Without such signage, visibility for tenants would be severely limited, creating an impractical and unreasonable burden on businesses trying to attract customers.

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossings Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features an early learning academy, an Ace Hardware, Tropical Café, a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

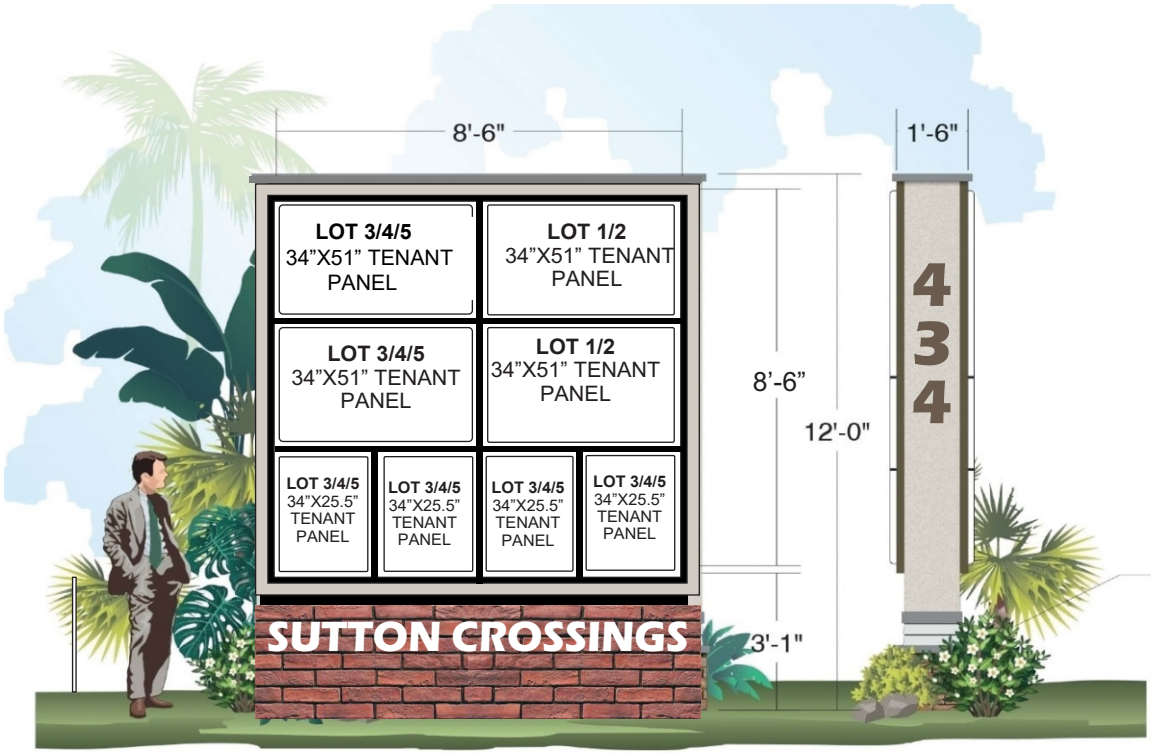
Wess McMillan - Developer, Owner, and Operator for Ace Hardware

Marlon Champion - Developer for Chick-fil-a

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Monument Sign Drawing, Location Map of Monument Sign on Conceptual Site Plan

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_



INTERNALLY ILLUMINATED DOUBLE SIDED FREESTANDING SIGN SCALE 1/4"

FABRICATE AND INSTALL THREE DOUBLE SIDED ILLUMINATED MONUMENT SIGNS. SIGN CABINET IS ALL ALUMINUM CONSTRUCTION USING 2"X2"X3/16" ALUMINUM ANGLE FRAME AND SKINNED WITH .063" ALUMINUM SHEET. INTERNAL ILLUMINATION IS LED TAPOUT STICKS. FACES ARE WHITE PANNED ACRYLIC WITH T-BAR DIVIDERS AND GRAPHICS WILL BE 3M TRANSLUCENT VINYL.
BASE WILL BRICK VENEER MOUNTED TO ALUMINUM POLE COVER.
STEEL PIPE AND CONCRETE FOOTER PER ENGINEERS CALCULATIONS.

PROJECT NAME: SUTTON CROSSINGS
DATE: 12.12.23

PRIMARY WIRING TO SIGN BY OTHERS. WE WILL CONNECT TO PRIMARY IF WITHIN 10' OF SIGN AND EASY CONNECTION.

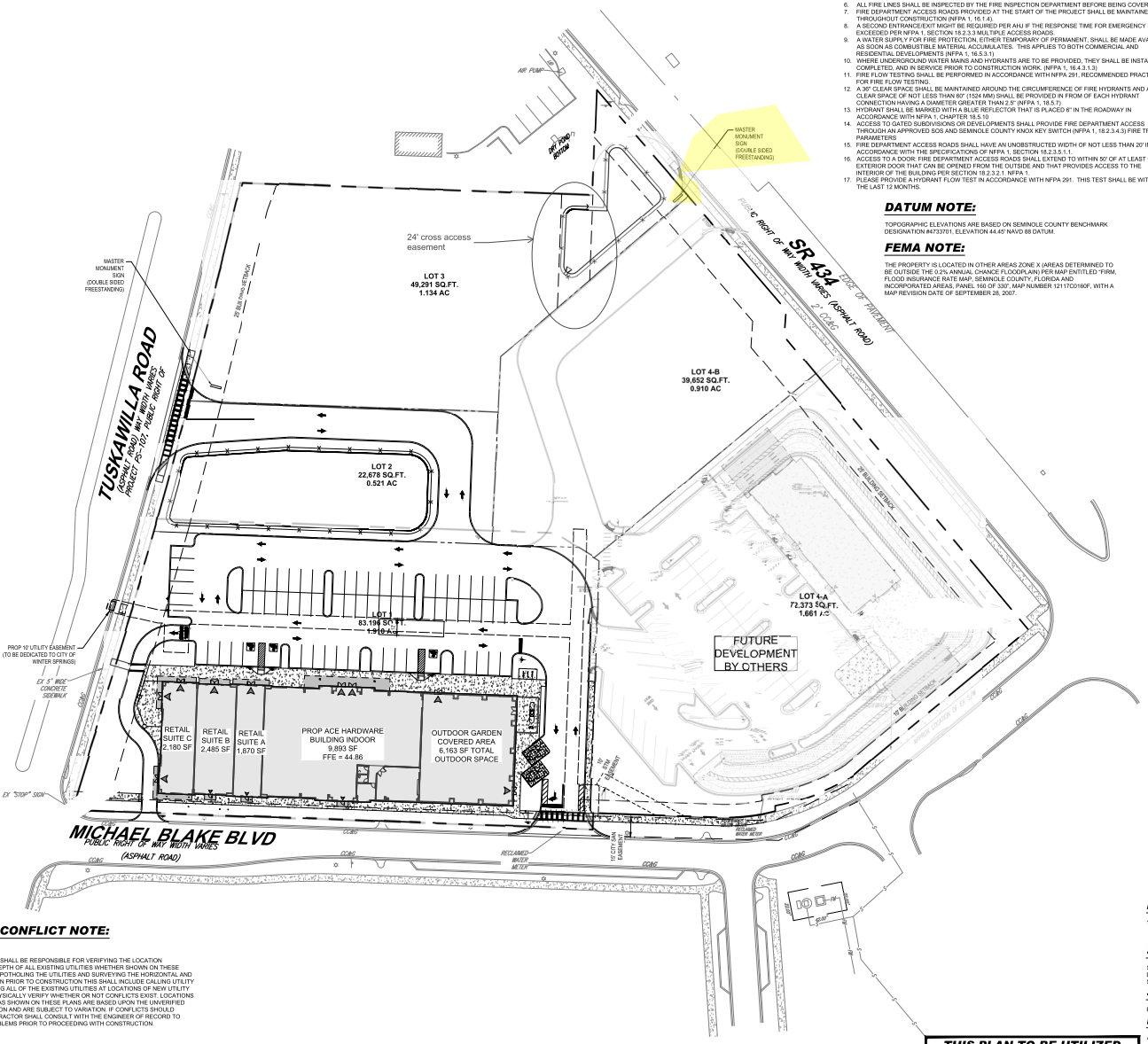
I have carefully reviewed and hereby accept the drawing(s) as shown. All additional changes must be in writing and approved by both parties.

signature

date

This drawing is for illustration purposes only. Colors and scaling in drawing may vary.

FLORIDA SIGN COMPANY
INNOVATIV SIGNAGE CHURCH & SCHOOL SIGNS
1101 29th Avenue West
Bradenton, FL 34205
Phone: 941.747.1000 Fax: 941-746.3667



WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS (NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330', MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	1
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
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UTILITY CONFLICT NOTE:

CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION THIS SHALL INCLUDE CALLING UTILITY LOCATE. POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LANDSCAPE ARCHITECTURE
PROGRAM MANAGEMENT
PERMITTING SERVICES
TRANSPORTATION SERVICES

THESE DOCUMENTS AND ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED THEREIN ARE THE EXCLUSIVE PROPERTY OF BOHLER AND SHALL NOT BE USED BY OR DISCLOSED TO ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF BOHLER.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

811 Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVIL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MORIS, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

C-301

REVISION 2 - 01/28/2025

Feb 06, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\SP-CIVIL-SITE-FLA240162.00-0A.dwg —— LAYOUT: C-301 - OVERALL SITE PLAN

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

Waiver - Statistical Tree Survey Waiver

REQUIRED INFORMATION

Applicant(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 3/11/2025
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Project Name:	Sutton Crossings Development
Property Address:	Raw Land Near West of intersection of Michael Blake Blvd and SR434 and East of intersection of Michael Blake Blvd and Tuskawilla Rd
Parcel ID(s):	01213050100000010 , 2620305AROA00008D, 2620305AROA00008H
Parcel Size:	6.2 Acres
Existing Use:	Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): Statistical Tree Survey Waiver

A waiver is requested from Winter Springs City Code per "Section 5-6(a)(1)" to allow "a statistical tree survey for trees between 4" DBH and 9" DBH" in lieu of "an inventory and location survey for all trees 4" DBH and greater"

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

The subject property contains a dense and excessive quantity of trees in the 4"–9" DBH range. Requiring a full-location tree survey of every tree within this size class would be logistically infeasible, financially burdensome, and unnecessarily duplicative given the ecological intent of the code. Recognizing this impracticality, the City Landscape Manager, in collaboration with the City-approved arborist and Community Development Director, implemented a nationally accepted statistical sampling methodology to assess trees within the 4"–9" DBH category. This approach aligns with best management practices outlined by the ISA (International Society of Arboriculture) and ANSI A300 standards, ensuring scientific accuracy and ecological sensitivity while maintaining regulatory intent.

In contrast, all trees 10" DBH and larger were individually surveyed and assessed, which reflects both the practical feasibility and higher ecological value of larger, more mature trees.

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossings Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features an early learning academy, an Ace Hardware, Tropical Café, a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

Wess McMillan - Developer, Owner, and Operator for Ace Hardware

Marlon Champion - Developer for Chick-fil-a

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Arborist Memo Addressing Statistical Tree Survey

(Note: Tree Location and Health Assessment Surveys for the 306 trees with a DBH of 10" and greater has been completed and submitted to the city)

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_

Mary L. Edwards
Consulting Arborist Services

March 3, 2025

Wess McMillian
Ace Hardware
Central Florida

Dear Wess,

I would like to summarize the timeline and requirements for the Statistical Survey that was approved by the City of Winter Springs in March 2022. This survey was conducted for the adjacent parcel located at the southeast corner of Tuscawilla Road and Michael Blake Boulevard, which is now referred to as Sutton Crossing Development.

On March 7, 2022, I emailed Kevin Maddox, the Landscape Manager at that time for the City of Winter Springs, to make the following request:

- The tree survey identified a total of 706 trees on the property, with 400 trees having a diameter of 4"–9" and 306 trees ranging from 10"–30" in diameter. However, the survey did not include the necessary species identification, which is required for development.
- I proposed that, instead of identifying the species of all 706 trees, it would be acceptable to conduct a Statistical Survey for the 400 trees with diameters between 4" and 9" and provide an individual assessment for the 306 trees with diameters between 10" and 30".

That same day, March 7, 2022, Mr. Maddox responded, confirming that after consulting with the Community Development Director, this approach was deemed acceptable. With this approval, we scheduled the final assessment for May 24, 2023. The results of the statistical survey assessment are provided below, along with supporting images and site characteristics.

Statistical Tree Survey Results for Sutton Crossing Development:

- 100% of trees under 10" in diameter appear to be volunteer trees. There were very few mature trees for the size of the parcel. The area consists of vines, volunteer trees, invasive species, and Palmetto ground cover. These are trees/plants that were not planted with purpose and tend to be less than a desirable species with poor form and lack of value.

- The species outline for this tree canopy consists of.
    1. 10% - (40 trees) *Quercus virginiana* – Live Oak – 50% Poor and 50% Moderate, the same as the full inventory assessment
    2. 10% - (40 trees) *Quercus laurifolia* - Laurel Oak – Poor condition, stretched canopies, and heavy vines.
    3. 55%- (220 trees) Invasive Species and Palmettos – Poor Invasive Species
    4. 1% (4 trees) *Prunus laurocerasus* - Cherry Laurel – Poor – Poor Form and Weak Structures
    5. 23% (92 trees) *Pinus elliottii* – Slash Pine – Poor Heavily encroached by surrounding vines
    6. 1% (4 trees) *Prunus serotina* – Black Cherry – Poor most of this species was dead or in a state of

decline



Examples of volunteer trees under ten inches in diameter

Supporting Characteristics for Health Assessments:

Health ratings for individual trees will be based on the following criteria:

Excellent – Specimen tree good health
Good – Tree that meets available points for good structure, viable canopy and without decay.
Moderate – Tree that does not meet either good structure, viable canopy or has internal decay present.
Poor – Tree that meets multiple stress items and should be considered for removal also includes Invasive Species– Removal Only

The underbrush and heavy forestation were consistent throughout the entire site, resulting in poor trunk and canopy form primarily due to the heavy encroachment from neighboring trees, heavy vines, and insufficient sunlight for proper development. This site had large openings with little to no tree cover giving the vine and Palmetto population an opportunity to mature which has completely engulf the neighboring tree canopies. (Pictures below).



Heavily encroached canopies with vines

Other characteristics such as trunk wounding, advanced decay, and Pine decline was evident throughout the property. There was excessive utility pruning along the east property line leaving one-sided canopies with poor form, dead trees, high stretched canopies competing for sunlight and branch bark inclusions on the co- dominant and tri-dominant trunk structures. There was also storm damage along the southeast corner of the property, where trees were broken and damaged from high winds. These circumstances play a significant role in determining if a tree is in good health and suitable for preservation (Example Pictures below).



Large deadwood, broken branches, and damaged trees.

We also conducted the individual species identification and health assessment for all of the (306) trees 10" diameter and greater. The result of this assessment is attached to this summary report.

Again Wess, thank you for the opportunity to submit this Consulting Arborist report. Please let me know if you have any questions regarding this information.

Sincerely,
Mary

Mary L. Edwards
Registered Consulting Arborist RCA #451
ISA Certified Arborist FL-0116- ISA Qualified Tree Risk Assessor
mary@maryedwardsarborist.com
321-303-4714

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

Waiver - Specimen Tree Removal

REQUIRED INFORMATION

Applicant(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 3/11/2025
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Project Name:	Sutton Crossings Development
Property Address:	Raw Land Near West of intersection of Michael Blake Blvd and SR434 and East of intersection of Michael Blake Blvd and Tuskawilla Rd
Parcel ID(s):	01213050100000010 , 2620305AROA00008D, 2620305AROA00008H
Parcel Size:	6.2 Acres
Existing Use:	Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): Specimen Tree Removal Waiver

A waiver is requested from Winter Springs City Code per "Section 5-16" to allow "a specimen tree removal" in lieu of "Obstructing a Building Footprint"

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

The existing zoning condition regarding specimen tree preservation creates an impractical and unreasonable obstacle for the proposed development. A specimen tree is located within the building footprint of the proposed Chick-fil-A, making its removal necessary to accommodate the restaurant's structure, parking, and drive-thru layout. Preserving the tree in its current location would render the site unusable for its intended purpose, effectively preventing the development from proceeding as planned. The waiver is essential to balance responsible site planning with the economic viability of the project while maintaining overall landscape requirements.

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossings Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features an early learning academy, an Ace Hardware, Tropical Café, a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

Wess McMillan - Developer, Owner, and Operator for Ace Hardware

Marlon Champion - Developer for Chick-fil-a

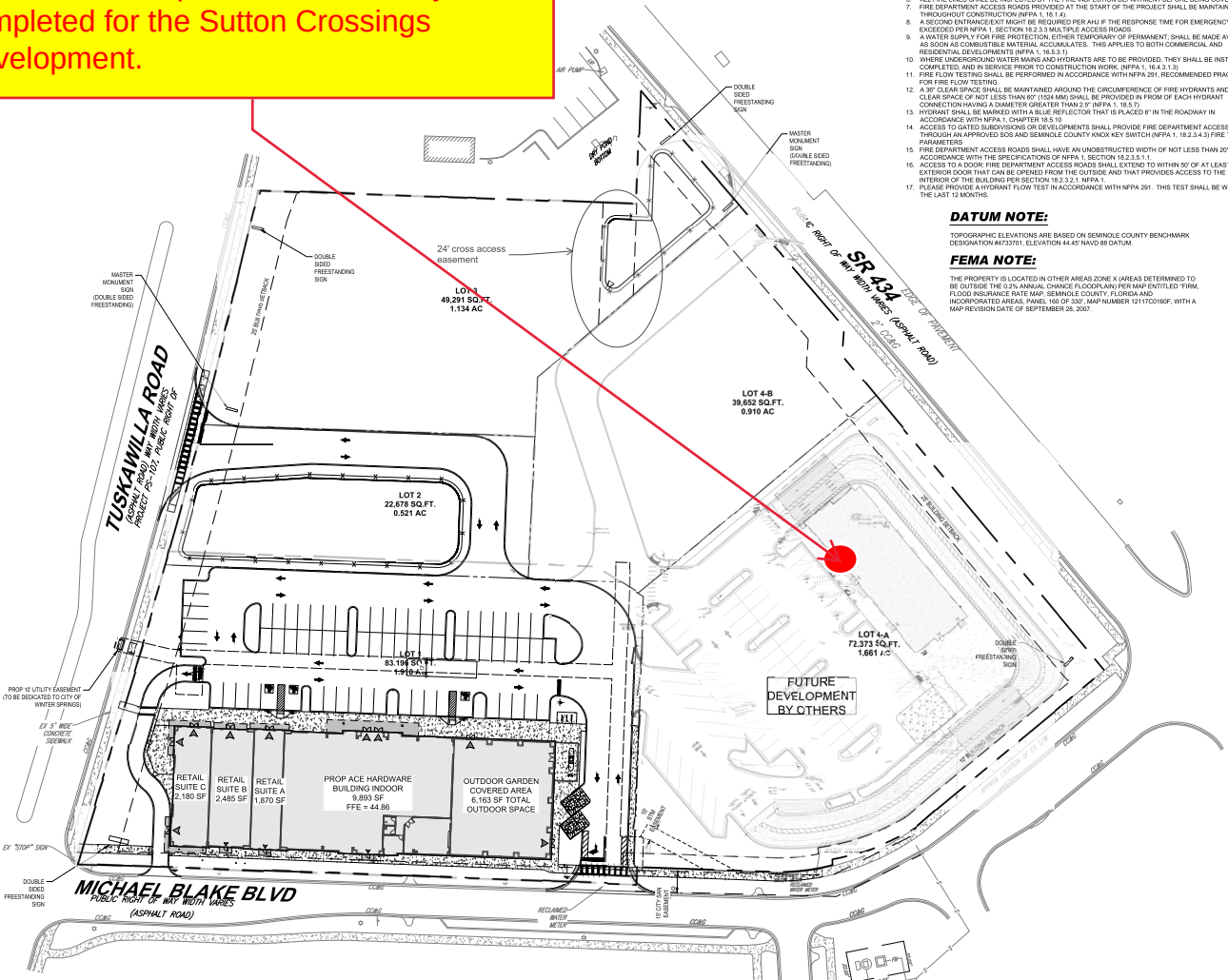
Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Location map for tree on conceptual site plan

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_

42" Quercus Virginiana (Live Oak - Tree 8053) - Located in building footprint for Chick-fil-A.

Note: Arborist report and tree survey were completed for the Sutton Crossings Development.



WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS (NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 30" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7).
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	1
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE, SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
13. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN.
14. FDEP WATER AND WASTEWATER PERMITS MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

RIGHT-OF-WAY NOTES:

1. A RIGHT-OF-WAY USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
2. ALL AREAS WITHIN THE COUNTY OR F.D.O.T. RIGHT-OF-WAY DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.
3. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO PROTECT ALL COUNTY OR F.D.O.T. OWNED AND/OR MAINTAINED INFRASTRUCTURE. ANY/ALL COSTS ASSOCIATED WITH ALTERATIONS, RELOCATIONS, OR REPAIRS MADE NECESSARY BY THIS DEVELOPMENT SHALL BE BORNE BY EITHER THE OWNER, DEVELOPER, AND/OR CONTRACTOR. SPLICES IN THE FIBER OPTIC CABLE, SIGNALIZATION OR ROADWAY LIGHTING CONDUCTORS, OR THE ADDITION OF ADDITIONAL PULL/JUNCTION BOXES WILL NOT BE PERMITTED. IN THE EVENT A CABLE IS CUT, DAMAGED, OR REQUIRES RELOCATION, THE CABLE(S) SHALL BE RESTORED BACK TO THE ORIGINAL CONFIGURATION. ORIGINAL CONFIGURATION IS DEFINED AS SYSTEM STATUS, LAYOUT, AND DESIGN PRIOR TO ANY WORK COMMENCING.
4. FOR UTILITIES TO BE RELOCATED BY THE UTILITY PROVIDER, CONTRACTOR SHALL COORDINATE DEMOLITION SCHEDULE WITH UTILITY PROVIDERS. DEMOLITION OF SIDEWALKS AND DRIVEWAYS SHALL OCCUR PRIOR TO UTILITY RELOCATIONS.
5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (RW) SHOULD BE THERMOPLASTIC.
6. SIGNS WITHIN THE STATE RIGHT-OF-WAY (RW) NEEDS TO BE MOUNTED TO ROUND ALUMINUM COLUMN (POST).

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE ROW OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

FDOT NOTES:

1. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL.

STORMWATER MANAGEMENT:

STORMWATER RUNOFF FROM THE SITE IMPROVEMENTS PROPOSED ONSITE SHALL BE MANAGED THROUGH A COMBINATION OF PROPOSED DRY DETENTION PONDS AND UNDERGROUND STORMTECH CHAMBERS LOCATED UNDER THE PAVEMENT AREAS AS SHOWN. THE STORMWATER MANAGEMENT SYSTEM HAS BEEN DESIGNED IN PART WITH "POND 1" WITHIN TUSKAWILLA CROSSINGS SUBDIVISION.

SITE SIGNAGE:

PERMANENT SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

LANDSCAPING:

ALL LANDSCAPING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

SIDEWALK NOTE:

ANY BROKEN OR NON ADA COMPLIANT SIDEWALK IN THE PUBLIC RIGHT-OF-WAY FRONTING THE PROJECT SITE SHALL BE REPLACED AS PART OF THIS PROJECT.

UTILITY CONFLICT NOTE:

CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION THIS SHALL INCLUDE CALLING UTILITY LOCATE. POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LANDSCAPE ARCHITECTURE
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVIL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MORIS, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

C-301

REVISION 2 - 01/28/2025

File: 00001
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\SP-CIVIL-SITE-FLA240162.00-0A.dwg — LAYOUT: C-301 - OVERALL SITE PLAN

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

Waiver - Tuskawilla Master Monument Sign

REQUIRED INFORMATION

Applicant(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 3/11/2025
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Project Name:	Sutton Crossings Development
Property Address:	Raw Land Near West of intersection of Michael Blake Blvd and SR434 and East of intersection of Michael Blake Blvd and Tuskawilla Rd
Parcel ID(s):	01213050100000010 , 2620305AROA00008D, 2620305AROA00008H
Parcel Size:	6.2 Acres
Existing Use:	Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): Tuskawilla Monument Sign Waiver

A waiver is requested from Winter Springs City Code "Section 16-57" to allow

"a freestanding master monument sign" in lieu of "not allowing a freestanding sign"

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

Sutton Crossings is a planned commercial development that requires a master monument sign to effectively inform passing traffic of the businesses within the shopping center. Without such signage, visibility for tenants would be severely limited, creating an impractical and unreasonable burden on businesses trying to attract customers.

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossings Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features an early learning academy, an Ace Hardware, Tropical Café, a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

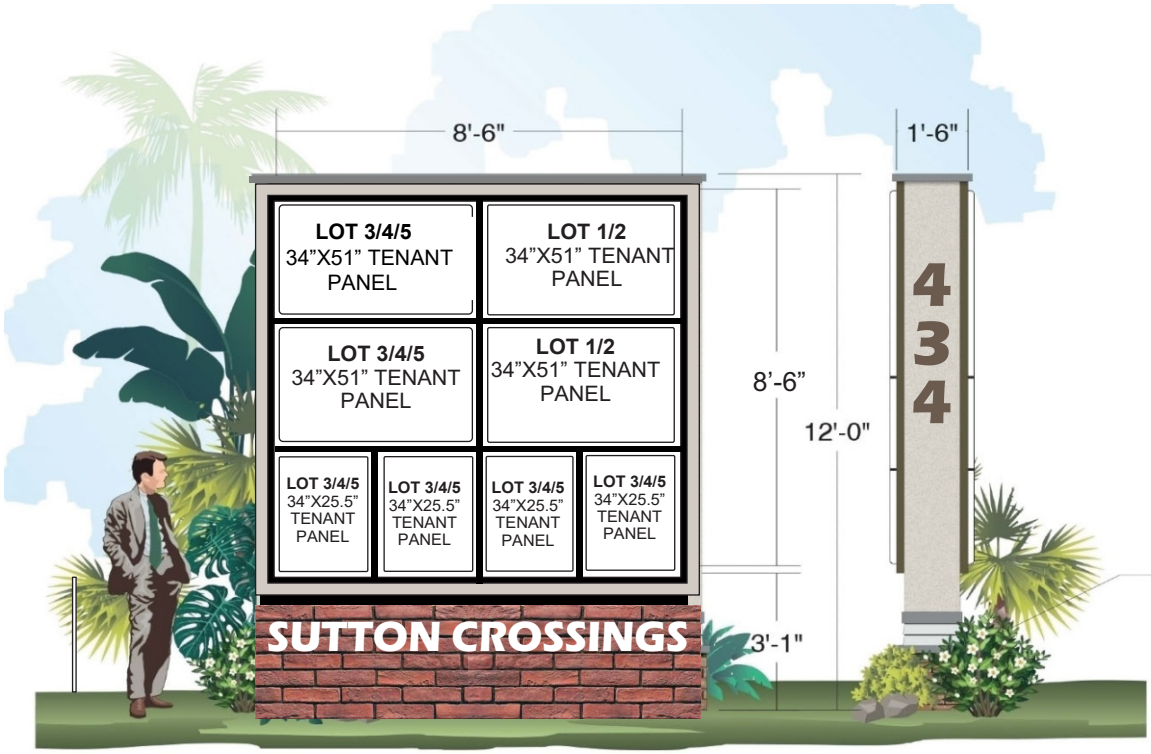
Wess McMillan - Developer, Owner, and Operator for Ace Hardware

Marlon Champion - Developer for Chick-fil-a

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Monument Sign Drawing, Location Map of Monument Sign on Conceptual Site Plan

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_



INTERNALLY ILLUMINATED DOUBLE SIDED FREESTANDING SIGN SCALE 1/4"

FABRICATE AND INSTALL THREE DOUBLE SIDED ILLUMINATED MONUMENT SIGNS. SIGN CABINET IS ALL ALUMINUM CONSTRUCTION USING 2"X2"X3/16" ALUMINUM ANGLE FRAME AND SKINNED WITH .063" ALUMINUM SHEET. INTERNAL ILLUMINATION IS LED TAPOUT STICKS. FACES ARE WHITE PANNED ACRYLIC WITH T-BAR DIVIDERS AND GRAPHICS WILL BE 3M TRANSLUCENT VINYL.
BASE WILL BRICK VENEER MOUNTED TO ALUMINUM POLE COVER.
STEEL PIPE AND CONCRETE FOOTER PER ENGINEERS CALCULATIONS.

PROJECT NAME: SUTTON CROSSINGS
DATE: 12.12.23

PRIMARY WIRING TO SIGN BY OTHERS. WE WILL CONNECT TO PRIMARY IF WITHIN 10' OF SIGN AND EASY CONNECTION.

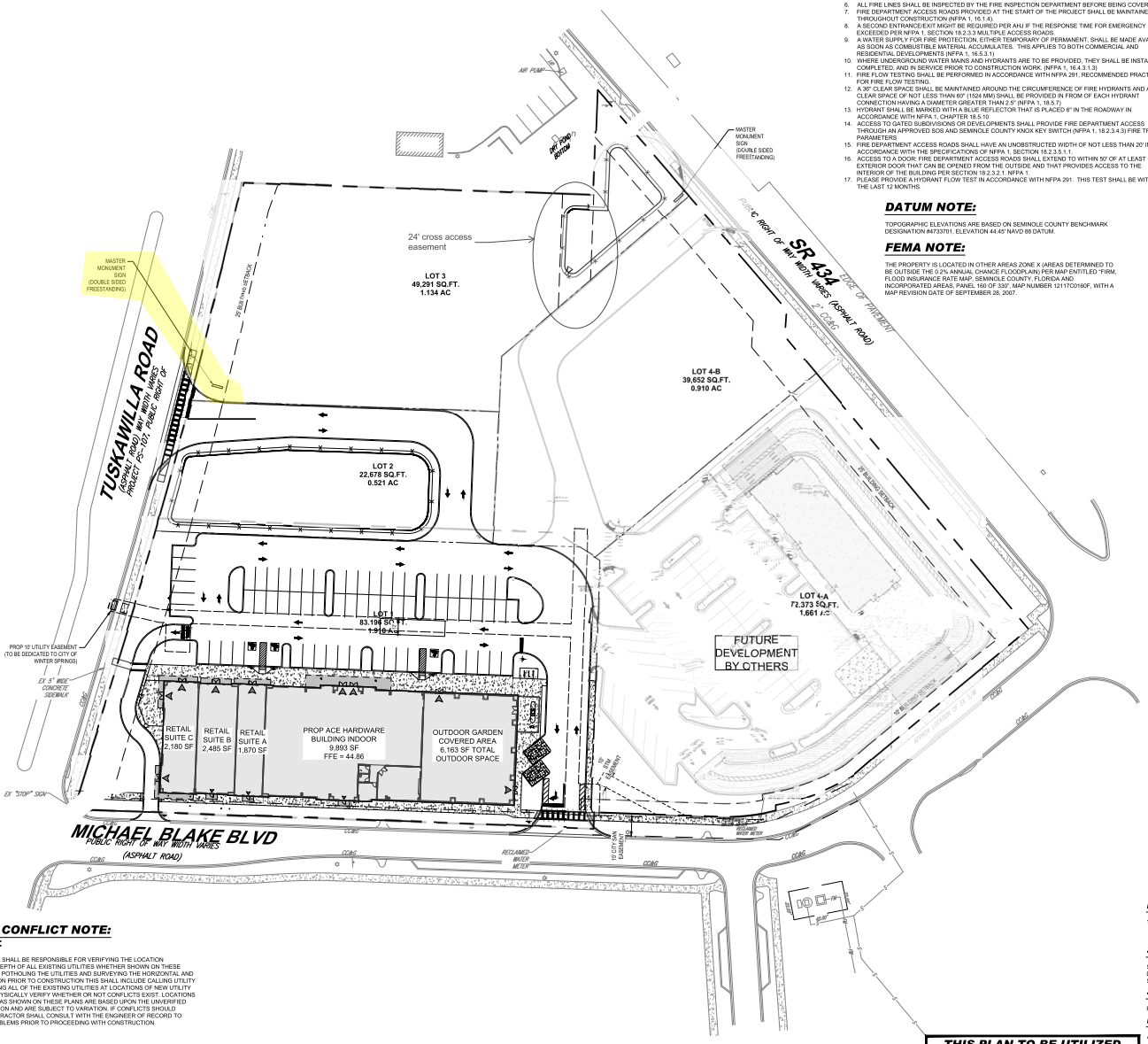
I have carefully reviewed and hereby accept the drawing(s) as shown. All additional changes must be in writing and approved by both parties.

signature

date

This drawing is for illustration purposes only. Colors and scaling in drawing may vary.

FLORIDA SIGN COMPANY
INNOVATIV SIGNAGE CHURCH & SCHOOL SIGNS
1101 29th Avenue West
Bradenton, FL 34205
Phone: 941.747.1000 Fax: 941-746.3667



WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS (NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 30' CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60' (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

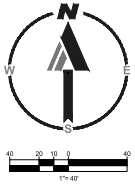
THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

UTILITY CONFLICT NOTE:

CAUTION:

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LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	1
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE, SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
13. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN.
14. FDEP WATER AND WASTEWATER PERMITS MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

RIGHT-OF-WAY NOTES:

1. A RIGHT-OF-WAY USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
2. ALL AREAS WITHIN THE COUNTY OR F.D.O.T. RIGHT-OF-WAY DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.
3. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO PROTECT ALL COUNTY OR F.D.O.T. OWNED AND/OR MAINTAINED INFRASTRUCTURE. ANY/ALL COSTS ASSOCIATED WITH ALTERATIONS, RELOCATIONS, OR REPAIRS MADE NECESSARY BY THIS DEVELOPMENT SHALL BE BORNE BY EITHER THE OWNER, DEVELOPER, AND/OR CONTRACTOR. SPLICES IN THE FIBER OPTIC CABLE, SIGNALIZATION OR ROADWAY LIGHTING CONDUCTORS, OR THE ADDITION OF ADDITIONAL PULL/JUNCTION BOXES WILL NOT BE PERMITTED. IN THE EVENT A CABLE IS CUT, DAMAGED, OR REQUIRES RELOCATION, THE CABLE(S) SHALL BE RESTORED BACK TO THE ORIGINAL CONFIGURATION. ORIGINAL CONFIGURATION IS DEFINED AS SYSTEM STATUS, LAYOUT, AND DESIGN PRIOR TO ANY WORK COMMENCING.
4. FOR UTILITIES TO BE RELOCATED BY THE UTILITY PROVIDER, CONTRACTOR SHALL COORDINATE DEMOLITION SCHEDULE WITH UTILITY PROVIDERS. DEMOLITION OF SIDEWALKS AND DRIVEWAYS SHALL OCCUR PRIOR TO UTILITY RELOCATIONS.
5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (RW) SHOULD BE THERMOPLASTIC.
6. SIGNS WITHIN THE STATE RIGHT-OF-WAY (RW) NEEDS TO BE MOUNTED TO ROUND ALUMINUM COLUMN (POST).

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE ROW OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

FDOT NOTES:

1. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL.

STORMWATER MANAGEMENT:

STORMWATER RUNOFF FROM THE SITE IMPROVEMENTS PROPOSED ONSITE SHALL BE MANAGED THROUGH A COMBINATION OF PROPOSED DRY DETENTION PONDS AND UNDERGROUND STORMTECH CHAMBERS LOCATED UNDER THE PAVEMENT AREAS AS SHOWN. THE STORMWATER MANAGEMENT SYSTEM HAS BEEN DESIGNED IN PART WITH "POND 1" WITHIN TUSKAWILLA CROSSINGS SUBDIVISION.

SITE SIGNAGE:

PERMANENT SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

LANDSCAPING:

ALL LANDSCAPING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

SIDEWALK NOTE:

ANY BROKEN OR NON ADA COMPLIANT SIDEWALK IN THE PUBLIC RIGHT-OF-WAY FRONTING THE PROJECT SITE SHALL BE REPLACED AS PART OF THIS PROJECT.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LANDSCAPE ARCHITECTURE
PROGRAM MANAGEMENT
PERMITTING SERVICES
TRANSPORTATION SERVICES

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DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVIL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

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SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

C-301

REVISION 2 - 01/28/2025

Feb 06, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\SPA PLAN SET\SP-CIVIL-SITE-FLA240162.00-0A.dwg —— LAYOUT: C-301 - OVERALL SITE PLAN

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Aesthetic Review

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per Chapter 9–Aesthetic Review Sec.9-605. The sufficiency review shall be completed within thirty (30) calendar days per FL Statue 166.033. Once the application is deemed sufficient, the applicant shall move forward with the Community Workshop, required per Chapter 20–Zoning Sec.20-29.1.

Applicants are responsible for posting notice (provided by the city) on the site at least seven (20) days prior to the City Commission (CC) meeting at which the matter will be considered. Said notice shall not be posted within the City right-of-way.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Conditional Use is quasi-judicial in nature. Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Aesthetic Review recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Aesthetic Review and may impose reasonable conditions on any approved Aesthetic Review to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan. All formal decisions shall be based on competent substantial evidence and the applicable criteria as set forth in Chapter 9, Aesthetic Review Standards. Applicants are advised that if, they decide to appeal any decisions made at the meetings or hearings with respect to any matter considered at the meetings or hearings, they will need a record of the proceedings and, for such purposes, they will need to insure that a verbatim record of the proceedings is made, at their cost, which includes the testimony and evidence upon which the appeal is to be based, per Florida Statute 286.0105.

An Aesthetic Review Approval by the City Commission under this article shall be valid for a maximum of eighteen (18) months from the date the city commission renders its approval at a public meeting. If the applicant fails to obtain a building permit within the eighteen (18) month period, the city commission's approval shall expire at the end of the period. However, once a building permit is issued, the approval shall be valid for a time period equal to the permit and shall expire only if the building permit expires. Reasonable extensions may be granted by the city commission upon good cause shown by the applicant, provided substantial changes have not occurred in the surrounding area that would make the prior approval inconsistent with the criteria set forth in Chapter 9-Aesthetic Review Sec.9-9603

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Aesthetic Review

REQUIRED INFORMATION:

Applicant(s): John McMillan (Part of Sutton Crossings Development with Equinox) Date: 11/13/2022

Mailing address: PO Box 1013 Oakland Fl. 34760

Email: wessmcmillan@centralfloridaace.com

Phone Number: 407-509-7098

Property Owner(s): Patti Schoen

Mailing Address:

Email: Chuckcpa@suddenlinkmail.com

Phone Number: Schoen 304-345-3700

Project Name: Sutton Crossings

Property Address: Undeveloped Land East of 190 Tuskawilla Rd. Winter Springs Fl. 32708

Parcel ID(s): 01-21-30-501-0000-0010

Parcel Size: 3.422 Acres

Existing Use: Undeveloped Land (Mixed Commerical Use)

Future Land Use: Mixed Commercial Use

Zoning District: T-5

Final Engineering Approval Date: NA

Has the applicant agreed to a binding development agreement required by city to incorporate the terms and conditions of approval deemed necessary by the City Commission including, but not limited to, any mitigative techniques and plans required by city code? Yes ____ No X____

List all witnesses that the applicant intends to present to the City Commission to provide testimony:
NA - No Testimony

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:
NA - No Testimony

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing

CRITERIA FOR REVIEW:

1. The PLANS AND SPECIFICATIONS of the proposed project indicate that the setting, landscaping, proportions, materials, colors, texture, scale, unity, balance, rhythm, contrast, and simplicity are coordinated in a harmonious manner relevant to the particular proposal, surrounding area and cultural character of the community.
2. The PLANS for the proposed project are in harmony with any future development which has been formally approved by the City within the surrounding area.
3. The PLANS for the proposed project are not excessively similar or dissimilar to any other building, structure or sign which is either fully constructed, permitted but not fully constructed, or included on the same permit application, and facing upon the same or intersecting street within five hundred (500) feet of the proposed site, with respect to one or more of the following features of exterior design and appearance:
    a. Front or side elevations;
    b. Size and arrangement of elevation facing the street, including reverse arrangement; or
    c. Other significant features of design such as, but not limited to: materials, roof line, hardscape improvements, and height or design elements.
4. The PLANS for the proposed project are in harmony with, or significantly enhance, the established character of other buildings, structures or signs in the surrounding area with respect to architectural specifications and design features deemed significant based upon commonly accepted architectural principles of the local community.
5. The PROPOSED PROJECT is consistent and compatible with the intent and purpose of this article, the Comprehensive Plan for Winter Springs, design criteria adopted by the City (e.g. Town Center guidelines, SR 434 design specifications) and other applicable federal, state or local laws.
6. The PROPOSED PROJECT has incorporated significant architectural enhancements such as concrete masonry units with stucco, marble, termite-resistant wood, wrought iron, brick, columns and piers, porches, arches, fountains, planting areas, display windows, and other distinctive design detailing and promoting the character of the community.

REQUIRED DOCUMENTATION (PDF):

X A complete Application and applicable fee

___ Minor (Site less than 2 acres) – $300*

X Major (Site greater than 2 acres) – $600*

___ Modification of previously approved Aesthetic Review – $300*

X A Legal Description accompanied by a certified survey or the portion of the map maintained by the Seminole County Property Appraiser reflecting the boundaries of the subject property (To scale).

X Site Plan

X Building Elevations (color) illustrating all sides of structures

X COLOR RENDERING illustrating street view with landscaping at time of planting;

X ILLUSTRATIONS of all WALLS, FENCES, AND OTHER ACCESSORY STRUCTURES and indication of their height and the materials proposed for their construction;

Later SIGNAGE ELEVATIONS of proposed exterior permanent signs, outdoor advertising or other constructed elements other than habitable space, if any;

X IDENTIFICATION of MATERIALS, TEXTURES, AND COLORS (include paint chips) to be used on all buildings, accessory structures, exterior signs, and other constructed elements;

Later OTHER architectural and engineering data as may be requested to clarify the application.

Later For all new commercial development and new residential subdivisions of ten (10) or more lots or existing commercial buildings being altered by 50 percent or greater of the original floor plan or seating capacity and requiring a modified site plan, or development agreements process under section 20-28.1 of the City Code, or as otherwise deemed applicable by the city to relevantly and competently examine an application for compliance with the city code and the affect and impact the proposed use will have on neighborhood and surrounding properties, applicants shall be required to submit with the following additional information referenced in Chapter 20 – Zoning Sec.20.29 Applications (7) – (11).

* Fees are as shown above plus actual costs incurred for advertising or notification, and for reimbursement for technical and/or professional services which may be required in connection with the review, inspection or approval of any development (based on accounting submitted by the city's consultant) , payable prior to approval of the pertinent stage of development.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Aesthetic Review

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for an Aesthetic Review for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): John McMillan

Applicant Signature: _____ Date: 11/13/2022

Business Name: Route 46 Ace Hardware Inc.

Address: PO Box 1013 Oakland Fl. 34760 Parcel ID: 01-21-30-501-0000-0010

STATE OF Florida COUNTY OF Seminole

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____as identification and who did/did not take an oath.

_____Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property.

Property Owner's Name (Print): Patti Ann Schoen

Property Owner Signature: Patti Ann Schoen Date 11/13/2022

STATE OF WV COUNTY OF KANAWHA

The foregoing instrument was acknowledged before me this 13th day of NOVEMBER, 2022, by PATTI ANN SCHOEN who is personally known to me or who has produced _____as identification and who did/did not take an oath.

_____Date: 11/13/2022

Notary Public Signature: Virginia S. Willard

My Commission expires: OCTOBER 16, 2027

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Virginia S Willard
2428 Shadyside Road, St. Albans, WV 25177
My Commission Expires October 16, 2027

THERE ARE NO SURVEY RELATED ITEMS TO BE SHOWN.

SCHEDULE "B" ITEMS

5 — ALL MATTERS CONTAINED ON THE PLAT OF TUSKAWILLA, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA. (AFFECTS, BLANKET IN NATURE)

6 — ORDINANCE RECORDED IN O.R. BOOK 2001, PAGE 647, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA. (AFFECTS, BLANKET IN NATURE)

7 — ORDINANCE RECORDED IN O.R. BOOK 2094, PAGE 287, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA. (AFFECTS, BLANKET IN NATURE)

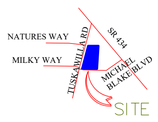
8 — RESOLUTION RECORDED IN O.R. BOOK 3191, PAGE 791, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORID

SITE PICTURE



VICINITY MAP

NOT TO SCALE



LAND AREA

148,735± SQUARE FEET

3.414 ± ACRES

PARKING STALLS

REGULAR= 0 HANDICAP= 0

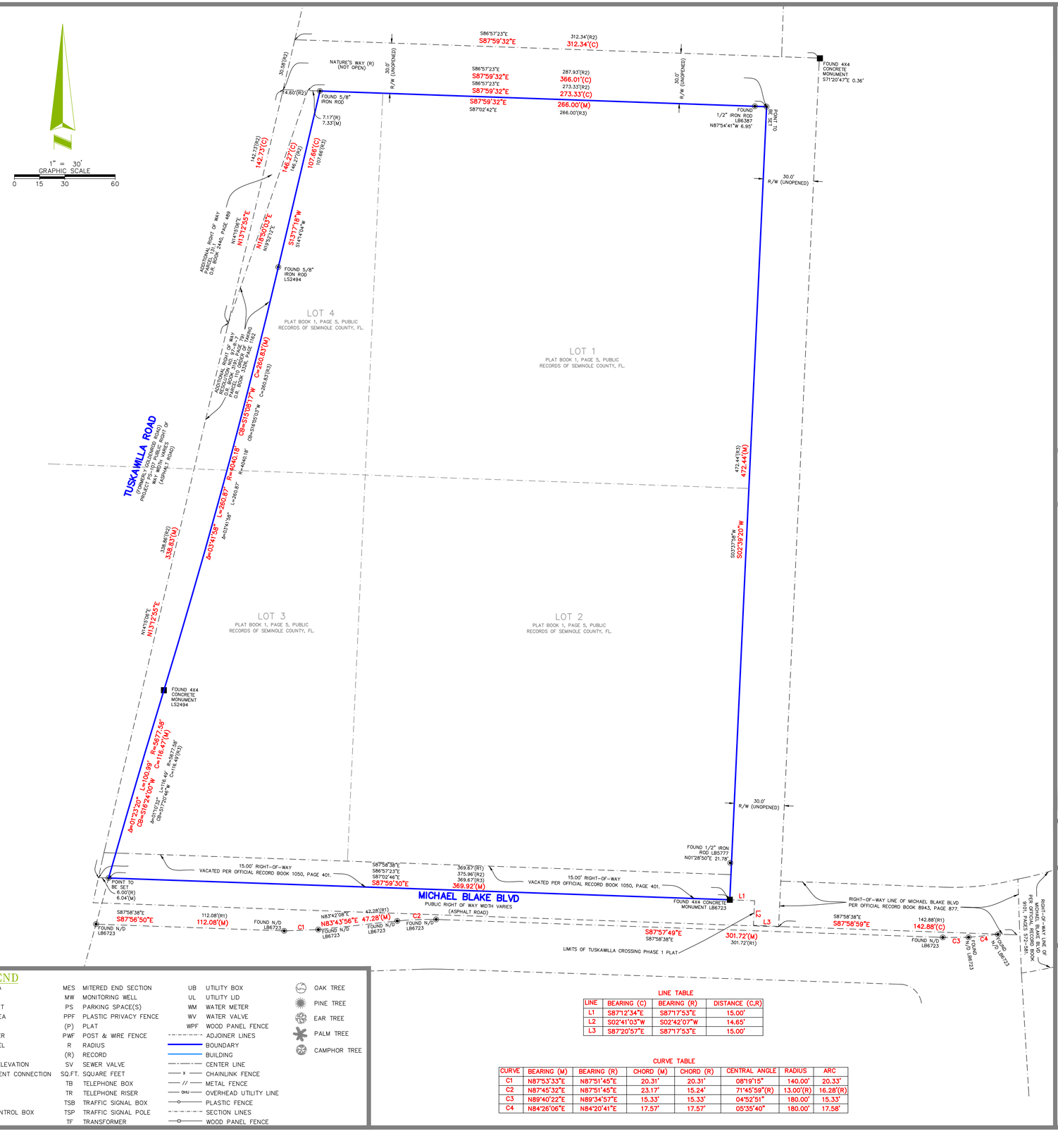
TOTAL= 0

STATEMENT OF ENCROACHMENTS

A ENCROACHMENT BY DRAINAGE MANHOLE 0.4' INLET CONCRETE.

FLOOD NOTE

FLOOD NOTE: BASED ON MAPS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AVAILABLE ONLINE AT WWW.MSC.FEMA.GOV, AND BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE "X" ON FLOOD INSURANCE RATE MAP NUMBER 12117C0160F, WHICH BEARS AN EFFECTIVE DATE OF 09/28/2007 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. BY REVIEWING FLOOD MAPS PROVIDED BY THE NATIONAL FLOOD INSURANCE PROGRAM WE HAVE LEARNED THIS COMMUNITY DOES PARTICIPATE IN THE PROGRAM. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THE ACCURACY OF THE MAPS AND/OR TO APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.



LEGEND

- BOLLARD
- CONCRETE SURFACE
- (E) ELECTRIC MANHOLE
- FIRE HYDRANT
- GAS VALVE
- GROUND LIGHT
- GUY ANCHOR
- HANDICAP PARKING SPACE
- LIGHT POLE
- (M) MANHOLE
- NO PARKING AREA
- (S) SANITARY MANHOLE
- SET/FOUND MONUMENT AS NOTED
- SIGN
- 12.3 X SPOTSHOT

- (D) STORM MANHOLE
- (T) TELEPHONE MANHOLE
- UTILITY POLE
- (W) WATER MANHOLE
- WATER VALVE
- AC AIR CONDITIONER
- L ARC LENGTH
- BFP BACKFLOW PREVENTER
- CR CABLE RISER
- Δ CENTRAL ANGLE
- CLF CHAIN LINK FENCE
- CB CHORD BEARING
- C CHORD LENGTH
- CO CLEAN OUT
- CC&G CONCRETE CURB & GUTTER

- CA COVERED AREA
- (D) DEED
- DI DRAINAGE INLET
- DA DUMPSTER AREA
- EB ELECTRIC BOX
- EM ELECTRIC METER
- EP ELECTRIC PANEL
- ELEV ELEVATION
- FFE FIRST FLOOR ELEVATION
- FDC FIRE DEPARTMENT CONNECTION
- FND FOUND
- GM GAS METER
- GEN GENERATOR
- ICV IRRIGATION CONTROL BOX
- (M) MEASURED

- MES MITERED END SECTION
- MW MONITORING WELL
- PS PARKING SPACE(S)
- PPF PLASTIC PRIVACY FENCE
- (P) PLAT
- PWF POST & WIRE FENCE
- R RADIUS
- (R) RECORD
- SV SEWER VALVE
- SQ.FT. SQUARE FEET
- TB TELEPHONE BOX
- TR TELEPHONE RISER
- TSB TRAFFIC SIGNAL BOX
- TSP TRAFFIC SIGNAL POLE
- TF TRANSFORMER

- UB UTILITY BOX
- UL UTILITY LID
- WM WATER METER
- WV WATER VALVE
- WPF WOOD PANEL FENCE
- ADJOINER LINES
- BOUNDARY
- BUILDING
- CENTER LINE
- CHAINLINK FENCE
- METAL FENCE
- OHU OVERHEAD UTILITY LINE
- PLASTIC FENCE
- SECTION LINES
- WOOD PANEL FENCE

- OAK TREE
- PINE TREE
- EAR TREE
- PALM TREE
- CAMPHOR TREE

LINE TABLE

LINE	BEARING (C)	BEARING (R)	DISTANCE (C,R)
L1	S87°12'34"E	S87°17'53"E	15.00'
L2	S02°41'03"W	S02°42'07"W	14.65'
L3	S87°20'57"E	S87°17'53"E	15.00'

CURVE TABLE

CURVE	BEARING (M)	BEARING (R)	CHORD (M)	CHORD (R)	CENTRAL ANGLE	RADIUS	ARC
C1	N87°53'33"E	N87°51'45"E	20.31'	20.31'	08°19'15"	140.00'	20.33'
C2	N87°45'32"E	N87°51'45"E	23.17'	15.24'	71°45'59"(R)	13.00'(R)	16.28'(R)
C3	N89°40'22"E	N89°34'57"E	15.33'	15.33'	04°52'51"	180.00'	15.33'
C4	N84°26'06"E	N84°20'41"E	17.57'	17.57'	05°35'40"	180.00'	17.58'

LEGAL DESCRIPTION

SHEET 1 OF 4

LOTS 1 AND 2 AND THAT PART OF LOTS 3 AND 4 EAST OF GOLDENROD ROAD, TUSKAWILLA, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGE 5, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

TOGETHER WITH: THE NORTH HALF (1/2) OF THE VACATED RIGHT-OF-WAY ADJACENT ON THE SOUTH, AS DESCRIBED IN RESOLUTION RECORDED IN O.R. BOOK 1050, PAGE 401, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

LESS AND EXCEPT: THOSE PORTIONS TAKEN IN WARRANTY DEED RECORDED IN O.R. BOOK 2440, PAGE 489, AND ORDER OF TAKING RECORDED IN O.R. BOOK 3326, PAGE 1162, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PERTINENT PROPERTY AS DESCRIBED IN OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, COMMITMENT FILE NO.: 908435, WITH AN EFFECTIVE DATE OF DECEMBER 13, 2021.

GENERAL NOTES

1. WITH REGARD TO TABLE A, ITEM 11, SOURCE INFORMATION FROM PLANS AND MARKINGS WILL BE COMBINED WITH OBSERVED EVIDENCE OF UTILITIES PURSUANT TO SECTION 5.E.IV. TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE, IN WHICH CASE THE SURVEYOR SHALL NOTE ON THE PLAT OR MAP HOW THIS AFFECTED THE SURVEYOR'S ASSESSMENT OF THE LOCATION OF THE UTILITIES. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION AND/OR A PRIVATE UTILITY LOCATE REQUEST MAY BE NECESSARY.
2. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARKING, WALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
3. THIS SURVEY MEETS OR EXCEEDS THE SURVEY STANDARDS/STANDARDS OF CARE AS SET FORTH IN SECTION 3 OF THE 2016 ALTA/NSPS SURVEY REQUIREMENTS.
4. THE SUBJECT PROPERTY HAS DIRECT PHYSICAL ACCESS TO TUSKAWILLA RD AND MICHAEL BLAKE BLVD, A DEDICATED PUBLIC STREET OR HIGHWAY.
5. THERE IS NO VISIBLE EVIDENCE OF CEMETERIES ON SUBJECT PROPERTY.
6. THERE IS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.
7. THE PARCELS CONTAINED IN THE LEGAL DESCRIPTION ARE CONTIGUOUS WITHOUT ANY GAPS, GORES OR OVERLAPS.
8. BUILDING AREAS SHOWN HEREON ARE FOR THE FOOTPRINT OF THE BUILDING ONLY.
9. NO APPARENT CHANGES IN STREET RIGHT OF WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION. NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
10. NOT VALID WITHOUT THE ELECTRONIC SIGNATURE OR ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS AND DELETIONS TO SURVEY MAPS, SKETCHES, OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
11. NO ATTEMPT WAS MADE TO DETERMINE WETLANDS OR OTHER ENVIRONMENTAL ISSUES, UNLESS OTHERWISE NOTED.
12. ALL BEARINGS AND DISTANCES ARE RECORD AND MEASURED UNLESS OTHERWISE NOTED.
13. RECORD 1 (R1) BASED ON TUSKAWILLA CROSSINGS PHASE 1, PLAT BOOK 83, PAGE 89, RECORD 2 (R2) BASED ON FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 77070-2516 SHEET 10 OF 13, RECORD 3 (R3) BASED ON SEMINOLE COUNTY RIGHT OF WAY MAP PROJECT PS-107 SHEETS 8 AND 9.
14. TOPOGRAPHICAL ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.
15. AERIAL PHOTO DATED 8/6/20 PREPARED BY REPUBLIC NATIONAL, INC.

BEARING BASIS

BEARINGS SHOWN HEREON ARE BASED ON FLORIDA EAST STATE PLANE COORDINATES BASED ON RTK NETWORK GPS OBSERVATION.

ALTA/NSPS LAND TITLE SURVEY

PROJECT NAME

SHOEN PROPERTY

TUSKAWILLA ROAD AND MICHAEL BLAKE BLVD.

SEMINOLE COUNTY WINTER SPRINGS, FLORIDA

SURVEYOR'S CERTIFICATE

TO: OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY; JOHN W. MCMILLAN:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 13, 14, 16, AND 17 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON 04/05/2022. DATE OF PLAT OR MAP: 05/03/22.

MICHAEL W. SOLITRO CERTIFICATE NO. 4458 STATE OF FLORIDA REGISTERED LAND SURVEYOR

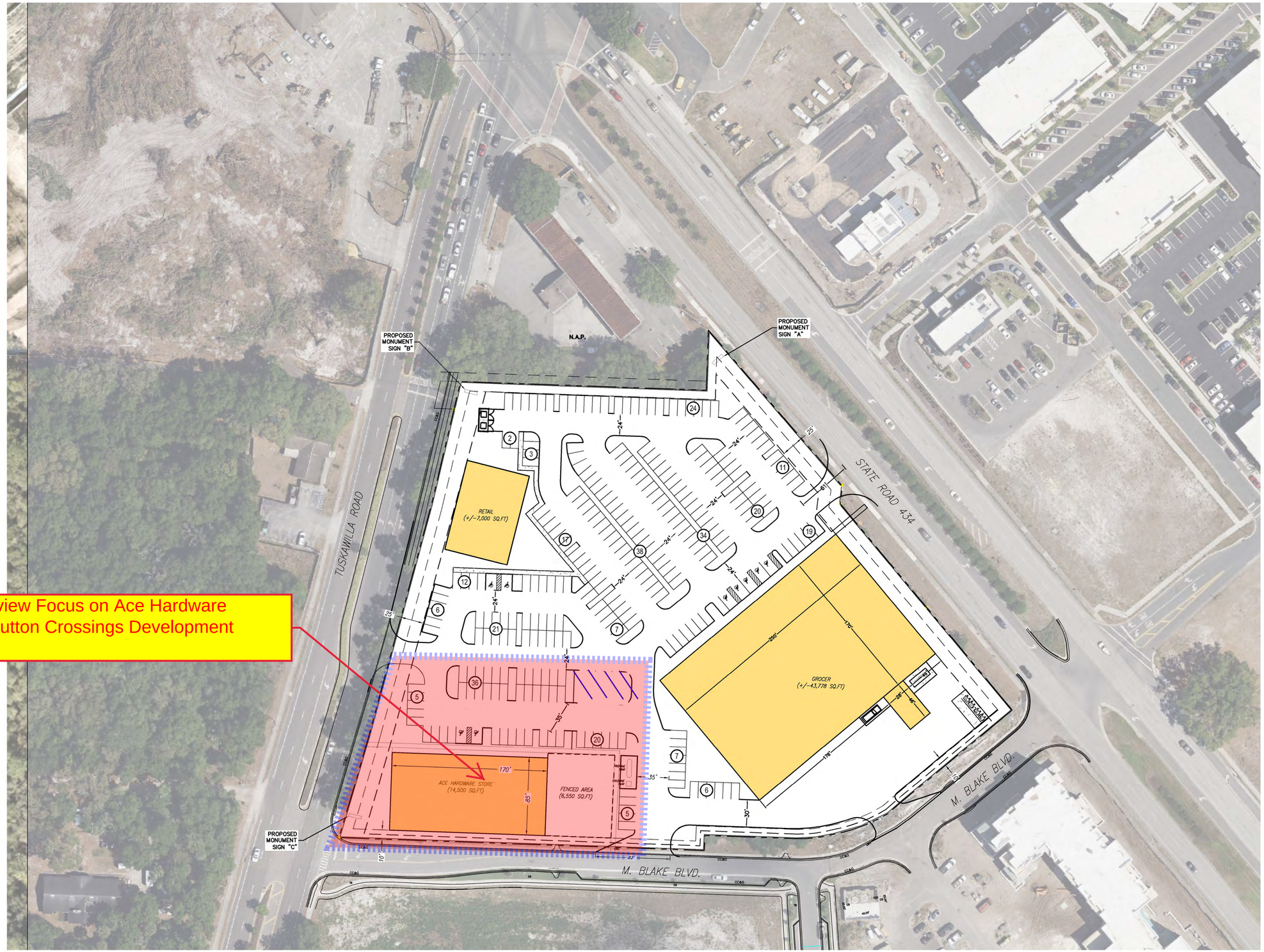
DATE

REGISTERED SURVEYOR: MICHAEL W. SOLITRO
PROFESSIONAL LAND SURVEYOR NO.: 4458
STATE OF FLORIDA LB6300

DATE	REVISION HISTORY	BY
08/18/20	UPDATE BY CLIENTS REQUEST	MMJ
04/05/22	TOPOGRAPHIC UPDATE/TREE TABLE	
05/03/22	UPDAT TITLE COMMITMENT	

JOB NUMBER: 220336
SCALE: 1" = 30'
DRAWN BY: JR
APPROVED BY: MWS

REPUBLIC NATIONAL
460 NEEDLES TRAIL
LONGWOOD, FLORIDA 32779
PHONE: (407) 862-4200 • RNSURVEYS@REPUBLICNATIONAL.NET • FAX: (407) 862-4229



Aesthetic Review Focus on Ace Hardware Building for Sutton Crossings Development

SITE DATA

SITE AREA: +/-6.2 AC

BUILDING AREA:	
GROCER:	43,788 SF
RETAIL:	4,200 SF
ACE HARDWARE:	14,500 SF
TOTAL AREA:	62,488 SF

PARKING
291 SPACES = 4.65 SP/1,000 SF

GROCER:	175 SPACES
REMAINDER:	116 SPACES

K:\ORL_Civil\1491700320-Sutton Crossing\CADD\CONCEPT\SP-18.dwg

SP-18

S.R. 434 & TUSCAWILLA RD.

WINTER SPRINGS, FLORIDA

CONCEPTUAL SKETCH

10/19/2022 - CONTACT JONATHAN A. MARTIN, P.E. (407) 427-1686

GRAPHIC SCALE IN FEET
0 25 50 100

NORTH



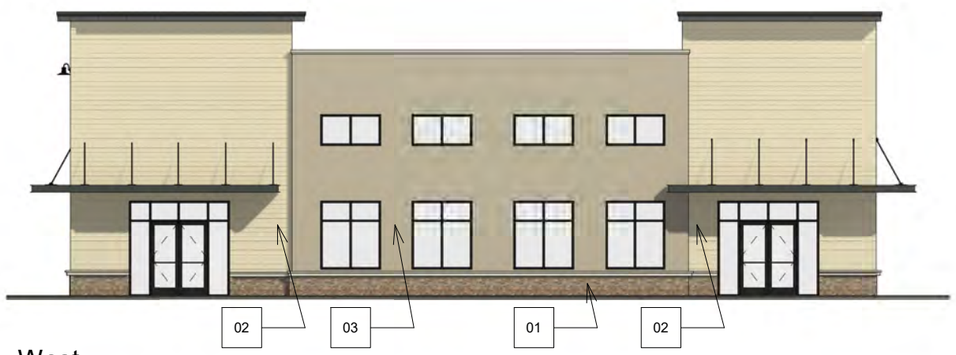
PROJECT ACE HARDWARE - WINTER SPRINGS
CONCEPT 08 COLOR BOARD
DATE 11/28/22



PROJECT ACE HARDWARE - WINTER SPRINGS
A2 CONCEPT 8 COLOR BOARD
DATE 11/30/22



A North
1/16" = 1'-0"



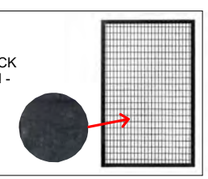
B West
1/16" = 1'-0"



C East
1/16" = 1'-0"



D South
1/16" = 1'-0"

01 MFR - CULTURED STONE STYLE - RIVER ROCK		02 SCORED EIFS COLOR - SW AESTHETIC WHITE		03 STUCCO COLOR - SW AGREEABLE GRAY		04 STUCCO COLOR - SW ALABASTER		05 METAL TRUSS COLOR-SW NIGHT OUT		06 ANTI-CLIMB FENCE COLOR - FACTORY BLACK WITH PRIVACY SCREEN - FACTORY BLACK	

PROJECT ACE HARDWARE - WINTER SPRINGS
A3 CONCEPT 8 COLOR BOARD - ELEVATIONS
DATE 11/30/22

PROPOSED SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED

ACE HARDWARE

LOCATION OF SITE

E. SR. 434 & MICHAEL BLAKE BLVD.

WINTER SPRINGS, FL 32708

SECTION 38, TOWNSHIP 21 SOUTH, RANGE 31 EAST

REFERENCES AND CONTACTS

REFERENCES

♦ BOUNDARY & TOPOGRAPHIC SURVEY:
REPUBLIC NATIONAL
480 NEEDLES TRAIL
LONGWOOD, FL 32779
DATED: 10/08/24 (REV. 4)
JOB # /SURVEY JOB #: 220336
ELEVATIONS: NAVD 1988

♦ GEOTECHNICAL INVESTIGATION REPORT:
YOVAISH ENGINEERING SERVICES
953 SUNSHINE LANE
ALTAMONTE SPRINGS, FL 32714
DATED: 10/12/23

♦ ARCHITECTURAL PLAN:
STUDIO1+
9100 CONROY WINDERMERE ROAD,
SUITE 200 PMB 374
WINDERMERE, FL 34786
DATED: 08/20/24

GOVERNING AGENCIES

♦ PLANNING, ZONING COMMITTEE
CITY OF WINTER SPRINGS
1126 E STATE RD. 434
WINTER SPRINGS, FL 32708
PHONE: (407) 327-5963

♦ BUILDING DEPARTMENT
CITY OF WINTER SPRINGS BUILDING DEPT.
1126 E STATE RD. 434
WINTER SPRINGS, FL 32708
PHONE: (407) 327-5963

♦ FIRE DEPARTMENT
SEMINOLE COUNTY FIRE DEPT.
150 ESLINGER WAY
SANFORD, FL 32773
PHONE: (407) 665-5042

♦ FDOT DISTRICT 5
719 SOUTH WOODLAND BLVD.
DELAND, FL 32720
PHONE: (800) 780-7120

♦ SJRWMD
19561 SE HWY. 42
UMATILLA, FL 32784
PHONE: (832) 821-1043

ROW JURISDICTION

♦ TRAFFIC, STORMWATER, WATER & SEWER
CITY OF WINTER SPRINGS PUBLIC WORKS
1126 E. SR. 434
WINTER SPRINGS, FL 32708
PHONE: (407) 327-5989

UTILITIES

♦ TELEPHONE
AT&T
PHONE: (407) 778-9140

♦ CABLE/INTERNET/FIBER
SPECTRUM
CONTACT: HELENE HERNANDEZ
PHONE: (407) 332-8092

♦ ELECTRIC
DUKE ENERGY
2801 WEST STATE ROAD 426
OVIEDO, FL 32765
PHONE: (407) 359-4447

♦ GAS
FLORIDA PUBLIC UTILITIES
405 S. HWY 17-92
DEBARY, FL 33713
CONTACT: DAVID JOHNSON
PHONE: (352) 636-7057

♦ WATER AND SEWER
CITY OF WINTER SPRINGS
1126 E. S.R. 434
WINTER SPRINGS, FL 32708
CONTACT: DILLON THOMAS
PHONE: (407) 327-1800 EXT. 588

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.

LEGAL DESCRIPTION

THE LAND IS DESCRIBED AS FOLLOWS:
THAT PART OF LOT 8 BLOCK "A", OF TUSKAWILLA, ACCORDING TO THE PLAT OF MITCHELL'S SURVEY OF THE LEVY GRANT AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWESTERN MOST CORNER OF LOT 31 ST. JOHNS LANDING AS RECORDED IN PLAT BOOK 53, PAGES 45 THRU 49 OF SAID PUBLIC RECORDS, SAID POINT BEING A RECOVERED CONCRETE MONUMENT ON THE EASTERLY RIGHT OF WAY LINE OF TUSKAWILLA ROAD (FORMERLY BRANTLEY AS RECORDED IN OFFICIAL RECORDS BOOK 3225, PAGE 1829 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 59°31'38" WEST ALONG THE WESTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 31 FOR A DISTANCE OF 15.00 FEET; THENCE RUN SOUTH 30°04'55" WEST ALONG SAID EASTERLY RIGHT OF WAY LINE FOR A DISTANCE OF 5.00 FEET; THENCE CONTINUE SOUTH 30°04'55" WEST A DISTANCE OF 35.00 FEET; THENCE SOUTH 59°31'38" EAST, A DISTANCE OF 1132.34 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT HAVING A RADIUS OF 150.00 FEET; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE AT 60°36'00" FOR AN ARC DISTANCE OF 158.65 FEET TO THE POINT OF TANGENCY; THENCE SOUTH 01°04'22" WEST A DISTANCE OF 146.91 FEET; THENCE SOUTH 24°59'41" WEST, A DISTANCE OF 318.72 FEET; THENCE SOUTH 00°00'00" EAST A DISTANCE OF 115.48 FEET; THENCE SOUTH 36°55'21" EAST A DISTANCE OF 217.54 FEET; THENCE SOUTH 15°19'53" EAST A DISTANCE OF 140.49 FEET, THENCE SOUTH 02°23'00" WEST A DISTANCE OF 556.34 FEET; THENCE SOUTH 07°25'15" WEST A DISTANCE OF 272.61 FEET; THENCE SOUTH 29°30'05" WEST A DISTANCE OF 231.32; THENCE SOUTH 50°31'58" WEST A DISTANCE OF 1475.69 FEET TO THE NORTHEASTERLY RIGHT OF WAY LINE OF STATE ROAD 434 ACCORDING TO FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 77070-2516; THENCE CONTINUE SOUTH 50°31'58" WEST FOR A DISTANCE OF 143.34 FEET TO A FOUND 1/2" IRON ROD & CAP (LB ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF SAID STATE ROAD 434; THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY NORTH 39°47'08" WEST, 741.99 FEET TO THE POINT OF BEGINNING; THENCE DEPARTING SAID SOUTHWESTERLY RIGHT OF WAY SOUTH 50°22'25" WEST, 153.21 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071); THENCE SOUTH 49°13'20" WEST, 22.84 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 21°33'57", AND A CHORD BEARING AND DISTANCE OF SOUTH 68°52'35" WEST, 63.61 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 63.99 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON THE WESTERLY RIGHT OF WAY OF C.S.X TRANSPORTATION., INC "LAKE CHARM BRANCH" RAIL CORRIDOR; SAID POINT BEING ON A NON-TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°28'47", AND A CHORD BEARING AND DISTANCE OF SOUTH 01°55'26" EAST, 31.04 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AND SAID WESTERLY RIGHT OF WAY, A DISTANCE OF 31.04 FEET TO A FOUND 4"X4" CONCRETE MONUMENT (LB 220) ON THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 17 OF SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID WESTERLY RIGHT OF WAY, ALONG SAID EASTERLY EXTENSION OF NORTH LINE, NORTH 87°52'13" WEST, 143.10 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID EASTERLY EXTENSION OF THE NORTH LINE, ALONG SAID EASTERLY RIGHT OF WAY, NORTH 02°44'06" EAST, 510.43 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R MITCHELL'S SURVEY OF LEVY GRANT, THENCE DEPARTING SAID EASTERLY RIGHT OF WAY, ALONG SAID NORTHERLY RIGHT OF WAY, NORTH 87°56'41" WEST, 21.83 FEET TO THE EASTERLY BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2152, PAGE 533 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE DEPARTING SAID NORTHERLY RIGHT OF WAY, ALONG SAID EASTERLY BOUNDARY, NORTH 02°03'02" EAST, 65.81 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT OF WAY OF AFORESAID STATE ROAD 434; THENCE DEPARTING SAID EASTERLY BOUNDARY, ALONG THE SAID SOUTHWESTERLY RIGHT OF WAY THE FOLLOWS THREE (3) COURSES: 1) THENCE SOUTH40°37'45" EAST, 224.63 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EASTERLY, ; HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°18'00", AND A CHORD BEARING AND DISTANCE OF SOUTH 06°37'29" WEST, 19.42 FEET; 2) THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 19.42 FEET TO THE END OF SAID CURVE; 3) THENCE S.39°47'08"E., 293.27 FEET TO THE POINT OF BEGINNING.

LESS (OFFICIAL RECORDS BOOK 8943, PAGE 877)

A PORTION LOT 8, BLOOK A, DR MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, LYING IN SECTION 6, TOWNSHIP 21 SOUTH, RANGE 31 EAST BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE RESERVE AT TUSCAWILLA PHASE II, AS RECORDED IN PLAT BOOK 50, PAGES 3 THROUGH 9 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE RUN SOUTH 00°46'33" EAST ALONG THE WESTERLY LINE OF SAID RESERVE AT TUSCAWILLA, PHASE II; ALSO BEING THE EAST LINE OF BLOCK A, GARDENIA FARMS TOWN SITES, AS RECORDED IN PLAT BOOK 6, PAGE 39, OF THE SAID PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, FOR A DISTANCE OF 810.29 FEET TO A POINT ON THE NORTHEASTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS AS RECORDED IN OFFICIAL RECORDS BOOK 3177, PAGE 632 OF SAID PUBLIC RECORDS; THENCE DEPARTING SAID WEST LINE AND SAID EAST LINE, RUN NORTH 55°28'13" WEST ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 593.50 FEET TO THE SOUTHEAST CORNER OF BLOCK C, OF SAID GARDENIA FARMS TOWN SITES; THENCE CONTINUE NORTH 55°28'13" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 800.00 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1815.35 FEET, A CHORD BEARING OF NORTH 39°53'20" WEST AND A CHORD DISTANCE OF 974.43 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 31°08'12" FOR AN ARC DISTANCE OF 986.53 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF A 2148.74 FEET, A CHORD BEARING OF NORTH 22°10'08" WEST AND A CHORD DISTANCE OF 162.34 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 04°19'47" FOR AN ARC DISTANCE OF 162.58 FEET TO A POINT ON THE NORTHWESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, AS RECORDED IN OFFICIAL RECORDS BOOK 3988, PAGE 1075 OF THE AFORESAID PUBLIC RECORDS OF SEMINOLE COUNTY; THENCE RUN NORTH 49°31'30" EAST, ALONG SAID NORTHWESTERLY RIGHT OF WAY LINE, NON-TANGENT TO SAID CURVE, FOR A DISTANCE OF 250.50 FEET; THENCE RUN NORTH 39°49'55" WEST, DEPARTING SAID NORTHWESTERLY RIGHT OF WAY LINE FOR A DISTANCE OF 659.48 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, ACCORDING TO THE AFORESAID OFFICIAL RECORDS BOOK 3177, PAGE 632, LYING ON A NON-TANGENT CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 4008.02 FEET, A CHORD BEARING OF NORTH 01°01'14" WEST AND A CHORD DISTANCE OF 96.30 FEET; THENCE RON NORTHERLY ALONG SAID WESTERLY RIGHT OF WAY LINE AND ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 01°22'36" FOR AN ARC DISTANCE OF 96.30 FEET TO A NON-TANGENT POINT AND THE POINT OF BEGINNING; THENCE RUN NORTH 87°58'38" WEST, ALONG THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 17 OF TUSKAWILLA, ACCORDING TO THE PLAT OF D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, NON-RADIAL WITH SAID CURVE AND DEPARTING SAID WESTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 142.83 FEET TO THE EASTERLY LINE OF THAT CERTAIN THIRTY FOOT (30) WIDE UNNAMED RIGHT OF WAY ACCORDING TO THE AFORESAID PLAT OF D.R. MITCHELL'S SURVEY OF THE LEVY GRANT; THENCE RUN NORTH 02°41'39" EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 27.00 FEET; THENCE RUN SOUTH 87°58'38" EAST, DEPARTING SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 99.57 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 151.67 FEET, A CHORD BEARING OF NORTH 83°10'19" EAST AND A CHORD DISTANCE OF 41.09 FEET; THENCE RUN NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 15°34'11" FOR AN ARC DISTANCE OF 41.22 FEET TO A POINT ON THE AFORESAID WESTERLY. RIGHT OF WAY LINE OF RAILS TO TRAILS, LYING ON A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 4008.02 FEET, A CHORD BEARING OF SOUTH 02°05'36" EAST AND A CHORD DISTANCE OF 33.41 FEET; THENCE RUN SOUTHERLY ALONG SAID WESTERLY RIGHT OF WAY LINE AND ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 00°28'30" FOR AN ARC DISTANCE OF 33.41 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH:

LOTS 1 AND 2 AND THAT PART OF LOTS 3 AND 4 EAST OF GOLDENROD ROAD, TUSKAWILLA, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGE 5, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

TOGETHER WITH: THE NORTH HALF (1/2) OF THE VACATED RIGHT-OF-WAY ADJACENT ON THE SOUTH, AS DESCRIBED IN RESOLUTION RECORDED IN O.R. BOOK 1050, PAGE 401, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

LESS AND EXCEPT: THOSE PORTIONS TAKEN IN WARRANTY DEED RECORDED IN O.R. BOOK 2440, PAGE 489, AND ORDER OF TAKING RECORDED IN O.R. BOOK 3326, PAGE 1162, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.



LOCATION MAP
SCALE: 1" = 1,000'
SOURCE: MICROSOFT

APPLICANT/CONTACT
BLUE ORANGE HOLDINGS, LLC
WESS MCMILLAN
PHONE: (407) 509-7098
EMAIL: WESSMCMILLAN@GMAIL.COM

PREPARED BY

BOHLER

CONTACT: FL-PERMITS@BOHLERENG.COM

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SURVEY NOTE

A BOUNDARY AND TOPOGRAPHY SURVEY HAS BEEN PREPARED BY REPUBLIC NATIONAL. ALL EXISTING INFORMATION SHOWN IS BASED ON SAID SURVEY UNLESS OTHERWISE NOTED. PARCEL BOUNDARY LINES SHOWN THESE PLANS ARE BASED ON THE SURVEY PREPARED BY REPUBLIC NATIONAL DATED 5-4-2022. FUTURE/PROPOSED INTERNAL LOT LINES ARE APPROXIMATE AND WILL BE PROPOSED UNDER A FUTURE REPLAT OF THE PROJECT SITE, PREPARED BY THE PROJECT SURVEYOR.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND PLANNING SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES
THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE COPYRIGHTED AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED, SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM
3	04/08/2025	SJRWMD COMMENTS	LS / KM

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ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS
FOR
SUTTON CROSSINGS
PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Ponce Rebb., S=Florida, SERIALNUMBER=A4A3D2A0829B73826, C=US
Date: 2025.04.09 15:09:47-04'00'
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MOREL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

REVISION 3 - 04/08/2025

Apr 09, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-CNDS-FLA240162.00-0A-----1A1YOUT C-101 - COVER SHEET
LS

GENERAL NOTES

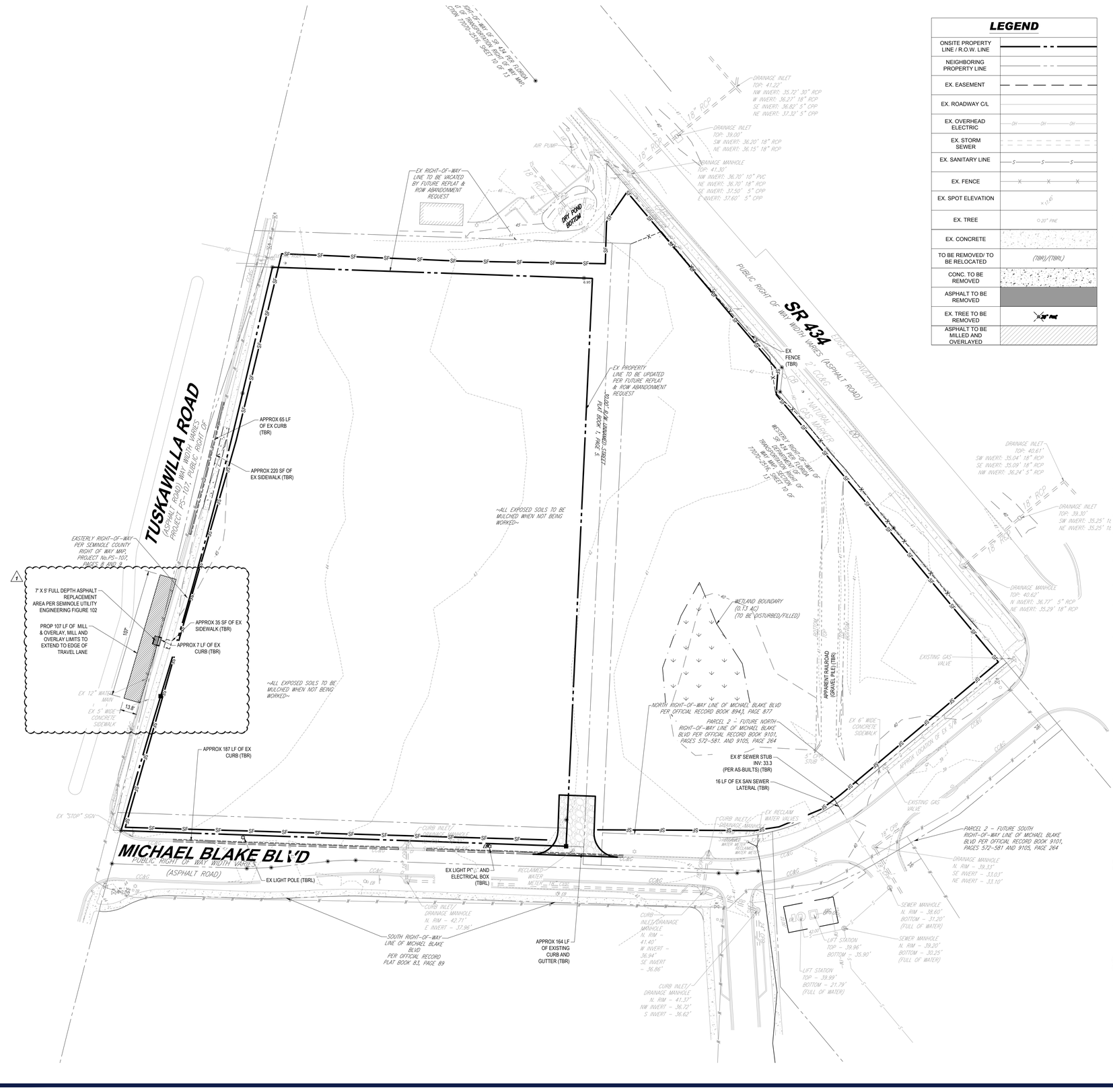
(Rev. 1/2023)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING FL, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE PROFESSIONAL OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER, IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BE UNDERTAKEN UNTIL THOROUGHLY REVIEWING ALL PERMITS AND THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK PERFORMED DUE TO DIMENSIONAL MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING PROFESSIONAL OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) PROFESSIONAL OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY. THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. PROFESSIONAL OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTIES.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. AT NO TIME IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.
14. THE CONTRACTOR IS TO EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND FOR THIRD PARTIES, PEDESTRIANS AND ANYONE ELSE WHO MAY BE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
17. THE CONTRACTOR SHALL REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND OR ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND PROFESSIONAL OF RECORD AND BOHLER PRIOR TO THE START OF CONSTRUCTION.
18. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING THE PROFESSIONAL OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
20. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO, JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD BOTH THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT PROFESSIONAL OF RECORD AND BOHLER SUFFER AND ANY AND ALL COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME.
21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THE FOLLOWING ENTITIES NAMED AS ADDITIONAL INSURED ON THEIR POLICIES, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS CONSTRUCTION/PROJECT SITE ADDITIONAL INSURED. NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, SUBJECTIVE OR OTHERWISE, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY PROFESSIONAL OF RECORD, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
22. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETING THE WORK DIRECTED BY BOTH THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, OR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREINAFTER, THE "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ANY AND ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY BODY HAVING JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE MEANS OR METHODS OF CONSTRUCTION OR ITS EMPLOYEES RELATED TO THEIR WORK AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE. THESE NOTES OR ANY PART THEREOF SHALL NOT BE CONSTRUED AS MEANING THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER WILL NOT BE RESPONSIBLE FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN PROFESSIONAL OF RECORD'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR MUST, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE PROFESSIONAL OF RECORD AND BOHLER'S DESIGN AND, FURTHER, THE OWNER IS SOLELY AND EXCLUSIVELY RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. PROFESSIONAL OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND SPECIFICATIONS. IF THE CONTRACTOR FAILS TO COMPLY WITH MANUFACTURER'S SPECIFICATIONS AND THEY DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND COSTS THAT PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE.
31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

DEMOLITION NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL ANCILLARY, INCIDENTAL OR NECESSARY AND/OR APPURTENANT ITEMS THAT ARE REQUIRED.
   B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE UTILIZED BY THE CONTRACTOR MUST COMPLY WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS REQUIRED BY ANY GOVERNMENTAL BODY HAVING JURISDICTION.
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL STRUCTURES AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES DISTURBED PER PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER AND IN COMPLIANCE WITH ALL OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEIGHBORING THE SAME.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM ANY DIMENSIONAL OR GRADES IRREGULARITIES AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME DURING THE DEMOLITION AREA.
8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE



LEGEND

ONSITE PROPERTY LINE / R.O.W. LINE	
NEIGHBORING PROPERTY LINE	
EX. EASEMENT	
EX. ROADWAY C/L	
EX. OVERHEAD ELECTRIC	OH OH OH
EX. STORM SEWER	
EX. SANITARY LINE	S S S
EX. FENCE	X X X
EX. SPOT ELEVATION	x 0.00'
EX. TREE	0.20" PINE
EX. CONCRETE	
TO BE REMOVED/ TO BE RELOCATED	(TBR)/(TBRL)
CONC. TO BE REMOVED	
ASPHALT TO BE REMOVED	
EX. TREE TO BE REMOVED	30" PINE
ASPHALT TO BE MILLED AND OVERLAYED	



DEMOLITION ABBREVIATIONS

ABBREVIATION	DESCRIPTION
(TBA)	TO BE ABANDONED
(TBR)	TO BE REMOVED
(TBV)	TO BE VACATED
(RELO)	TO BE RELOCATED

DEMOLITION NOTES:

1. BOHLER FL, LLC IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
2. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE, AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO BOHLER FL, LLC IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.
3. PERMITS FOR DEVIATIONS SHALL BE APPLIED FOR AND APPROVED BY THE CITY OF WINTER SPRINGS PRIOR TO THE COMMENCEMENT OF DEVIATION.
4. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO:
   A. PRE -CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE CITY OF WINTER SPRINGS PRIOR TO CONSTRUCTION ACTIVITY.
   B. NO CONSTRUCTION SHALL COMMENCE WITHOUT AN INSPECTED AND APPROVED SITE WORK PERMIT FROM THE CITY OF WINTER SPRINGS.
   C. CONSTRUCTION FENCE WITH MESH SHALL BE FULLY INSTALLED, INSPECTED, AND APPROVED PRIOR TO CONSTRUCTION ACTIVITIES.
   D. NO CONSTRUCTION SHALL COMMENCE WITHOUT AN INSPECTED AND APPROVED SITE WORK PERMIT FROM THE CITY OF WINTER SPRINGS.
   E. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE FULLY INSTALLED, INSPECTED, AND APPROVED BY THE CITY OF WINTER SPRINGS PRIOR TO CONSTRUCTION ACTIVITY.
   F. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATE ONE CALL LOCATION CERTIFICATION PRIOR TO ANY EXCAVATION OR DEMOLITION. THE NUMBER IS 1-800-432-4770.
   G. ENSURING COPIES OF ALL PERMITS AND APPROVALS MUST BE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW.
   H. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
   I. LOCATE/CAP ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC, WITHIN THE LIMITS OF DISTURBANCE.
   J. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
   K. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND BEING RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
   L. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.
   M. OPERATION OF ANY MECHANICALLY POWERED TOOLS OR EQUIPMENT USED IN CONSTRUCTION, DRILLING, OR DEMOLITION WORK BETWEEN THE HOURS OF 10:00 P.M. AND 7:00 A.M. THE FOLLOWING DAY IS PROHIBITED PER SECTION 13-31(D); CITY OF WINTER SPRINGS.
   N. A COMPLETE INSPECTION OF CONTAMINANTS BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED. SAME SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. ANY/ALL CONTAMINANTS SHALL BE REMOVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK INCLUDING HAZARDOUS MATERIAL, SOILS, ASBESTOS, OR OTHER REFERENCED OR IMPLIED HEREIN IS THE SOLE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL CONSULTANT.
4. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.
5. IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
6. EXPLOSIVES SHALL NOT BE USED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
7. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH: THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT - OF - WAY.
8. CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITIES.
9. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
10. USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
11. WRITTEN NOTICE INDICATING PROPERTIES DEEMED TO BE RETURNED TO "PRE-DEMOLITION" CONDITION SHALL BE SENT TO THE CITY OF WINTER SPRINGS. THE LETTER SHALL INCLUDE PROPERTY LOCATIONS, DATE OF DEMOLITION COMPLETION, DATE OF WORK TO COMMENCEMENT, AND NAME AND CONTACT INFORMATION OF CONTRACTOR.
12. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
13. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
14. DEBRIS SHALL NOT BE BURIED OR BURNED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS AND APPLICABLE CODES. BURNING OF ANY ORGANIC OR INORGANIC MATERIAL ON SITE SHALL BE PROHIBITED.
15. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
16. ALL EXISTING UTILITIES BEING REMOVED SHALL BE DONE SO BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
17. THERE ARE NO KNOWN WATER COURSES, WATER BODIES, FLOODPLAINS, XERIC UPLANDS, WETLANDS, CUTTHROAT GRASS SEEPS, HISTORICAL, AND ARCHAEOLOGICAL RESOURCES, OR CONES OF INFLUENCE FOR POTABLE WELLS, AQUIFER RECHARGE AREAS, SOIL TYPES, AND VEGETATIVE COVER LOCATED WITHIN PROJECT LIMITS.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

UTILITY NOTE:

1. CONTRACTOR SHALL FIELD VERIFY EXISTING ON-SITE UTILITIES AND UTILITIES WITHIN THE RIGHT-OF-WAY PRIOR TO START OF WORK.

GEOTECHNICAL NOTE:

1. CONTRACTOR SHALL FOLLOW THE GUIDANCE AND RECOMMENDATIONS AS SPECIFIED IN THE SUBSOIL AND GROUNDWATER LEVEL INVESTIGATION GEOTECHNICAL ENGINEERING REPORT PREPARED BY YOVAISH ENGINEERING SERVICES DATED OCTOBER 12, 2023.
2. PER THE GEOTECHNICAL REPORT PERFORMED BY YOVAISH ENGINEERING SERVICES ON 10/12/2023, THE MAJORITY OF THE SITE IS COVERED WITH ONE TO TWO FEET OF ORGANIC TOP SOIL. ALL ORGANIC TOP SOIL SHOULD BE REMOVED BY THE CONTRACTOR AND REPLACED WITH FDOT APPROVED CLEAN FINE SAND.

DUST AND DEBRIS CONTROL:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL WITHIN THE CONSTRUCTION LIMITS AS WELL AS ALONG HAUL ROUTES AND ROADWAYS USED BY THE EQUIPMENT AND VEHICLES. THE CONTRACTOR SHALL ENSURE EXCESSIVE DUST IS NOT TRANSPORTED BEYOND THE LIMITS OF CONSTRUCTION IN POPULATED AREAS. THE CONTRACTOR MAY CONTROL DUST FOR EMBANKMENTS OR OTHER CLEARED OR UNSURFACED AREAS BY APPLYING WATER. INSTALL MULCH, SEED, SOD, OR TEMPORARY PAVING AS EARLY AS PRACTICAL. CONTROL DUST DURING STORAGE AND HANDLING OF DUSTY MATERIALS BY WETTING, COVERING, OR OTHER MEANS AS APPROVED BY THE ENGINEER. DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THE PROJECT SITE.

THIS PLAN TO BE UTILIZED FOR DEMOLITION PURPOSES ONLY

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM
3	04/08/2025	SJRWMD COMMENTS	LS / KM

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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVIL-EXDM

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlerengineering.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Brandon, S=Florida, C=US, SN=MOREL, G=MAS20240827082826-0400
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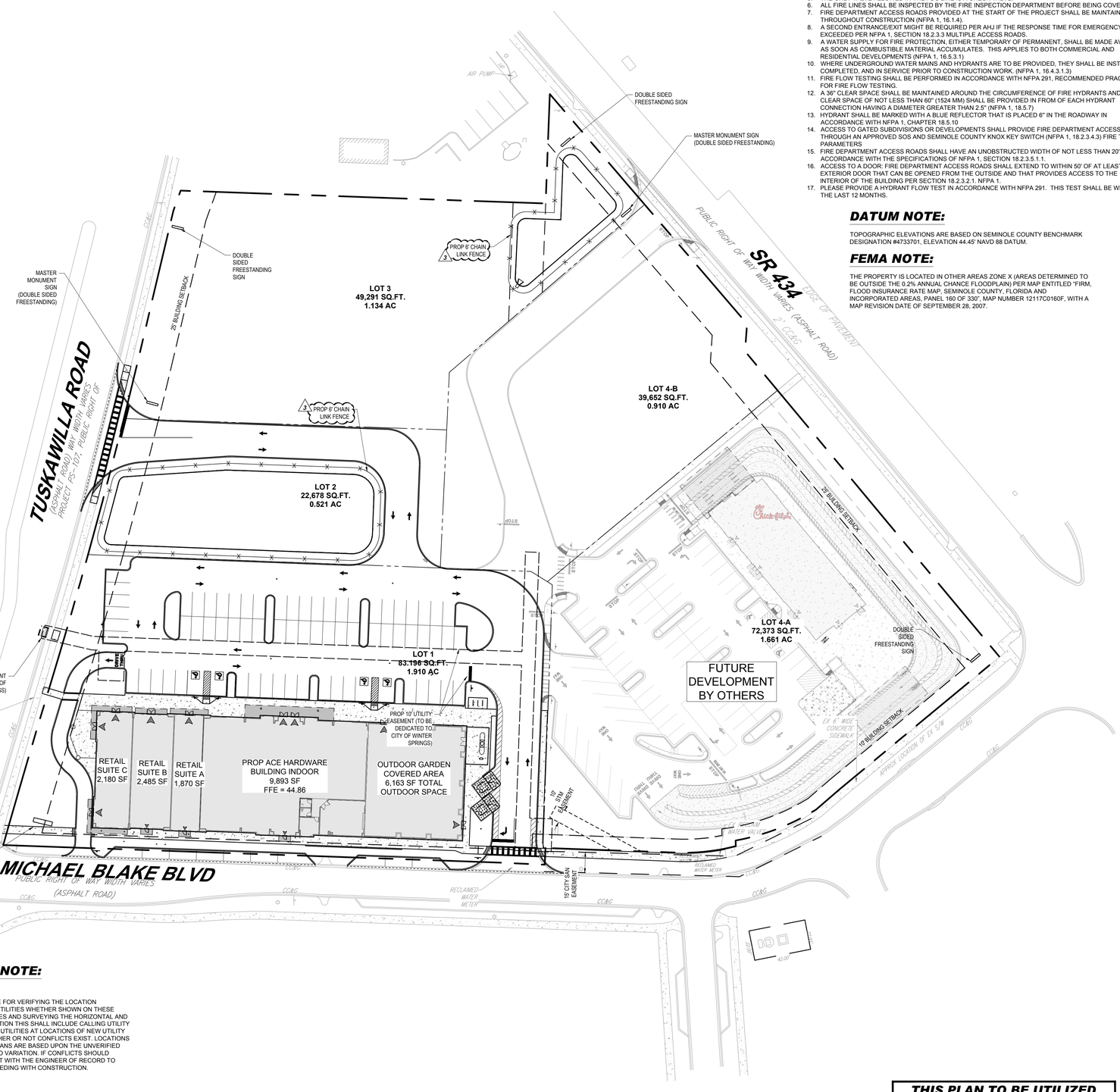
EXISTING CONDITIONS/ DEMOLITION PLAN

SHEET NUMBER:

C-201

REVISION 3 - 04/08/2025

Apr 09, 2025
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LS



WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.(NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

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LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE, SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
13. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN.
14. FDEP WATER AND WASTEWATER PERMITS MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

RIGHT-OF-WAY NOTES:

1. A RIGHT-OF-WAY USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
2. ALL AREAS WITHIN THE COUNTY OR F.D.O.T. RIGHT-OF-WAY DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.
3. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO PROTECT ALL COUNTY OR F.D.O.T. OWNED AND/OR MAINTAINED INFRASTRUCTURE. ANY/ALL COSTS ASSOCIATED WITH ALTERATIONS, RELOCATIONS, OR REPAIRS MADE NECESSARY BY THIS DEVELOPMENT SHALL BE BORNE BY EITHER THE OWNER, DEVELOPER, AND/OR CONTRACTOR. SPLICES IN THE FIBER OPTIC CABLE, SIGNALIZATION OR ROADWAY LIGHTING CONDUCTORS, OR THE ADDITION OF ADDITIONAL PULL/JUNCTION BOXES WILL NOT BE PERMITTED. IN THE EVENT A CABLE IS CUT, DAMAGED, OR REQUIRES RELOCATION, THE CABLE(S) SHALL BE RESTORED BACK TO THE ORIGINAL CONFIGURATION. ORIGINAL CONFIGURATION IS DEFINED AS SYSTEM STATUS, LAYOUT, AND DESIGN PRIOR TO ANY WORK COMMENCING.
4. FOR UTILITIES TO BE RELOCATED BY THE UTILITY PROVIDER, CONTRACTOR SHALL COORDINATE DEMOLITION SCHEDULE WITH UTILITY PROVIDERS. DEMOLITION OF SIDEWALKS AND DRIVEWAYS SHALL OCCUR PRIOR TO UTILITY RELOCATIONS.
5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (R/W) SHOULD BE THERMOPLASTIC.
6. SIGNS WITHIN THE STATE RIGHT-OF-WAY (R/W) NEEDS TO BE MOUNTED TO ROUND ALUMINUM COLUMN (POST).

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE ROW OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

FDOT NOTES:

1. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL

STORMWATER MANAGEMENT:

STORMWATER RUNOFF FROM THE SITE IMPROVEMENTS PROPOSED ONSITE SHALL BE MANAGED THROUGH A COMBINATION OF PROPOSED DRY DETENTION PONDS AND UNDERGROUND STORMTECH CHAMBERS LOCATED UNDER THE PAVEMENT AREAS AS SHOWN. THE STORMWATER MANAGEMENT SYSTEM HAS BEEN DESIGNED IN PART WITH "POND 1" WITHIN TUSKAWILLA CROSSINGS SUBDIVISION.

SITE SIGNAGE:

PERMANENT SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

LANDSCAPING:

ALL LANDSCAPING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

SIDEWALK NOTE:

ANY BROKEN OR NON ADA COMPLIANT SIDEWALK IN THE PUBLIC RIGHT-OF-WAY FRONTING THE PROJECT SITE SHALL BE REPLACED AS PART OF THIS PROJECT.

UTILITY CONFLICT NOTE:
CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION THIS SHALL INCLUDE CALLING UTILITY LOCATE, POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

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CAD I.D.: P-CIVL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

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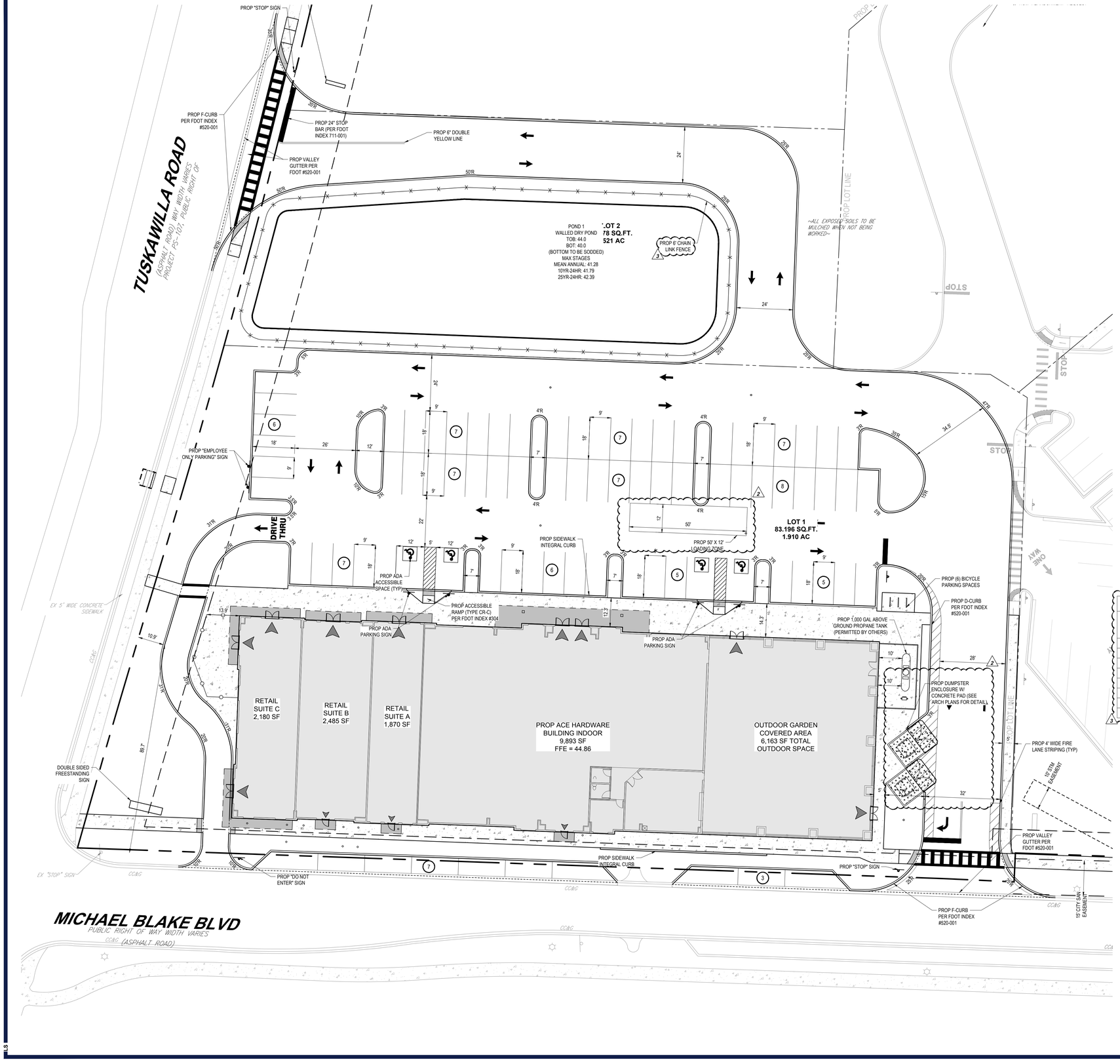
OVERALL SITE PLAN

SHEET NUMBER:

C-301

REVISION 3 - 04/08/2025

Apr 09, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\SP-CIVL-SITE-FLA240162.00-0A-----LAYOUT: C-301 - OVERALL SITE PLAN
MLS





LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE DATA TABLE

TAX PARCEL NUMBER(S):	01-21-30-501-0000-0010 & 26-20-30-5AR-0A00-008D/H
PROJECT ADDRESS:	UNDEVELOPED LAND EAST OF TUSKAWILLA RD WINTER SPRINGS, FL
PARCEL AREA:	6.14 AC
EXISTING ZONING:	T-5 URBAN CENTER ZONE
PROPOSED ZONING:	T-5 URBAN CENTER ZONE
EXISTING LAND USE:	VACANT - WOODED
FUTURE LAND USE:	COMMERCIAL
PROPOSED USE:	COMMERCIAL
MAX. BUILDING HEIGHT:	75 FEET

BUILDING SETBACKS

FRONT:	25' MIN. (TUSKAWILLA RD)
SIDE:	10' MIN. (NORTH)
SIDE:	10' MIN. (MICHAEL BLAKE BLVD)
REAR:	25' MIN. (SR 434)
INTERNAL LOT:	0'

IMPERVIOUS CALCULATIONS

MAXIMUM ALLOWABLE IMPERVIOUS AREA = 100% (6.14 AC)	
MCMILLIAN LOT 1 (1.91 AC)	
BUILDING AREA:	23,517 SF = 0.54 AC
VUA AREA:	43,996 SF = 1.01 AC
OTHER IMPERVIOUS AREA:	10,019 SF = 0.23 AC
TOTAL IMPERVIOUS AREA:	77,532 SF = 1.78 AC (BASIN 1, BASIN 2, & BP BASIN)
85% ASSUMED IMPERVIOUS AREA FOR FUTURE DEVELOPMENT	

PARKING CALCULATIONS

PARKING:	72 SPACES (INCLUDING 2 ADA SPACES)

IMPERVIOUS ALLOCATION TABLE FOR ALL BASINS

BASIN	BASIN AREA (AC)	ALLOWABLE IMPERVIOUS AREA (AC)	CONSTRUCTED IMPERVIOUS AREA (AC)	PROPOSED IMPERVIOUS AREA (AC)	REMAINING IMPERVIOUS AREA (AC)
BASIN 1	1.52	1.45	0	1.45	0
BASIN 2	0.52	0.17	0	0.17	0
BASIN 3	1.13	0.96	0	0	0.96
BASIN 4A	1.66	1.41	0	0	1.41
BASIN 4B	0.91	0.77	0	0	0.77
BASIN BP	0.49	0.16	0	0.16	0
TOTAL:	6.23	4.92	0	1.78	3.14

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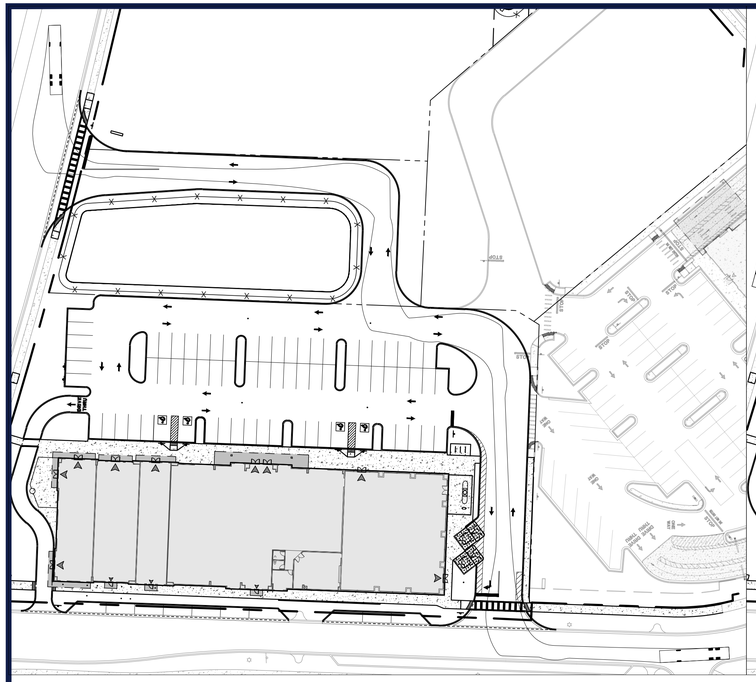
SITE PLAN

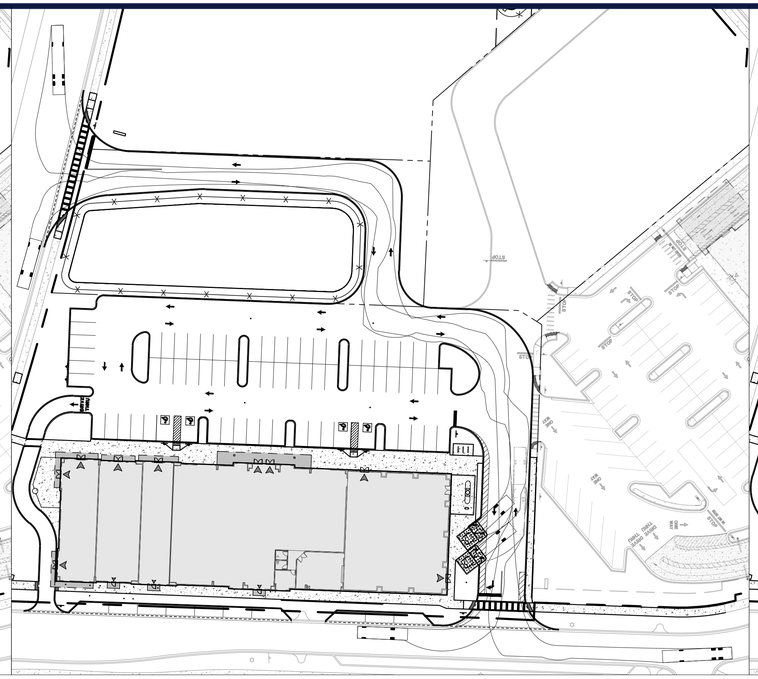
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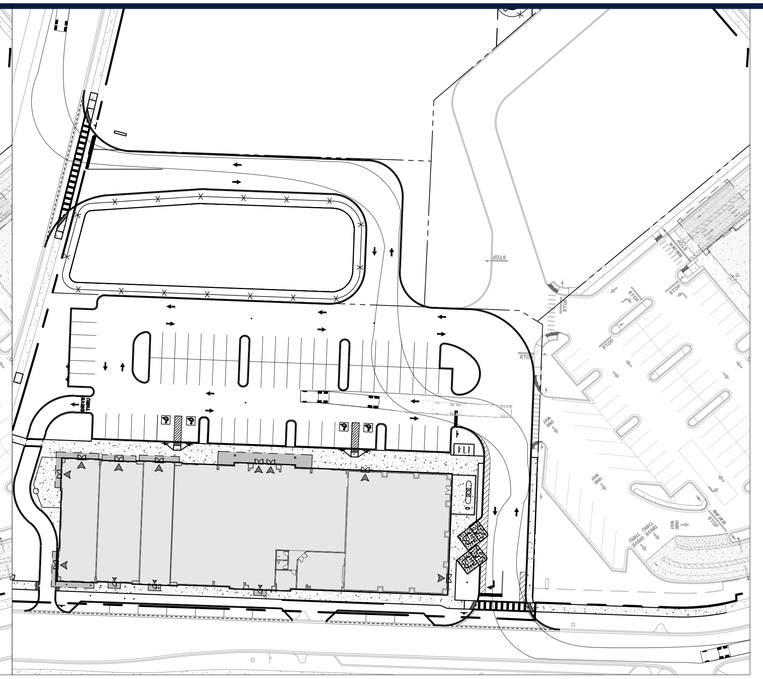
C-302

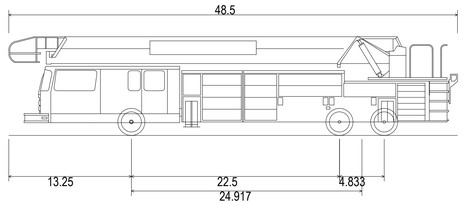
REVISION 3 - 04/08/2025

Apr 09, 2025
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LS



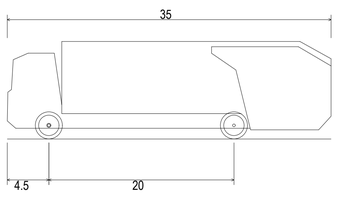






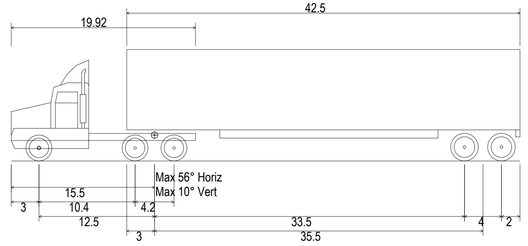
FIRE TRUCK - WINTER SPRINGS, FL

Overall Length	48.500ft
Overall Width	8.333ft
Overall Body Height	10.685ft
Min Body Ground Clearance	0.920ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Wall to Wall Turning Radius	48.420ft



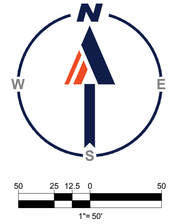
Rear-Load Garbage Truck

Overall Length	35.000ft
Overall Width	8.375ft
Overall Body Height	10.546ft
Min Body Ground Clearance	1.000ft
Track Width	8.375ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	29.300ft



WB-50 - Intermediate Semi-Trailer

Overall Length	55.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	45.000ft



UTILITY CONFLICT NOTE:

CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION THIS SHALL INCLUDE CALLING UTILITY LOCATE, POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

Apr 09, 2025
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LS

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ELECTRICAL ENGINEERING
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM
3	04/08/2025	SJRWMD COMMENTS	LS / KM

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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER

E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, OID.0.9.2342.19200300.100.1.1=A01410D0000019A5202A0929673826, C=US
Date: 2025.04.09 15:14:02-04'00'

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SHEET TITLE:

TRUCK TURNING PLAN

SHEET NUMBER:

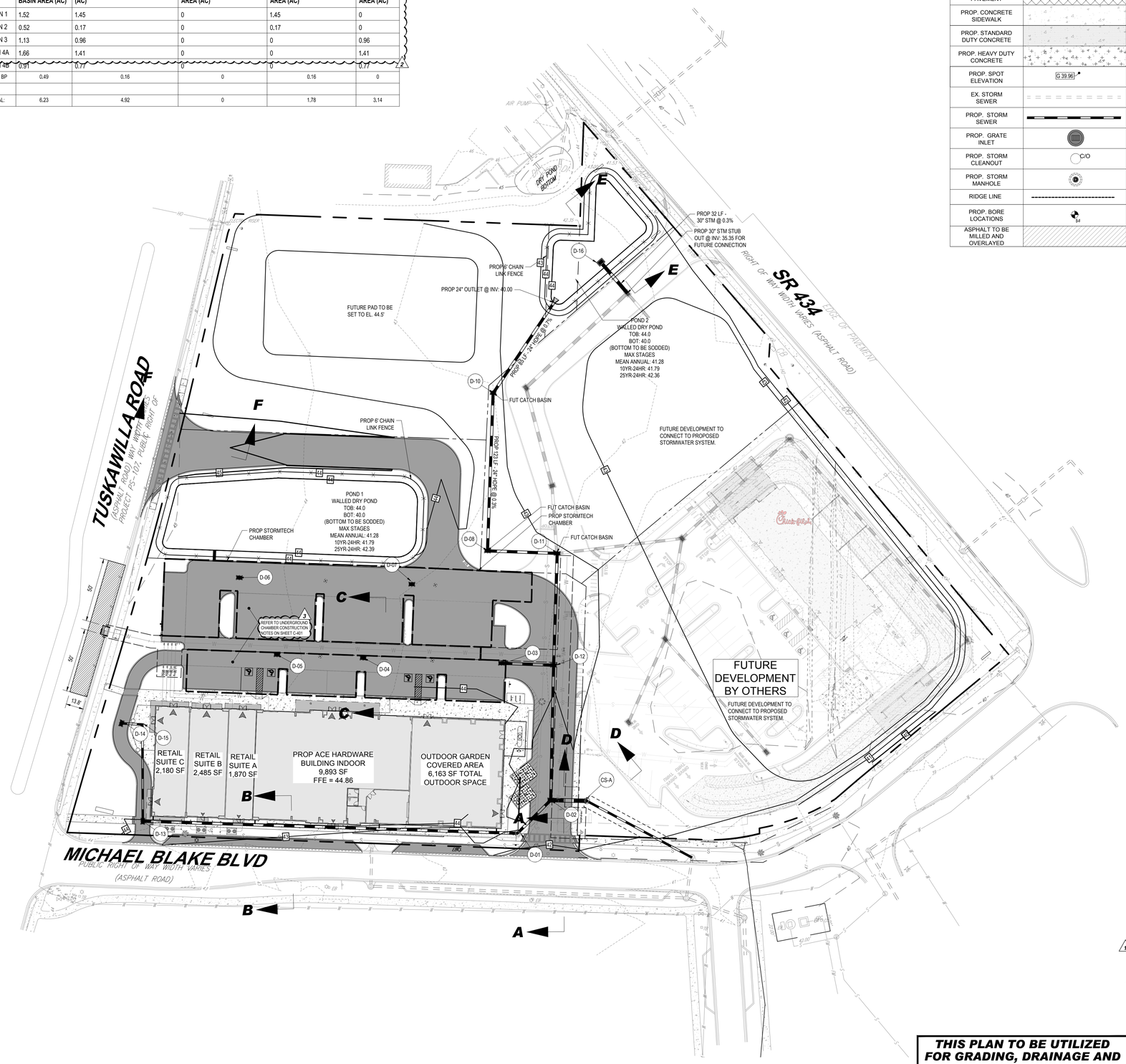
C-303

REVISION 3 - 04/08/2025

IMPERVIOUS ALLOCATION TABLE FOR ALL BASINS

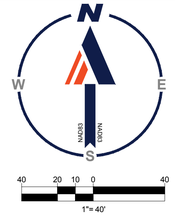
BASIN	BASIN AREA (AC)	ALLOWABLE IMPERVIOUS AREA (AC)	CONSTRUCTED IMPERVIOUS AREA (AC)	PROPOSED IMPERVIOUS AREA (AC)	REMAINING IMPERVIOUS AREA (AC)
BASIN 1	1.52	1.45	0	1.45	0
BASIN 2	0.52	0.17	0	0.17	0
BASIN 3	1.13	0.96	0	0	0.96
BASIN 4A	1.66	1.41	0	0	1.41
BASIN 4B	0.91	0.77	0	0	0.77
BASIN BP	0.49	0.16	0	0.16	0
TOTAL:	6.23	4.92	0	1.78	3.14

2



LEGEND

PROPERTY LINE	
PROP. ASPHALT PAVING	
PROP. PERVIOUS PAVEMENT	
PROP. CONCRETE SIDEWALK	
PROP. STANDARD DUTY CONCRETE	
PROP. HEAVY DUTY CONCRETE	
PROP. SPOT ELEVATION	G 39.96
EX. STORM SEWER	
PROP. STORM SEWER	
PROP. GRATE INLET	
PROP. STORM CLEANOUT	C/O
PROP. STORM MANHOLE	
RIDGE LINE	
PROP. BORE LOCATIONS	S4
ASPHALT TO BE MILLED AND OVERLAYED	



GENERAL NOTES:

1. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CASTING STRUCTURES.
3. COORDINATE ALL UTILITY LEADS AND BUILDING CONNECTIONS WITH THE ARCHITECTURAL PLANS.
4. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
5. ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY WILL NEED TO BE SODDED.

PAVING AND GRADING NOTES:

A. GENERAL:
1. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE SURVEYOR'S BENCHMARKS AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUNDBREAK.
2. ALL GRADES SHOWN REFERENCE PROPOSED ELEVATIONS AT EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. "TC" = TOP OF CURB ELEVATION; "G" = FINISHED GRADE; "MEG" = PROPOSED GRADE TO MATCH EXISTING GRADE; T/W = TOP OF RETAINING WALL ELEVATION; B/W = BOTTOM OF RETAINING WALL ELEVATION.
3. THE ALTA/ACSM LAND TITLE SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
4. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
5. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF LIMEROCK BASE.
6. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
7. WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAWCUT TO ENSURE A PROPER JOINT.
8. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.

B. MATERIALS:
1. BASE COURSE SHALL BE ABC-3 PER F.D.O.T. SPECIFICATIONS OR EQUIVALENT LIMEROCK THICKNESS W/ MINIMUM LBR-100 (MAX. 6" LIFTS).
2. ASPHALT SURFACES SHALL BE TYPE S-III ASPHALTIC CONCRETE, UNLESS OTHERWISE SPECIFIED ON THE PLANS, SHALL BE A MINIMUM OF 1-1/2" THICK, AND SHALL BE CONSTRUCTED IN TWO 3/4" LIFTS, WITH TACKCOAT BETWEEN LIFTS.
3. REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" x 6" NO. 6 GAUGE WIRE MESH.

C. INSTALLATION:
1. SUBGRADE FOR ROADWAY SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY (AASHTO T-180), SHALL BE A MINIMUM 12", AND SHALL HAVE A MINIMUM LBR 40.
2. BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 6" PLACED IN ONE LIFT. ADDITIONALLY, BASE COURSE MATERIAL SHALL HAVE A MINIMUM MARSHALL STABILITY OF 1000, UNLESS OTHERWISE INDICATED (OR LBR-100).
3. BASE COURSE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
4. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM TO THE REQUIREMENTS OF THE D.O.T. STANDARD SPECIFICATIONS FOR TYPE S-III ASPHALTIC CONCRETE OR THE LATEST REVISION.

D. TESTING
1. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
2. DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.
3. ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE CONTRACTOR.
4. DENSITY TESTS ON THE STABILIZED SUBGRADE SHALL BE SUPPLIED TO AND APPROVED BY THE ENGINEER OF RECORD AND GEOTECHNICAL ENGINEER BEFORE ANY BASE IS CONSTRUCTED.
5. DENSITY TESTS AND "AS-BUILTS" ON THE FINISHED BASE SHALL BE SUPPLIED TO AND APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE ANY ASPHALT PAVEMENT IS CONSTRUCTED.

STORM DRAINAGE NOTES:

A. GENERAL:
1. DISTANCES AND LENGTHS OF PIPE SHOWN ON PLANS ARE REFERENCED TO THE CENTER OF STRUCTURES.

B. MATERIALS:
1. REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM C-76, CLASS III, WALL THICKNESS "B", LATEST REVISION. RUBBER GASKETS OR OTHER MANUFACTURER SUPPLIED JOINT SEALER SHALL BE USED.
2. ALL PVC DRAINAGE PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 35, WITH PUSH-ON RUBBER GASKET JOINTS.
3. ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.

C. INSTALLATION:
1. PIPE SHALL BE PLACED ON A MINIMUM OF 8" STABLE GRANULAR MATERIAL FREE OF ROCK FORMATION AND OTHER FOREIGN FORMATIONS, AND CONSTRUCTED TO A UNIFORM GRADE AND LINE.
2. BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6" TO A HEIGHT OF 12" ABOVE PIPE AS SHOWN ON THE PLANS.
3. PROVIDE A MINIMUM PROTECTIVE COVER OF 18" OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.

D. CONNECTIONS TO EXISTING STORM STRUCTURES:
1. THE HOLE INTO THE EXISTING STRUCTURE SHALL BE SAW CUT OR CORE DRILLED.
2. USE NON-SHRINKING GROUT TO FILL ALL GAPS AROUND THE JOINT.
3. AFTER PIPE IS CONNECTED WITH THE INLET, THE END OF THE PIPE MUST BE CUT FLUSH WITH THE INSIDE SURFACE OF THE INLET.
4. REFER TO F.D.O.T. STANDARD PLAN INDEX 425-001 FOR FILTER FABRIC WRAP ON GROUTED PIPE TO STRUCTURE JOINT DETAIL.

GRADING NOTES:

1. STRUCTURAL FILL REQUIRED TO ATTAIN FINAL GRADES SHALL BE COMPRISED OF CLEAN SAND WITH NO MORE THAN 10 PERCENT PASSING THE U.S. NO. 200 SIEVE. THE FILL SHALL BE PLACED IN MAXIMUM 12-INCH THICK LIFTS AND COMPACTED TO A MINIMUM DENSITY EQUIVALENT TO 95 PERCENT OF THE SOILS MAX. MODIFIED PROCTOR DENSITY VALUE (ASTM D-1557) HAS BEEN ACHIEVED.
2. CONTRACTOR SHALL FOLLOW THE GUIDANCE AND RECOMMENDATIONS AS SPECIFIED IN THE SUBSOIL AND GROUNDWATER LEVEL INVESTIGATION GEOTECHNICAL ENGINEERING REPORT PREPARED BY YOVAISH ENGINEERING SERVICES DATED OCTOBER 12, 2023.

DRAINAGE NOTES:

1. ALL STORM PIPE MATERIAL SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER SPRINGS STANDARDS AND SPECIFICATIONS.
2. FINAL RIM OR TOP OF CATCH BASIN ELEVATIONS FOR FUTURE CATCH BASINS SHOULD NOT BE FINALIZED UNTIL PAVEMENT AREAS OF FUTURE DEVELOPMENTS ARE DESIGNED.
3. ALL POND AREAS SHALL BE VEGETATED.
4. ANY BARE SOIL AREAS NOT COVERED BY IMPERVIOUS SURFACES SHALL BE STABILIZED (HYDROSEEDING OR EQUIVALENT).
5. ALL INLETS FROM STORMTECH CHAMBER SYSTEM SHALL BE INSTALLED WITH SEDIMENT SUMP.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

DEWATERING NOTE:

CONTRACTOR SHALL SUBMIT DEWATERING PLAN TO THE DISTRICT, 14 DAYS PRIOR TO COMMENCEMENT. SUBJECT PLANS SHALL BE REVISED AS NECESSARY.

ENGINEER'S CERTIFICATION NOTE:

1

"I, KYLE MOREL, P.E. HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE ALL EXISTING UTILITIES HAVE BEEN FIELD LOCATED AND THE LOCATION AND ELEVATION DEPICTED ON THESE PLANS IS BASED ON ACTUAL SURVEY, GROUND PENETRATING RADAR, SOFT DIG EXCAVATIONS, AND OTHER INDUSTRY METHODS. I FURTHER CERTIFY THAT ALL MEASURES HAVE BEEN TAKEN WITH REGARD TO UTILITY PROVIDERS' NOTIFICATION TO MARK UTILITIES IN ACCORDANCE WITH CHAPTER 556 F.S., SUNSHINE STATE ONE CALL."

UNDERGROUND CHAMBER CONSTRUCTION NOTES:

3

1. EXCAVATE BELOW UNDERGROUND CHAMBER BOTTOM PASSED FIRST LAYER OF CLAY LAYER AND REPLACE WITH CLEAN FILL, MINIMUM PERMEABILITY OF 20 FT / DAY HORZ & 10 FT / DAY VERT.
2. PRIOR TO CERTIFICATION, CONTRACTOR TO PROVIDE SUPPORTING GEOTECHNICAL DATA (DRI TEST OR SIMILAR) TO CONFIRM PERMEABILITY RATES. SHOULD TESTING NOT MEET THESE REQUIREMENTS, REMEDIATION EFFORTS WILL BE REQUIRED. PLEASE CONTACT EOR IMMEDIATELY.
3. CONTRACTOR TO MAINTAIN BEST MANAGEMENT SWPPP PRACTICES DURING CONSTRUCTION AND SHALL ENSURE NO CLAYS OR OTHER UNSUITABLE MATERIAL IS MIXED WITHIN THE VICINITY OF THE PROPOSED STORMWATER POND.

THIS PLAN TO BE UTILIZED FOR GRADING, DRAINAGE AND UTILITIES PURPOSES ONLY

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVIL-GRDR

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: C=US, E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Winter Springs, S=Florida, SERIALNUMBER=IAM/L2024082807382G, OU=
Date: 2025.04.08 15:14:16-04'00'

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SHEET TITLE:

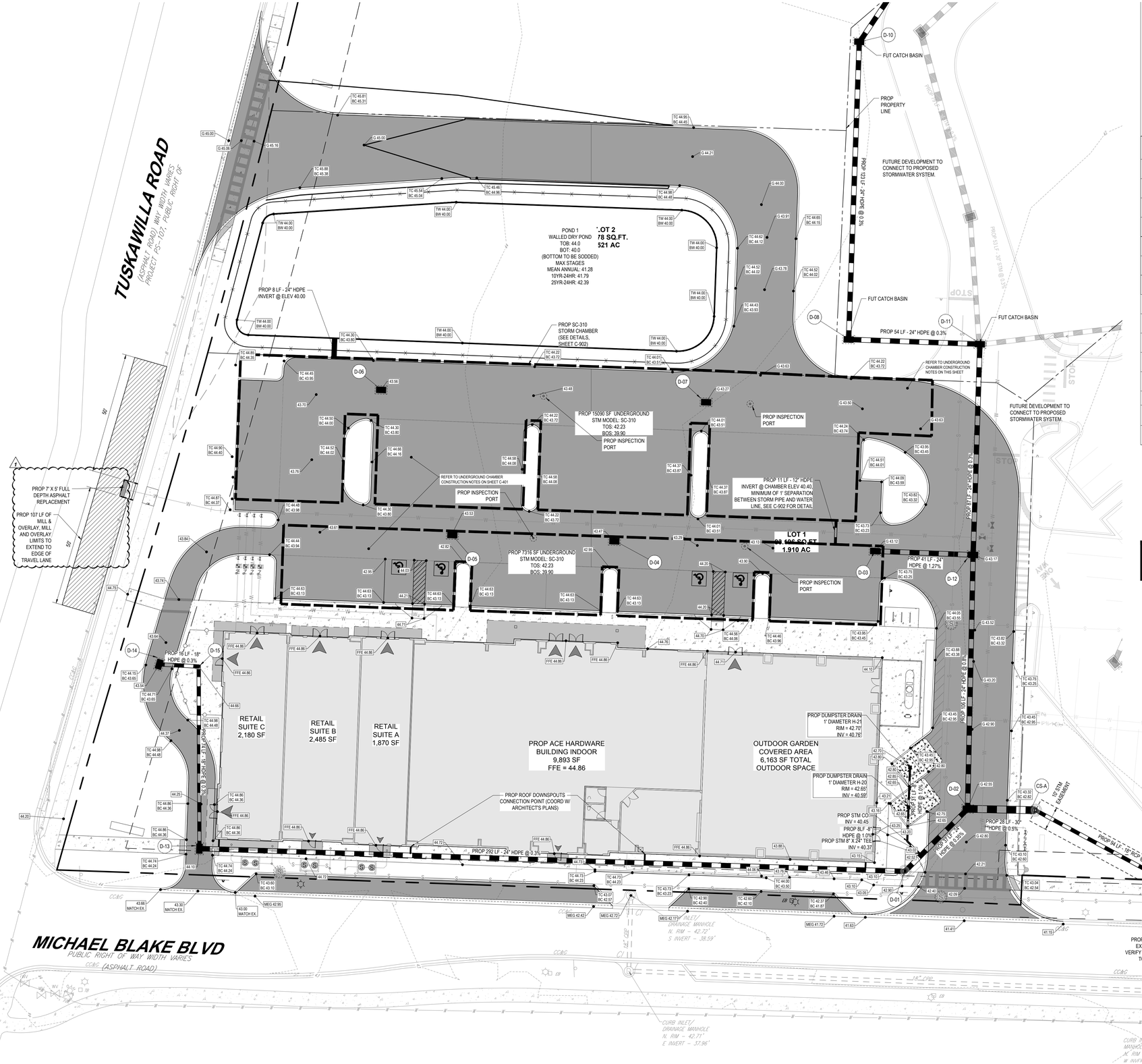
OVERALL PAVING GRADING AND DRAINAGE PLAN

SHEET NUMBER:

C-401

REVISION 3 - 04/08/2025

Apr 09, 2025
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KLS



N
W E
S
SCALE: 1" = 20'
20 10 5 0 20
1" = 20'

LEGEND

PROPERTY LINE	
PROP. ASPHALT PAVING	
PROP. PERVIOUS PAVEMENT	
PROP. CONCRETE SIDEWALK	
PROP. STANDARD DUTY CONCRETE	
PROP. HEAVY DUTY CONCRETE	
PROP. SPOT ELEVATION	G 39.96
EX. STORM SEWER	
PROP. STORM SEWER	
PROP. GRATE INLET	
PROP. STORM CLEANOUT	C/O
PROP. STORM MANHOLE	
RIDGE LINE	
PROP. BORE LOCATIONS	
ASPHALT TO BE MILLED AND OVERLAYED	

DOWNSPOUT NOTE:

CONNECT ALL ROOF DOWNSPOUTS TO 6-INCH HDPE LATERALS. LATERALS SHALL BE CONNECTED TO 12-INCH HDPE TRUNK LINES EXTENDING TO STRUCTURES WITH MIN. 0.5% SLOPE.

THIS PLAN TO BE UTILIZED FOR GRADING, DRAINAGE AND UTILITIES PURPOSES ONLY

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
CS-A	STORM MANHOLE CONTROL STRUCTURE PER FDOT INDEX #425-001 RIM = 43.50 WEIR ELEV. = 41.20 W INV IN=38.00 (30" HDPE) SE INV OUT = 38.00 (18" RCP)
D-01	STORM MANHOLE PER FDOT INDEX #425-001 RIM = 43.00 N INV IN = 38.27 (24" HDPE) W INV IN = 38.27 (24" HDPE)
D-02	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 42.55 E INV IN = 38.14 (30" HDPE) S INV OUT = 38.14 (24" HDPE) N INV OUT = 38.14 (24" HDPE)
D-03	TYPE "D" INLET RIM = 43.12 E INV OUT = 39.50 (24" HDPE)
D-04	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.47 W INV IN = 40.40 (12" HDPE) E INV OUT = 40.40 (12" HDPE)
D-05	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.53 E INV OUT = 40.04 (12" HDPE)
D-06	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.56 E INV OUT = 40.33 (12" HDPE)
D-07	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.27 W INV IN = 38.89 (12" HDPE)
D-08	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 43.85 E INV IN = 39.41 (24" HDPE) N INV OUT = 39.41 (24" HDPE)
D-10	TYPE "D" INLET RIM = 43.06 S INV IN = 39.66 (24" HDPE) NE INV IN = 39.66 (24" HDPE)
D-11	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 43.40 S INV IN = 39.24 (24" HDPE) W INV OUT = 39.24 (24" HDPE)
D-12	TYPE "D" INLET RIM = 43.17 S INV IN = 38.98 (24" HDPE) W INV IN = 38.98 (24" HDPE) N INV OUT = 38.98 (24" HDPE)
D-13	TYPE "D" INLET RIM = 44.10 N INV IN = 39.16 (18" HDPE) E INV OUT = 39.16 (24" HDPE)
D-14	TYPE "D" INLET RIM = 43.54 E INV OUT = 39.58 (18" HDPE)
D-15	STORM DRAIN RIM = 44.66 W INV OUT = 39.53 (18" HDPE) S INV OUT = 39.53 (18" HDPE)
D-16	TYPE "C" BUBBLE STRUCTURE RIM: 40.00 30" INV: 35.25 (W/ WEEP HOLE PER FDOT INDEX #425-001)

IMPERVIOUS ALLOCATION TABLE FOR ALL BASINS

BASIN	BASIN AREA (AC)	ALLOWABLE IMPERVIOUS AREA (AC)	CONSTRUCTED IMPERVIOUS AREA (AC)	PROPOSED IMPERVIOUS AREA (AC)	REMAINING IMPERVIOUS AREA (AC)
BASIN 1	1.52	1.45	0	1.45	0
BASIN 2	0.52	0.17	0	0.17	0
BASIN 3	1.13	0.96	0	0	0.96
BASIN 4A	1.66	1.41	0	0	1.41
BASIN 4B	0.91	0.77	0	0	0.77
BASIN BP	0.49	0.16	0	0.16	0
TOTAL	6.23	4.92	0	1.78	3.14

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2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM
3	04/08/2025	SJRWMD COMMENTS	LS / KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-GRDR

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL
LICENSE
No. 77085
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Bonita Rasbo, S=Florida, SERIALNUMBER=AA1202A0B0973B35, C=US
Date: 2025.04.09 15:14:33-04'00'

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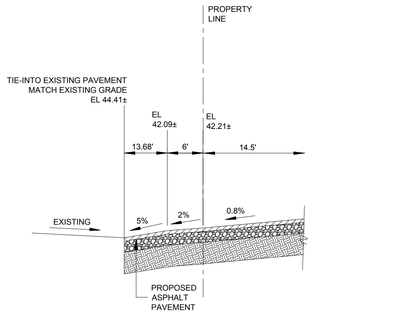
PAVING GRADING AND DRAINAGE PLAN

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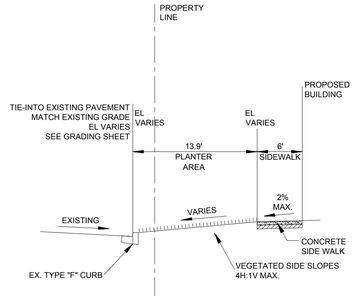
C-402

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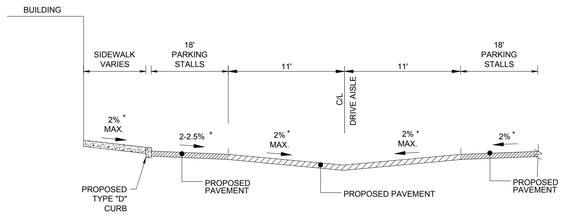
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H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-GRDR-FLA240162.00-0A-----LAYOUT: C-402 - PAVING GRADING & DRAINAGE
LS



MICHAEL BLAKE ENTRANCE SECTION A-A
N.T.S.

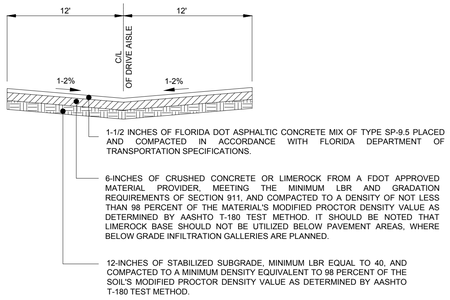


MICHAEL BLAKE PARKING SECTION B-B
N.T.S.

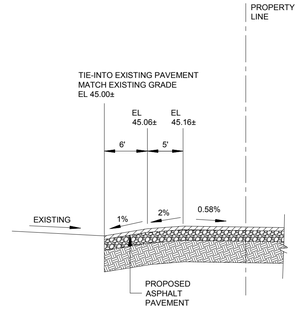


DRIVE AISLE
SECTION C-C
N.T.S.

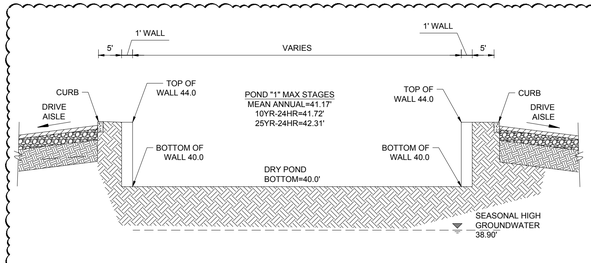
*CROSS-SLOPES OF PARKING STALLS & DRIVE AISLE SHALL BE AS NOTED ON SECTION DETAIL, UNLESS OTHERWISE NOTED FROM SPOT ELEVATIONS ON SHEET C5.1.



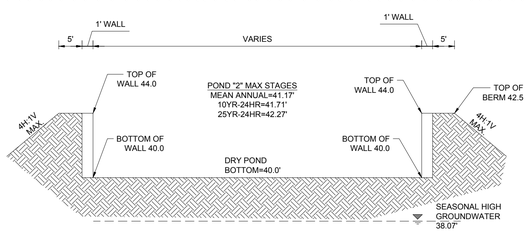
TYPICAL DRIVE AISLE
PAVEMENT SECTION
N.T.S.



TUSKAWILLA ENTRANCE SECTION F-F
N.T.S.



POND 1
SECTION D-D
N.T.S.



POND 2
SECTION E-E
N.T.S.

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PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
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FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 PROFESSIONAL ENGINEER STATE OF FLORIDA
Digitally signed by Kyle Morel
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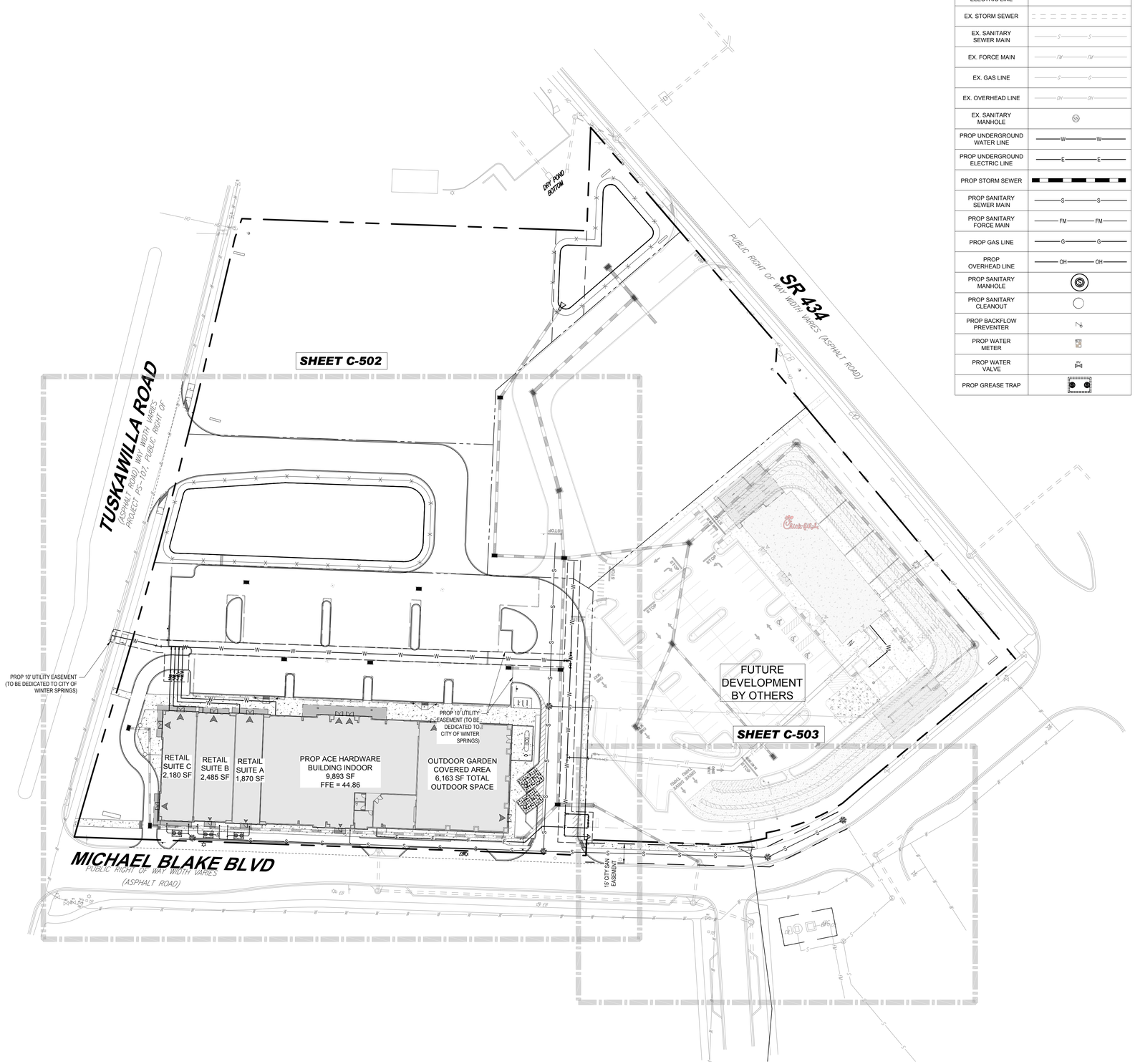
CROSS SECTIONS

SHEET NUMBER:

C-403

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LS



LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	

N
W E S
40 20 10 0 40
1"= 40'

GENERAL NOTE:

ALL ONSITE WATER AND SEWER DISTRIBUTION/COLLECTION LINES/MAINS TO BE PRIVATELY OWNED & MAINTAINED UNLESS OR UNTIL A UTILITY EASEMENT IS DESCRIBED & APPROVED BY ALL INVOLVED PARTIES.

SANITARY SEWER NOTES:

A. GENERAL:

1. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.
2. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR TO TELEVISE EXISTING SANITARY SEWER LINE FROM POINT OF CONNECTION THROUGH THE NEXT SEQUENTIAL DOWNSTREAM RUN OF PIPE. ADDITIONALLY, PRIOR TO COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL TELEVISE THE NEWLY INSTALLED SANITARY SEWER MAIN TO ENSURE NO DIPS OR DEBRIS WITHIN LINE.
3. EXISTING SERVICES WITHIN MANHOLES SHALL BE RELOCATED TO NEW SEWER.
4. BYPASS PUMPING MAY BE REQUIRED AND SANITARY SERVICE MAINTAINED WHILE EXISTING SEWER IS BEING REPLACED.
5. CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH CITY WITH MAKING CONNECTION TO PUMP STATION / MANHOLE.
6. CONTRACTOR MUST COORDINATE WITH CITY AND SHOPPING CENTER AND PROVIDE AT LEAST 48-HOURS NOTICE PRIOR TO REPLACING SERVICES.

B. MATERIALS:

1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.
2. ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
3. ALL SANITARY CLEANOUTS WITHIN PAVEMENT SHALL HAVE A LID THAT IS H20 LOADING.

C. INSTALLATION:

1. PIPE AND FITTINGS:
   a. SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, AND THE UNI-BELL PLASTICS PIPE ASSOCIATION'S 'RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE.'
   b. BEDDING AND INITIAL BACKFILL (12") OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. PEA ROCK OR 3/4 " WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.
2. CLEANOUTS:
   a. CLEANOUTS SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM CLEAN SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
   b. ALL OPENINGS AND JOINTS SHALL BE SEALED WATER-TIGHT.
3. SERVICE:
   a. MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE 1.00%.
   b. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED PLUG.
   c. CONNECTION OF SERVICES TO BUILDING'S PLUMBING SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

D. TESTING:

1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER.
3. SEWER PIPE LEAKAGE ALLOWABLE SHALL NOT EXCEED 150 GALLONS PER DAY PER INCH DIAMETER PER MILE IN A TWO HOUR TEST PERIOD FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED.
4. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO THE CERTIFICATION TO ANY AGENCY.
5. GENERAL CONTRACTOR SHALL EMPLOY AN INDEPENDENT INSPECTOR FOR 1-⅛ CONTINUOUS INSPECTION OF THE BEDDING AND BACKFILL OPERATION. COMPACTION TEST SHALL BE TAKEN AT THE BOTTOM OF TRENCH AND AT EACH LIFT OF BACKFILL.
6. GENERAL CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR AS-BUILT TOP OF PIPE ELEVATIONS TAKEN WHEN BEDDING OPERATIONS IS 75% COMPLETE. THESE ELEVATIONS SHALL BE TAKEN AT POINTS OF CONNECTION, CHANGES IN DIRECTION AND AT MINIMUM 20' INTERVALS ALONG THE LENGTH OF THE PIPE. THESE ELEVATIONS SHALL BE RECORDED AS AS-BUILT DIMENSIONS ON SITE PLAN REVIEW BY PROJECT ENGINEER.
7. ALL SANITARY LINES ARE TO BE FLUSHED PRIOR TO CONTRACTOR TURNOVER OF THE FACILITY.

WATER DISTRIBUTION NOTES:

1. CONTRACTOR SHALL FOLLOW GUIDELINES AND PROCEDURES OUTLINED BY UTILITY PROVIDER, AND HAVE UTILITY PROVIDER'S MANUAL ON-SITE AT ALL TIMES. THIS POLICY MANUAL SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS AS IT PERTAINS TO APPROVED MATERIALS, INSTALLATION METHODS, INSPECTION NOTIFICATION, AND AS-BUILT/PROJECT CLOSEOUT REQUIREMENTS.
2. ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.
3. CONTRACTOR TO COORDINATE WITH COUNTY AND ADJACENT PROPERTY OWNERS AND BUSINESSES FOR ANY ANTICIPATED WATER INTERRUPTIONS FOR CONNECTION TO EXISTING WATER LINE.
4. CONTRACTOR TO DEFLECT OR BEND WATER LINES AS NECESSARY TO MAINTAIN 12" VERTICAL SEPARATION FROM STORM SEWER PER FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SANITARY SEWER GRAVITY NOTES:

1. IF REQUIRED, THE CONTRACTOR SHALL RECONSTRUCT THE BENCH IN THE EXISTING MANHOLE TO ACCOMMODATE THE NEW FLOW DIRECTION.
2. WASTEWATER FLOW IN THE EXISTING SEWER MUST BE MAINTAINED DURING THE INSTALLATION OF THE LATERAL. IF A BY-PASS IS REQUIRED, THE CONTRACTOR MUST SUBMIT DETAILS OF THE SYSTEM FOR REVIEW AND APPROVAL TO THE CITY OF WINTER SPRINGS PUBLIC WORKS DEPARTMENT PRIOR TO STARTING CONSTRUCTION.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

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PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
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KYLE STEVEN MOREL — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
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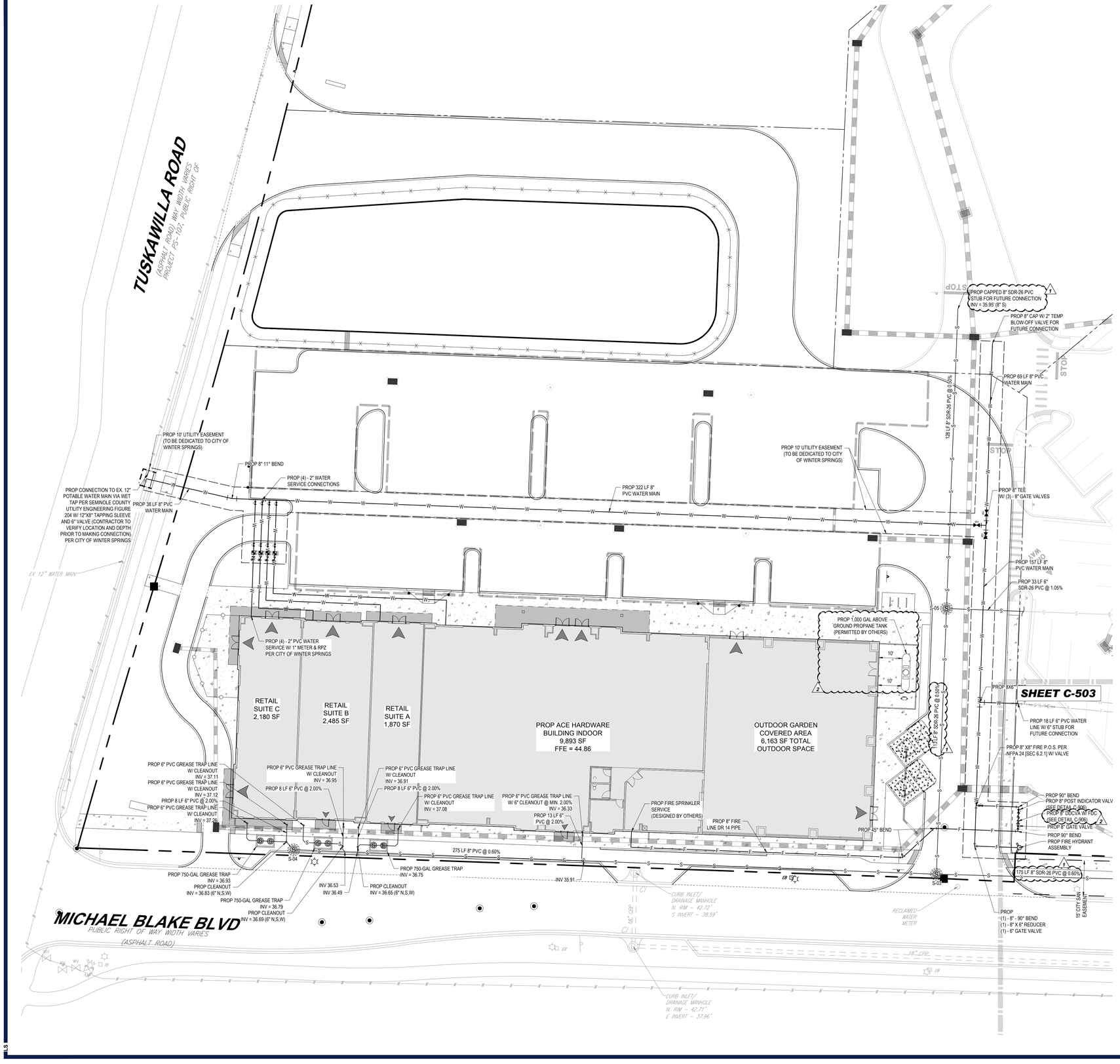
OVERALL UTILITY PLAN

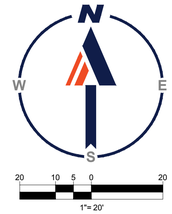
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C-501

REVISION 3 - 04/08/2025

Apr 09, 2025
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ALS





FIRE NOTES:

1. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1, 16.1.4).
2. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
3. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1).
4. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3).
5. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
6. A 36 IN. CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 21/2 IN. NFPA 1, 18.5.7.
7. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10.
8. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH. NFPA 1, 18.2.2.2.

FIRE SPRINKLER NOTES

A) AT MINIMUM, A CLASS FIVE CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1-FOOT ABOVE THE FINISHED FLOOR.

B). THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.

C). NO OTHER WATER CONNECTION SHALL BE OFF OF THE FIRE LINE

D). THE FIRE DEPARTMENT CONNECTION SHALL BE WITH-IN 100 FEET OF THE FIRE HYDRANT IF STANDPIPE SYSTEM IS PROVIDED.

E). THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.

F). ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPT. BEFORE BEING COVERED.

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE NAME:	**DETAILS:**
S-01	SANITARY MANHOLE RIM = 40.23 PROP INV IN (SW)= 33.03 (8" PVC) EX. INV: 32.93
S-02	SANITARY MANHOLE RIM = 41.00 W INV IN = 33.78 (8" PVC) NE INV OUT = 33.68 (8" PVC)
S-03	SANITARY MANHOLE RIM = 42.01 W INV IN = 34.93 (8" PVC) E INV OUT = 34.83 (8" PVC) N INV IN = 34.93 (8" PVC)
S-04	SANITARY MANHOLE RIM = 43.32 E INV OUT = 36.58 (8" PVC)
S-05	SANITARY MANHOLE RIM = S INV OUT = 35.50 (8" PVC) E INV IN = 35.60 (6" PVC) N INV IN = 35.60 (8" PVC)

WATER DEMAND	
TENANT:	**TOTAL WATER USAGE (GPD):**
ACE HARDWARE	219 GPD
RETAIL A	411 GPD
RETAIL B	376 GPD
RETAIL C	300 GPD

FIRE FLOW REQUIREMENTS

FIRE FLOW CALCULATION BASED ON NFPA-17TH EDITION CHAPTER 18 TABLE 18.4.5.2.1

BUILDING TYPE: VB
AREA PER IBC: 22,591 SF (1-STORY)
SPRINKLER SYSTEM: SPRINKLED
REQUIRED FLOW PER NFPA-17TH 18.4.5.3.2: 1,000 GPM @ 2 HOUR DURATIONS (75% REDUCTION)
REQUIRED SPRINKLER DEMAND: 600 GPM @ 40 PSI
PROVIDED FLOW: 2,273 GPM @ 20 PSI
PEAK DOMESTIC DEMAND: 4 GPM

RECLAIM WATER DEMAND

IRRIGATION SYSTEM

3 SPRAY ZONES @ 114 GPM X (20 MINUTES PER CYCLE) = 2,280 GALLONS PER CYCLE
7 DRIP ZONES @ 154.2 GPM X (30 MINUTES PER CYCLE) = 4,626 GALLONS PER CYCLE
2 BUBBLER ZONES @ 27 GPM X (20 MINUTES PER CYCLE) = 540 GALLONS PER CYCLE
TOTAL GALLONS = 7,446 GALLONS PER CYCLE

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY

LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND FIRE LINE	F F
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	

PROVIDE SIGNAGE FOR ALL PROPOSED FIRE DEPARTMENT CONNECTIONS (F.D.C.) INDICATING ITS LOCATION AND THE BUILDING IT SERVICES.

NEW AND EXISTING FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF SECTION 18.5 OF NFPA 1.

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LAND SURVEYING
PROGRAM MANAGEMENT
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PERMITTING SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM
3	04/08/2025	SJRWMD COMMENTS	LS / KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-UTIL

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA, 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: c=US, o=BOHLER ENGINEERING, CN=Kyle Morel, ou=BOHLER ENGINEERING FL (LCC), l=Boca Raton, S=Florida, SERIALNUMBER=MAGC004092867382E, GN=Kyle
Date: 2025.04.09 15:35:19-04'00'
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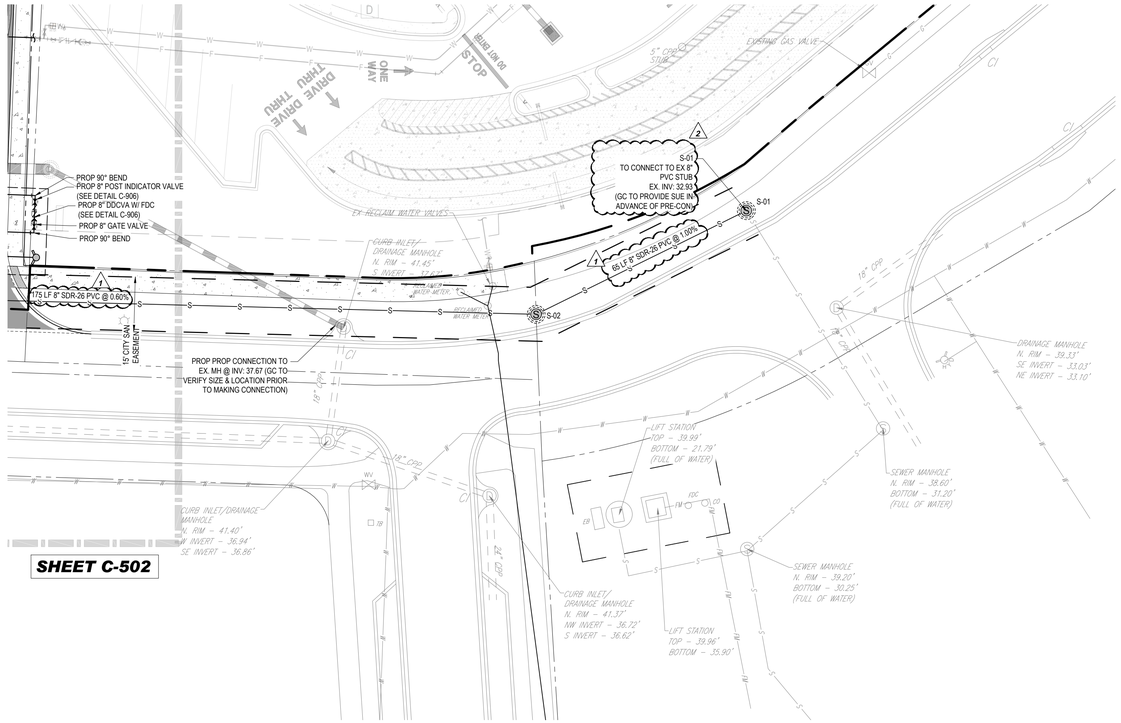
UTILITY PLAN

SHEET NUMBER:

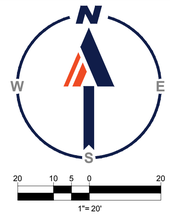
C-502

REVISION 3 - 04/08/2025

Apr 09, 2025
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LS



SHEET C-502



LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND FIRE LINE	F F
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	

FIRE NOTES:

1. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1, 16.1.4).
2. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
3. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1).
4. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3).
5. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
6. A 36 IN. CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 21/2 IN. NFPA 1, 18.5.7.
7. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10.
8. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH. NFPA 1, 18.2.2.2.

FIRE SPRINKLER NOTES

A) AT MINIMUM, A CLASS FIVE CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1-FOOT ABOVE THE FINISHED FLOOR.

B). THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.

C). NO OTHER WATER CONNECTION SHALL BE OFF OF THE FIRE LINE

D). THE FIRE DEPARTMENT CONNECTION SHALL BE WITH-IN 100 FEET OF THE FIRE HYDRANT IF STANDPIPE SYSTEM IS PROVIDED.

E). THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.

F). ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPT. BEFORE BEING COVERED.

PROVIDE SIGNAGE FOR ALL PROPOSED FIRE DEPARTMENT CONNECTIONS (F.D.C.) INDICATING ITS LOCATION AND THE BUILDING IT SERVICES.

NEW AND EXISTING FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF SECTION 18.5 OF NFPA 1.

SANITARY SEWER STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
S-01	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 40.23 PROP INV IN (SW)= 33.03 (8" PVC) EX. INV: 32.93
S-02	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 41.00 W INV IN = 33.78 (8" PVC) NE INV OUT = 33.68 (8" PVC)
S-03	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 42.01 W INV IN = 34.93 (8" PVC) E INV OUT = 34.83 (8" PVC) N INV OUT = 34.93 (8" PVC)
S-04	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 43.32 E INV OUT = 36.58 (8" PVC)

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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-UTIL

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

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E SR 434 & MICHAEL BLAKE BLVD.
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600 N. WESTSHORE BLVD. SUITE 950
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Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MONEL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Monel
DN: E=kmonel@bohlerengineering.com, CN=Kyle Monel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MA32024082867382&, C=US
Date: 2025.04.09 15:15:34-04'00'

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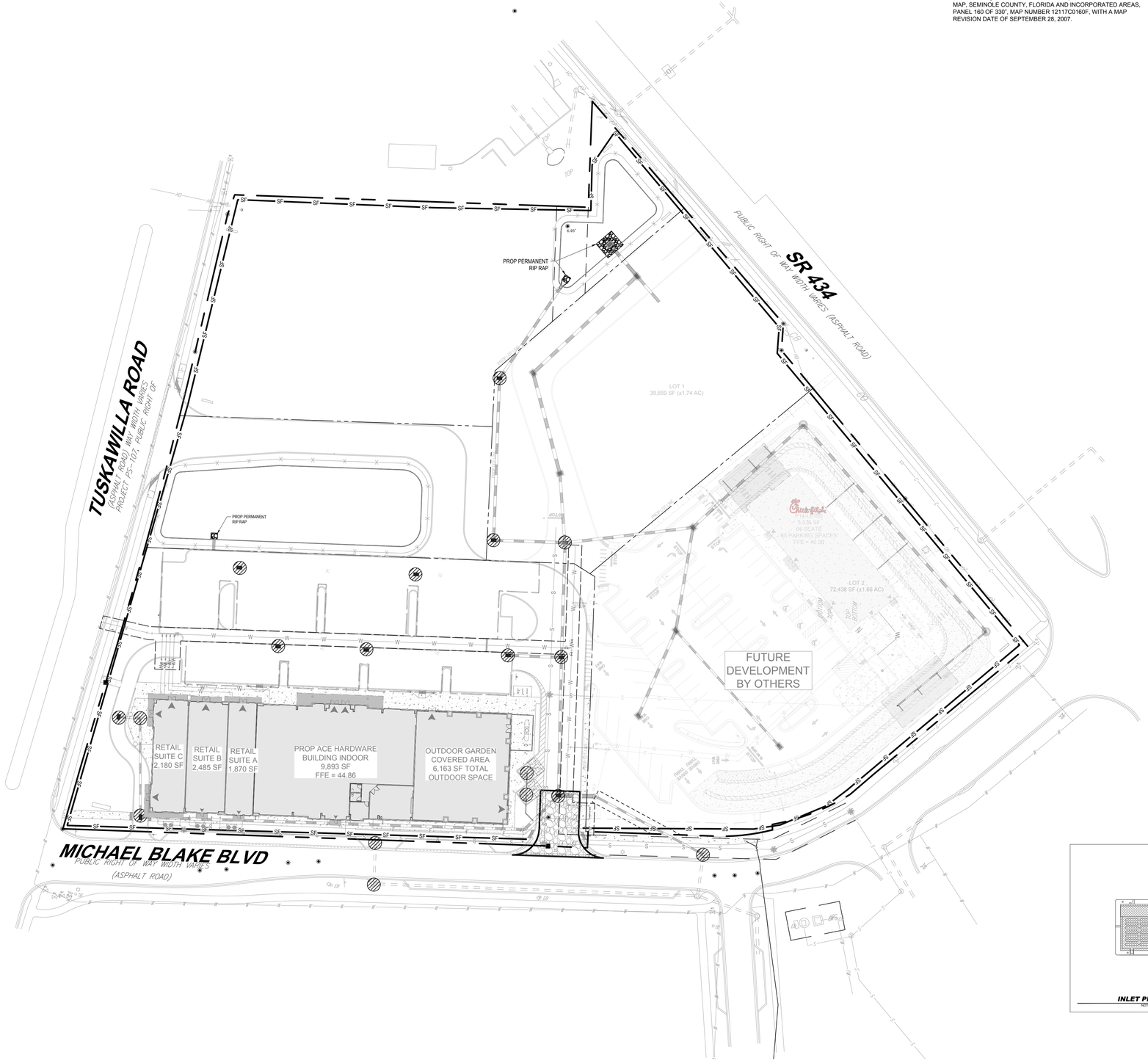
UTILITY PLAN

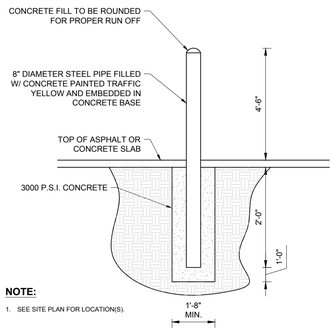
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C-503

REVISION 3 - 04/08/2025

Apr 09, 2025
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LS


TUSKAWILLA ROAD
(ASPHALT ROAD) VAR. WIDTH VARIES
PROJECT PC-101 PUBLIC RIGHT OF
SR 434
PUBLIC RIGHT OF WAY WIDTH VARIES (ASPHALT ROAD)
MICHAEL BLAKE BLVD
PUBLIC RIGHT OF WAY WIDTH VARIES
(ASPHALT ROAD)
PROP PERMANENT RIP RAP
PROP PERMANENT RIP RAP
LOT 1
39,659 SF (±1.74 AC)
LOT 2
72,438 SF (±1.66 AC)
FUTURE DEVELOPMENT BY OTHERS
RETAIL SUITE C 2,180 SF
RETAIL SUITE B 2,485 SF
RETAIL SUITE A 1,870 SF
PROP ACE HARDWARE BUILDING INDOOR 9,893 SF FFE = 44.86
OUTDOOR GARDEN COVERED AREA 6,163 SF TOTAL OUTDOOR SPACE
86 SEATS
65 PARKING SPACES
FFE = 45.00
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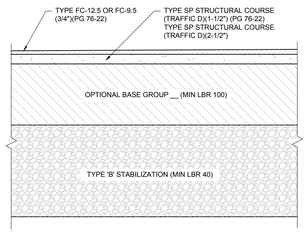


NOTE:

1. SEE SITE PLAN FOR LOCATION(S).

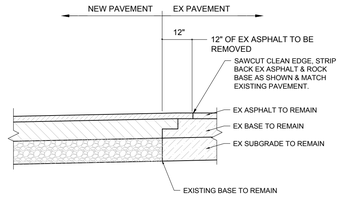
PIPE BOLLARD

NOT TO SCALE (MS-S070101 - 06/2023)



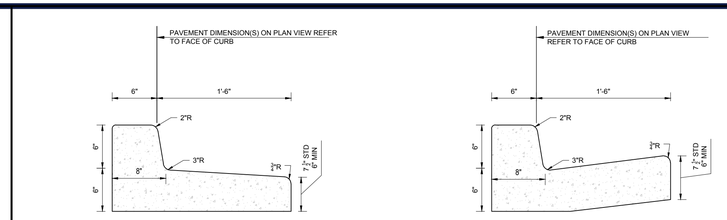
TYPICAL PAVEMENT SECTION FOR FDOT R/W

NOT TO SCALE (FL-S010102 - 09/2024)



ASPHALT SAWCUT

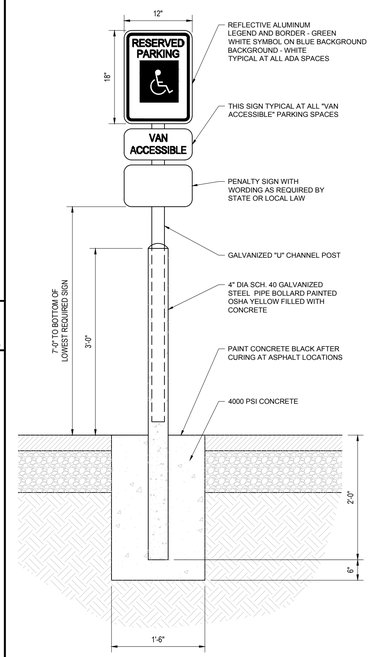
NOT TO SCALE (FL-S010103 - 09/2024)



NOTES:
1. CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. @ 28 DAYS.
2. CONSTRUCTION STAKING FOR CURB INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
3. AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
4. CONTRACTION JOINTS SHALL BE PLACED @ 10'-0" O.C. TOOLED 1/4" (±1/16") WIDE, 1" DEEP. EXPANSION JOINTS SHALL BE PLACED @ 40'-0" INTERVALS, MAXIMUM, AND ALL P.C.'S.
5. GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.
6. GUTTER TYPE TO MATCH PAVEMENT SLOPE DIRECTION. CONTRACTOR TO FIELD ADJUST AS NECESSARY.
7. REFER TO FDOT STANDARD PLANS INDEX 522-001 FOR CURB SPECIFICATIONS

FDOT INDEX 520-001 - TYPE F CURB AND GUTTER

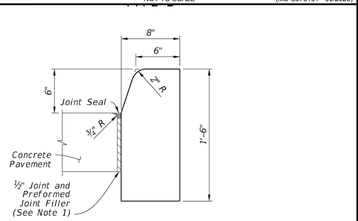
NOT TO SCALE (FL-S020201 - 09/2024)



NOTES:
ONE AT EACH ADA SPACE. WHERE ADA SPACES FACE EACH OTHER WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH SIDES

BOLLARD MOUNTED ADA PARKING SIGN

NOT TO SCALE (FL-S060101 - 09/2024)

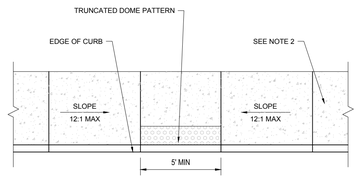


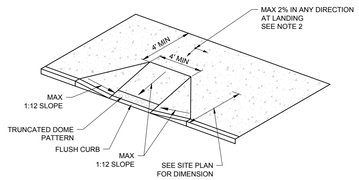
NOTE: *For use adjacent to concrete or flexible pavement, concrete shown.*

TYPE D

NOTES:

1. *For Type A, Type B, and Type D Curb: Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see Sheet 3.*
2. *For Type E, Type F, Drop Curb, and Valley Gutter: When used on high side of roadways, match the cross slope of the gutter to the cross slope of the adjacent pavement. The thickness of the lip is 6", unless otherwise shown on Plans.*
3. *For Type RA, rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.*
4. *For details depicting usage of Type A Curb adjacent to flexible pavement see Sheet 3.*

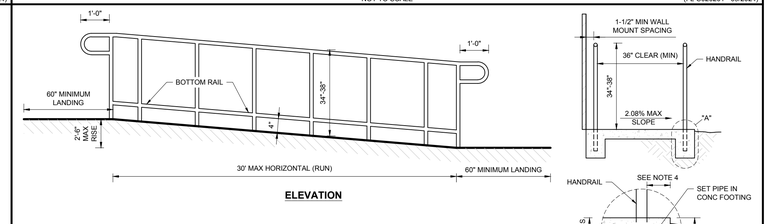




NOTES:
1. ADA ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO CURRENT ADA ACCESSIBLE GUIDELINES.
2. LEVEL LANDING AT TOP OF RAMP TO BE 4' DEEP IF NO CHANGE IN DIRECTION, OR 5'X5' MINIMUM IF A CHANGE IN DIRECTION OCCURS.

FDOT INDEX 522-022 - ADA ACCESSIBLE RAMP

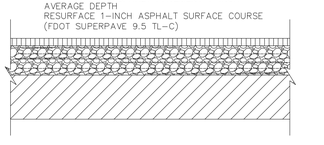
NOT TO SCALE (BE-X010101 - MM/YYYY)



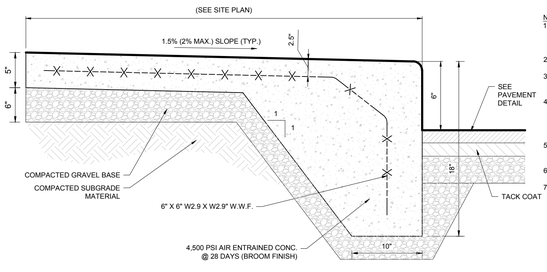
NOTES:
1. RAMPS AND HANDRAILS TO BE IN COMPLIANCE WITH CURRENT ADA GUIDELINES.
2. HANDRAILS WITH CIRCULAR CROSS SECTIONS SHALL BE 1.25" TO 2" OUTSIDE DIAMETER.
3. NON-CIRCULAR CROSS SECTIONS SHALL HAVE A PERIMETER OF 4" TO 6.25" AND A MAXIMUM CROSS SECTION DIMENSION OF 2.25". (SEE ADA GUIDELINES)
4. SIDEWALK TO EXTEND 4" BEYOND OUTSIDE OF RAILING WHEN A BOTTOM RAIL IS PROVIDED OR 12" BEYOND WHEN NO BOTTOM RAIL IS PROVIDED.

TYPICAL ADA RAMP AND HANDRAIL

NOT TO SCALE (FL-S030501 - 09/2024)



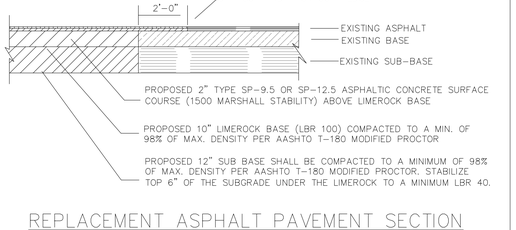
TYP. MILL & RESURFACE SECTION
N.T.S.



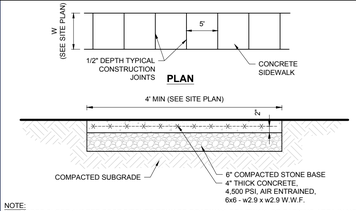
NOTES:
1. ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH ADDITIONAL GRAVEL BASE.
2. DUMMY JOINTS (FORMED) SHALL BE INSTALLED MIDWAY BETWEEN EXPANSION JOINTS.
3. THE 6" CURB REVEAL IS TYPICAL. CONTRACTOR TO REVIEW GRADING PLAN FOR AREAS WHERE REVEAL IS TO BE MODIFIED.
4. PROVIDE CONTROL JOINTS 5'-0" O.C. MIN. & EXPANSION JOINTS SHALL BE RECESSED ½" FROM THE FRONT FACE AND TOP OF THE CURB. REFER TO SIDEWALK CONSTRUCTION JOINT DETAILS.
5. PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED ADJACENT TO AND AROUND EXISTING STRUCTURES.
6. MIN CROSS SLOPE 1/4" PER FOOT PITCHED AWAY FROM BUILDING.
7. PROVIDE 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT AT INTERFACE WITH BUILDING. REFER TO ARCH PLANS AT DOOR LOCATIONS.

MONOLITHIC CURB AND SIDEWALK

NOT TO SCALE (BE-S030201 - 06/2024)



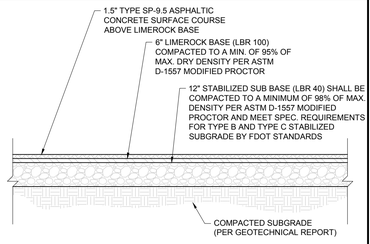
REPLACEMENT ASPHALT PAVEMENT SECTION
NTS



NOTE:
1. CROSS SLOPE 1/4" PER FOOT PITCHED TOWARD ROADWAY, DRIVEWAY, OR PARKING AREA IN NON ACCESSIBLE ROUTES.
2. FOR ACCESSIBLE ROUTES THE CROSS SLOPE, LONGITUDINAL (RUNNING) SLOPE AND WIDTH SHALL COMPLY WITH FEDERAL, LOCAL AND STATE ACCESSIBILITY REQUIREMENTS. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL ADA INSTRUCTIONS.
3. PROVIDE CONTROL JOINTS 5'-0" O.C. MIN. & EXPANSION JOINTS 20'-0" O.C. MIN. REFER TO SIDEWALK CONSTRUCTION JOINT DETAILS.
4. PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED ADJACENT TO AND AROUND EXISTING STRUCTURES.
5. MIN CROSS SLOPE 1/4" PER FOOT PITCHED AWAY FROM BUILDING.
6. PROVIDE 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT AT INTERFACE WITH BUILDING. REFER TO ARCH PLANS AT DOOR LOCATIONS.

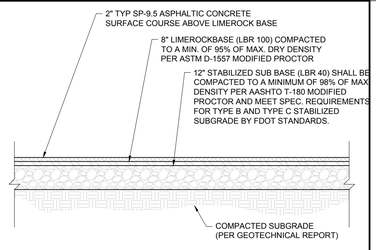
CONCRETE SIDEWALK

NOT TO SCALE (BE-S030202 - 06/2024)



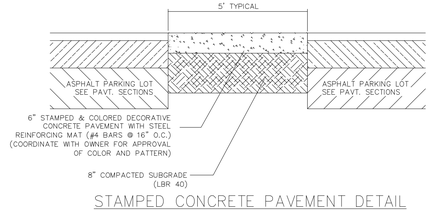
LIGHT DUTY ASPHALT PAVEMENT

NOT TO SCALE (FL-S010101 - 09/2024)



HEAVY DUTY ASPHALT PAVEMENT

NOT TO SCALE (FL-S010101 - 09/2024)



STAMPED CONCRETE PAVEMENT DETAIL
NTS (OPTION FOR DECORATIVE WALKWAY)

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM
3	04/08/2025	SJRWMD COMMENTS	LS / KM

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DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

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Date: 2025.04.09 15:16:29-04'00'

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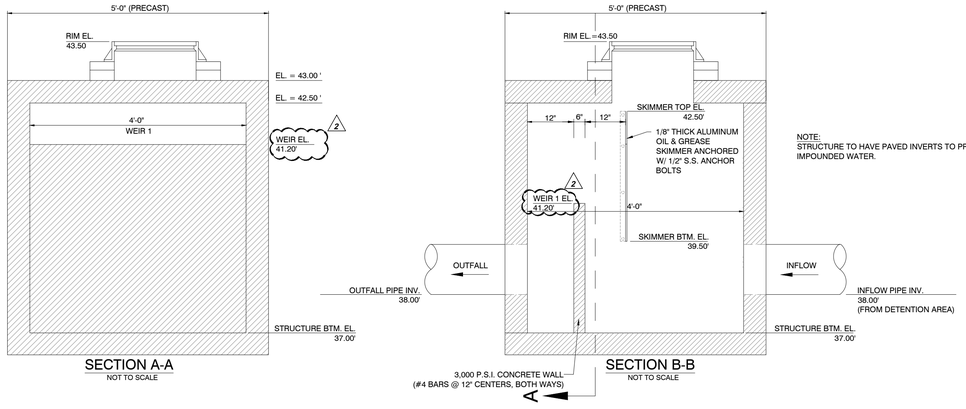
CONSTRUCTION DETAILS

SHEET NUMBER:

C-901

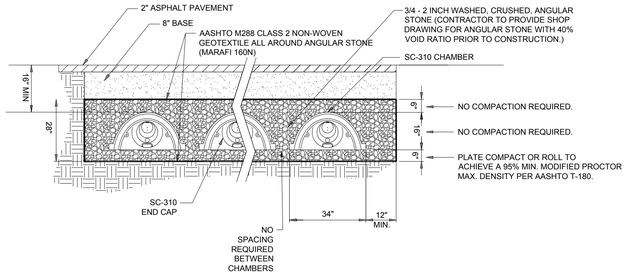
REVISION 3 - 04/08/2025

Apr 09, 2025
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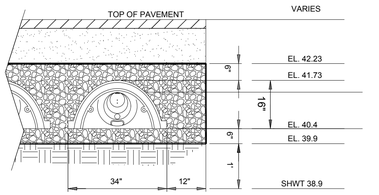


CONTROL STRUCTURE DETAIL CS-A
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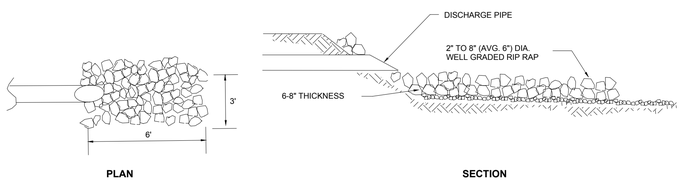
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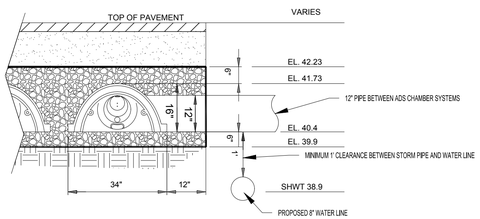
STORMTECH SC-310 CHAMBER DETAIL
N.T.S.



STORMTECH CHAMBER
AREA 'A'
N.T.S.



CULVERT OUTFALL ROCK PAD
N.T.S.



WATER LINE CLEARANCE DETAIL
N.T.S.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM
3	04/08/2025	SJRWMD COMMENTS	LS / KM

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DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVIL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=AA12024080923826, C=US
Date: 2025.04.09 15:18:42-04'00'

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Apr 09, 2025
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XLS

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

Advanced Drainage Systems, Inc.

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SUTTON CROSSINGS

WINTER SPRINGS, FL, USA

SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/% , THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONE/SHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

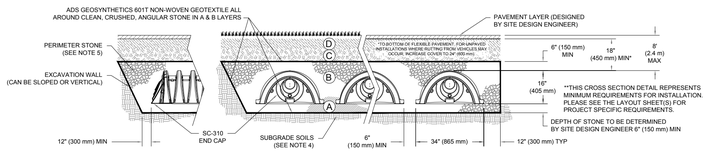
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETES	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETES	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.2,3

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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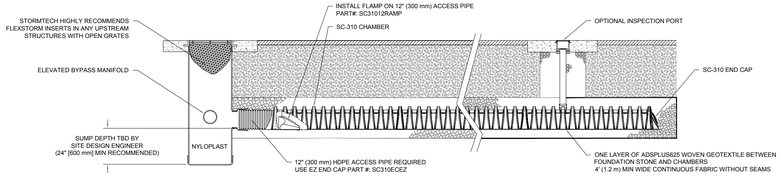
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SHEET 5 OF 8

OPERATION AND MAINTENANCE PLAN FOR STORMTECH CHAMBER



SC-310 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.*

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

*INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM. THIS INCLUDES SEDIMENT SUMPS FOR EACH INLET TO THE SYSTEM. INSPECTION SHOULD BE DONE EVERY 6 MONTHS FOR THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON THE PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.

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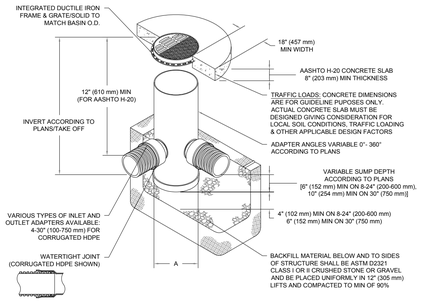
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SHEET 6 OF 8

NYLOPLAST DRAIN BASIN
NTS

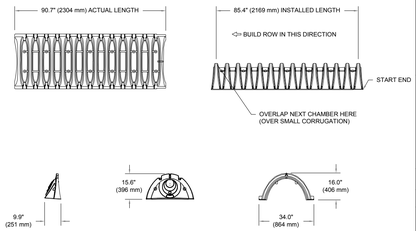


NOTES

1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: WWW.NYLOPLAST-US.COM
6. TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

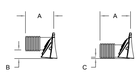
SC-310 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4" (864 mm X 406 mm X 2169 mm)	
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "SR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310ECEZ*	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310ECEZ THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

SUTTON CROSSINGS WINTER SPRINGS, FL, USA	DRAWN: EH
DATE:	CHECKED: N/A
PROJECT #:	
DESCRIPTION	
DATE	BY	CHK

Nyloplast®
770-932-2641 | WWW.NYLOPLAST-US.COM

4640 TRUEMAN BLVD · HILLIARD, OH 43026 · 1.800.733.7473

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SHEET 8 OF 8

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
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REVISIONS

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1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM
3	04/08/2025	SJRWMD COMMENTS	LS / KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS
FOR
SUTTON CROSSINGS
PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

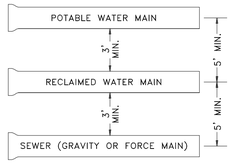
BOHLER

600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101

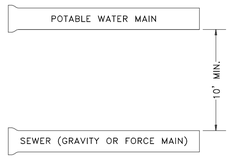
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL · LICENSE · No. 77085 · STATE OF FLORIDA · PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="B

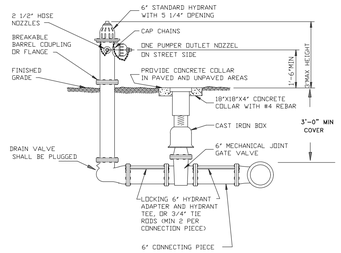


A MINIMUM HORIZONTAL SEPARATION OF 5' (CENTER TO CENTER) OR 3' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWER COLLECTION LINES.



A MINIMUM HORIZONTAL SEPARATION OF 10' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN SEWER COLLECTION LINES AND POTABLE WATER MAINS.

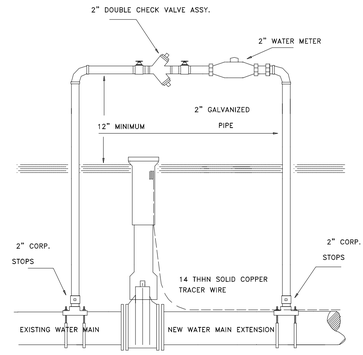
MINIMUM HORIZONTAL SEPARATION REQUIREMENTS FOR POTABLE, RECLAIMED, AND SEWER LINES



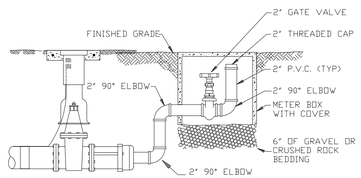
NOTES:

1. THE HYDRANTS ACCEPTABLE TO THE CITY OF WINTER SPRINGS SHALL BE EITHER THE CLOW # 42 MEDALION AMERICAN DARLING B84B, OR THE MUELLER A-423.
2. THE BARREL SHALL BE PAINTED YELLOW AND TOP WHITE
3. GRIP RING OR MEGA LUG RESTRAINTS MAY USED IN PLACE OF ALL THREAD RODS

FIRE HYDRANT ASSEMBLY



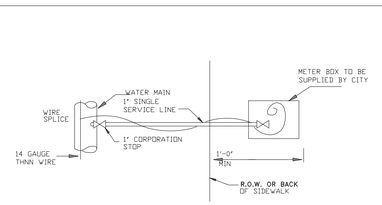
TEMPORARY BYPASS



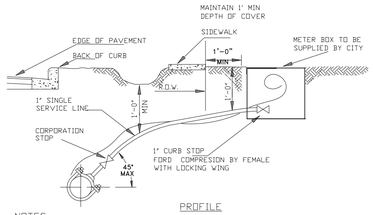
NOTE:

ALL PIPE AND FITTINGS MUST BE GALVANIZED IRON PIPE OR SCHEDULE 80 P.V.C.

BLOWOFF VALVE



PLAN

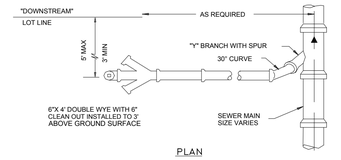


PROFILE

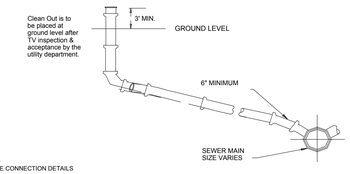
NOTES:

1. METER BOX INSTALLED BY THE CITY OF WINTER SPRINGS
2. METER PURCHASED FROM AND INSTALLED BY THE CITY OF WINTER SPRINGS

POTABLE WATER SERVICE SINGLE



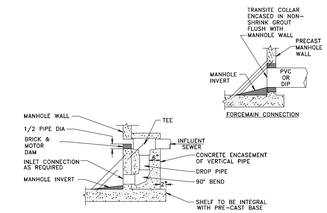
PLAN



NOTE:
SERVICE CONNECTION DETAILS SHOWN IS FOR A DOUBLE PVC SERVICE A SINGLE WYE WOULD BE USED FOR A SINGLE SERVICE

PROFILE

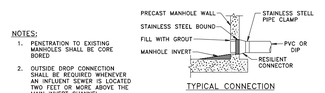
SEWER LATERAL DETAIL



DROP CONNECTION

NOTES:

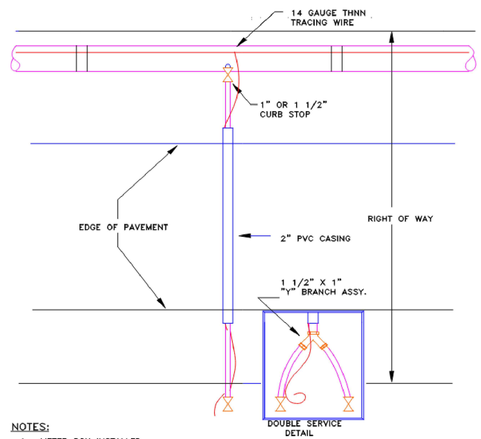
1. PENETRATION TO EXISTING MANHOLES SHALL BE CORE BORED
2. OUTSIDE DROP CONNECTION SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO FEET OR MORE ABOVE THE MAIN INVERT CHANNEL



TYPICAL CONNECTION

W.S. Detail 6-9-00

TYPICAL MANHOLE CONNECTIONS



NOTES:

1. METER BOX INSTALLED BY THE CITY OF WINTER SPRINGS
2. DOUBLE SERVICE LINES SHALL BE 1 1/2" PURPLE P.E TUBING WITH 1 1/2" X 1" Y BRANCH
3. ALL LINES UNDER PAVEMENT SHALL BE ENCASED IN 2" PVC PIPE

1" RECLAIMED WATER CURB STOP TO BE INSTALLED BY CONTRACTOR ON ALL RECLAIMED SERVICE LINES



RECLAIMED WATER SERVICE CONNECTION

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVIL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAS:2204082867382639, C=US
Date: 2025.04.08 13:17:11-04'00'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MOREL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:
CITY OF WINTER SPRINGS UTILITY DETAILS

SHEET NUMBER:
C-904

REVISION 3 - 04/08/2025

Apr 09, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVIL-OCDS-FLA240162.00-0A-----LAYOUT: C-904 - UTILITY DETAILS
MLS

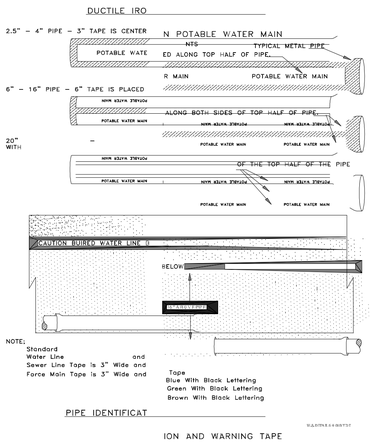
SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS

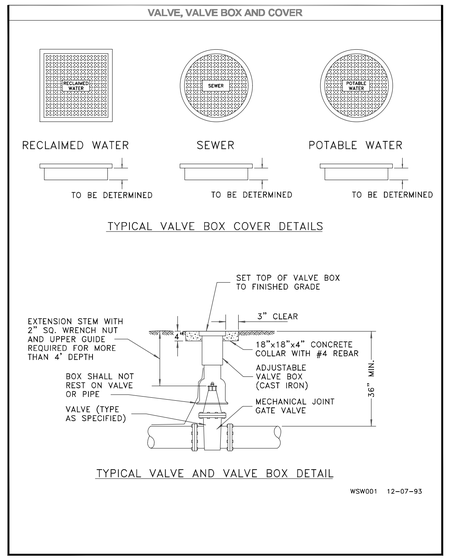
HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

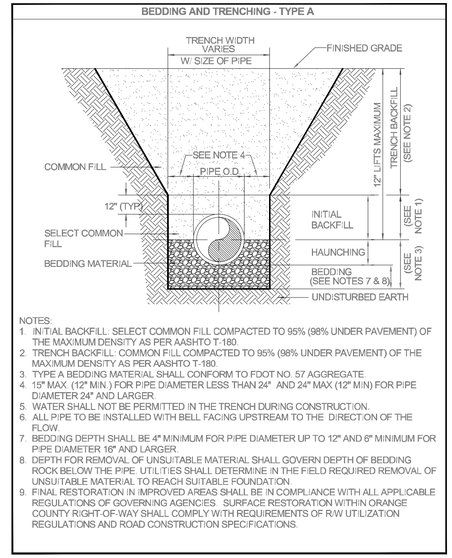
PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER		WASTEWATER (GRAVITY & FM)		STORM SEWER	
	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT
POTABLE WATER	3' NOTE 1	12"	3' NOTE 1 & 3	12" NOTE 3	6' NOTE 3	12" NOTE 3	3' NOTE 1 & 3	12"/18" NOTE 2 & 3
RECLAIMED WATER	3' NOTE 1 & 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12"/18" NOTE 2
WASTEWATER (GRAVITY AND FM)	6' NOTE 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12"/18" NOTE 2
RIGHT OF WAY	3' NOTE 1	N/A	3' NOTE 1	N/A	3' NOTE 1	N/A	N/A	N/A

NOTES:

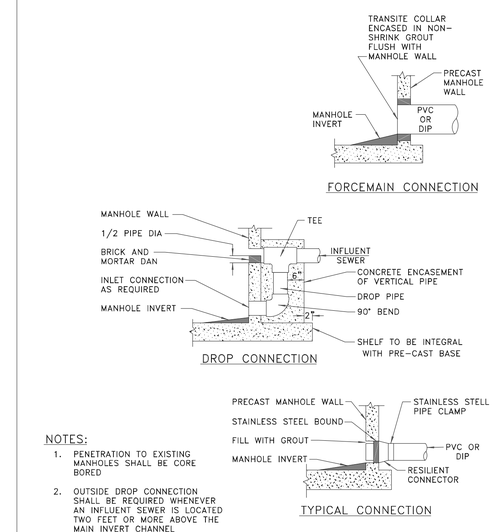
1. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTHS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
2. THE 18-INCH SEPARATION REQUIREMENT APPLIES WHEN THE STORM PIPE CROSSES ABOVE THE OCU MAIN, AND WHEN THE STORM PIPE HAS A DIAMETER EQUAL TO OR GREATER THAN 24 INCHES. OTHERWISE, THE REQUIRED SEPARATION IS 12 INCHES.
3. THIS SEPARATION REQUIREMENT COMPLIES WITH MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND OCU.
4. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.





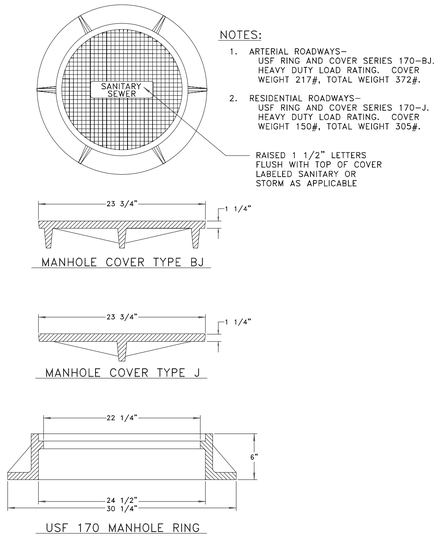


NOTES:
1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.



NOTES:
1. PENETRATION TO EXISTING MANHOLES SHALL BE CORE BORED
2. OUTSIDE DROP CONNECTION SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO FEET OR MORE ABOVE THE MAIN INVERT CHANNEL

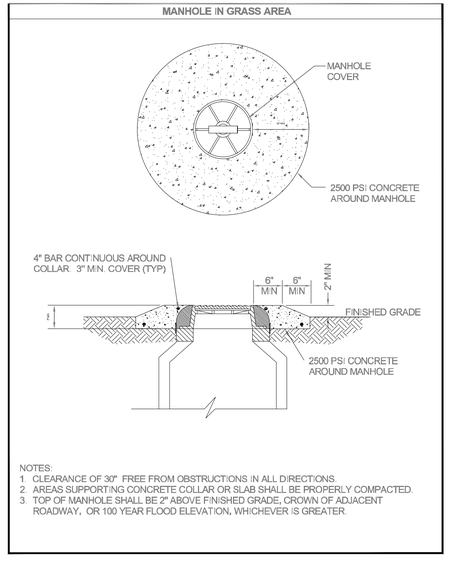
TYPICAL MANHOLE CONNECTIONS



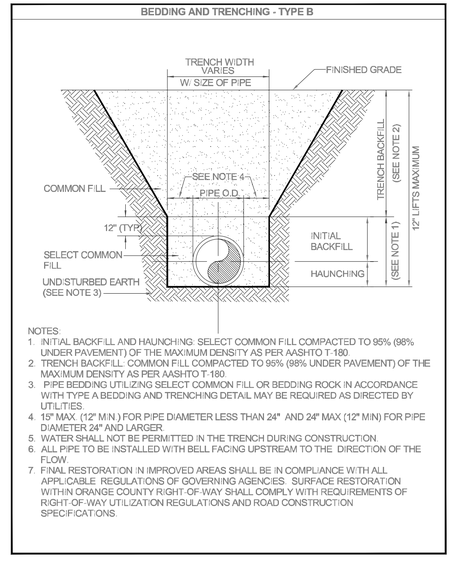
NOTES:
1. ARTERIAL ROADWAYS– USF RING AND COVER SERIES 170–BJ. HEAVY DUTY LOAD RATING. COVER WEIGHT 217#, TOTAL WEIGHT 372#.
2. RESIDENTIAL ROADWAYS– USF RING AND COVER SERIES 170–J. HEAVY DUTY LOAD RATING. COVER WEIGHT 150#, TOTAL WEIGHT 305#.

MANHOLE FRAME & COVER

W.S. Detail 6-9-00



NOTES:
1. CLEARANCE OF 30" FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.
2. AREAS SUPPORTING CONCRETE COLLAR OR SLAB SHALL BE PROPERLY COMPACTED.
3. TOP OF MANHOLE SHALL BE 2" ABOVE FINISHED GRADE, CROWN OF ADJACENT ROADWAY, OR 100 YEAR FLOOD ELEVATION, WHICHEVER IS GREATER.



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

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PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
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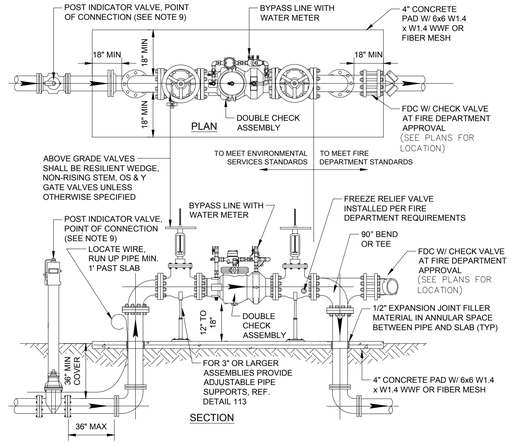
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SHEET TITLE:
CITY OF WINTER SPRINGS UTILITY DETAILS

SHEET NUMBER:
C-905

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Apr 09, 2025
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MLS

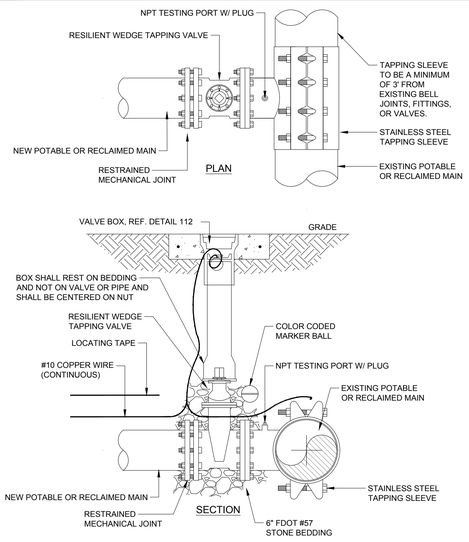


NOTES:
1. BY-PASS METER ASSEMBLY SHALL BE REQUIRED ON MONITORED FIRE SPRINKLER PROTECTION SYSTEMS.
2. THREE (3) INCH DIAMETER AND GREATER METER AND BACKFLOW ASSEMBLIES SHALL MEET REQUIREMENTS SET BY SEMINOLE COUNTY CROSS-CONNECTION CONTROL ORDINANCE 270.11, OR LATEST EDITION.
3. THE OWNER/CUSTOMER, AT HIS OR HER OWN EXPENSE, SHALL INSTALL, OPERATE, TEST, AND MAINTAIN APPROVED BACKFLOW PREVENTION ASSEMBLIES, AS DIRECTED BY SEMINOLE COUNTY ENVIRONMENTAL SERVICES.
4. ALL PIPE AND FITTINGS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
5. THREE (3) INCH DIAMETER AND GREATER ABOVE GRADE PIPE AND FITTINGS SHALL BE FLANGED DUCTILE IRON WITH 316 S.S. HARDWARE. BELOW GRADE FITTINGS SHALL BE RESTRAINED MECHANICAL JOINTS.
6. THREE (3) INCH DIAMETER AND GREATER FIRE LINES SHALL BE DUCTILE IRON PIPE FROM THE CONNECTION TO THE MAIN TO THE ASSEMBLE IF BOTH ARE LOCATED ON THE SAME SIDE OF THE STREET.
7. THE CHECK VALVE ASSEMBLY, VALVES, PIPING, BYPASS METER AND DOUBLE CHECK SHALL BE COATED IN ACCORDANCE TO THE SEMINOLE COUNTY UTILITY ENGINEERING MANUAL..
8. BYPASS METER AND BACKFLOW PREVENTER SHALL BE ASSEMBLED WITH APPROPRIATE FITTINGS TO ALLOW REMOVAL AND RE-INSTALLATION.
9. POST INDICATOR VALVE SHALL BE INSTALLED UPSTREAM OF DOUBLE DETECTOR CHECK VALVE ASSEMBLY AND DOWNSTREAM OF ALL OTHER POTABLE WATER CONNECTIONS.
10. CONCRETE PAD SHALL EXTEND 18 INCHES OUT FROM OUTSIDE EDGE OF ABOVE GRADE PIPING, ALL AROUND, AND SHALL BE A CONTINUOUS MONOLITHIC POUR, REINFORCED WITH 6"x6" W1.4xW1.4 WWF OR FIBER-MESH.
11. TAMPER SWITCHES SHALL BE INSTALLED PER AND INSPECTED BY FIRE DEPARTMENT.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION

FIGURE: 203

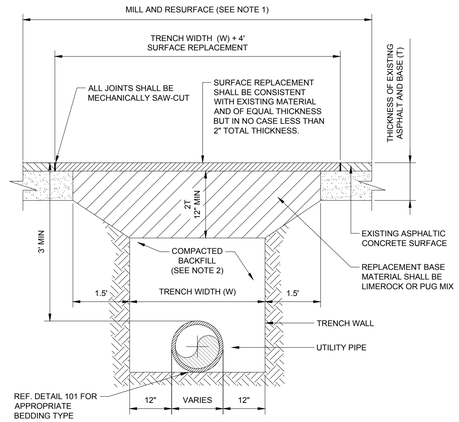
DOUBLE DETECTOR CHECK VALVE ASSEMBLY



NOTES:
1. THIS DETAIL IS INCOMPLETE WITHOUT ACCOMPANYING DETAIL 111 AND 112.
2. TAPPING SLEEVE AND VALVE SHALL BE INSTALLED AND TESTED UNDER WITNESS OF A REPRESENTATIVE FROM SEMINOLE COUNTY UTILITY ENGINEERING DIVISION.
3. TAPPING SLEEVE SHALL BE INSTALLED TO EXISTING MAIN PER MANUFACTURES INSTRUCTIONS, ALL HARDWARE TO BE TORQUED TO MANUFACTURES SPECIFICATIONS.
4. TAPPING SLEEVE AND VALVE SHALL BE PRESSURE TESTED IN ACCORDANCE TO THE UTILITY ENGINEERING MANUAL (150 PSI FOR 15 MINUTES FOR POTABLE AND RECLAIM WATER MAINS) PRIOR TO TAPPING EXISTING MAIN.
5. VALVE EXTENSION STEM REQUIRED IF TOP OF VALVE OPERATING NUT IS GREATER THAN 3' FROM FINISHED GRADE.
6. REF. STANDARD DETAIL 109 - PIPE MATERIAL LOCATION FOR FULL MATERIAL LOCATION REQUIREMENTS.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION — DATE: 05/18/21

POTABLE & RECLAIM MAIN WET TAP — FIGURE: 204



NOTES:
1. MILL AND RESURFACING REQUIREMENTS PER SEMINOLE COUNTY PUBLIC WORKS REQUIREMENTS OR WHICH EVER GOVERNING MUNICIPALITY.
2. BACKFILL SHALL BE PLACED IN 6" LAYERS FROM BENEATH THE HAUNCHES OF THE PIPE TO THE BASE AND COMPACTED TO 98% DENSITY PER AASHTO T-180 MODIFIED PROCTER.
3. BASE MATERIALS SHALL BE PLACED IN TWO OR THREE LAYERS ROLLED AND TAMPED TO ABOVE SPECIFIED DENSITY.
4. PARTIAL LANE REPLACEMENT SHALL HAVE FULL LANE WIDTH MILLED AND RESURFACED.
5. REF. DETAIL 104 FOR PIPE RESTRAINT REQUIREMENTS.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION — DATE: 05/18/21

EXISTING ROADWAY OPEN CUT — FIGURE: 102

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PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

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E SR 434 & MICHAEL BLAKE BLVD.
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CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
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Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

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Digitally signed by Kylie Morel
DN: E=kmorel@bohlereng.com, CN=Kylie C Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAS20240829673826, C=US
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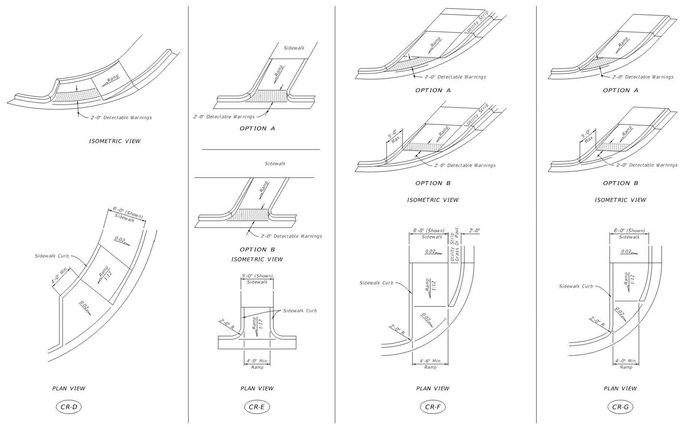
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CITY OF WINTER SPRINGS UTILITY DETAILS

SHEET NUMBER:

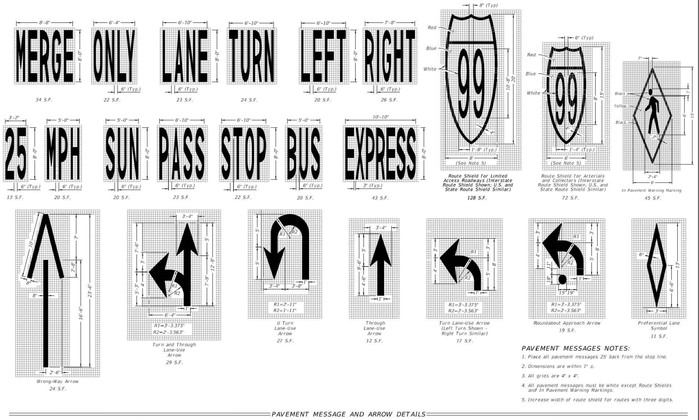
C-906

REVISION 3 - 04/08/2025



SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

LAST REVISION 11/01/21	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 4 of 7

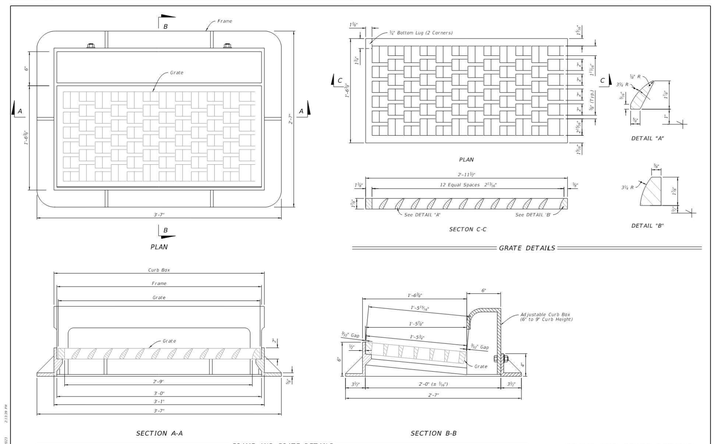


PAVEMENT MESSAGES NOTES:

1. Place all pavement messages 25' back from the stop line.
2. Dimensions are within 3" ±.
3. All grids are 4' x 4'.
4. All pavement messages must be white except Route Shields and In Pavement Warning Markings.
5. Increase width of route shield for routes with three digits.

PAVEMENT MESSAGE AND ARROW DETAILS

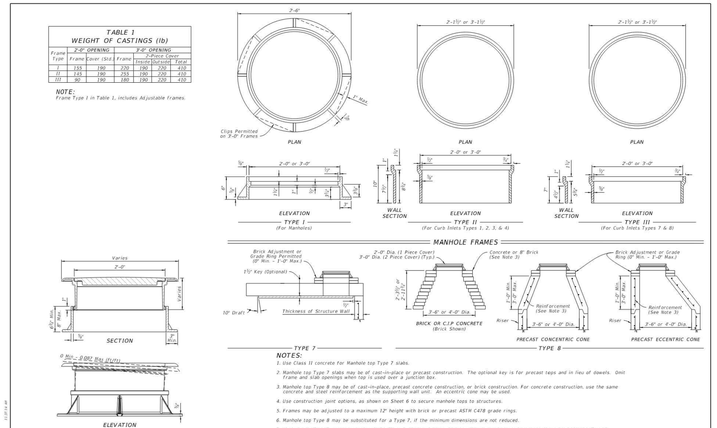
LAST REVISION 11/01/21	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 1 of 13



GRATE DETAILS

FRAME AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	CURB INLET TYPE 9	INDEX 425-024	SHEET 2 of 3



LAST REVISION 11/01/20	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX 425-001	SHEET 2 of 8

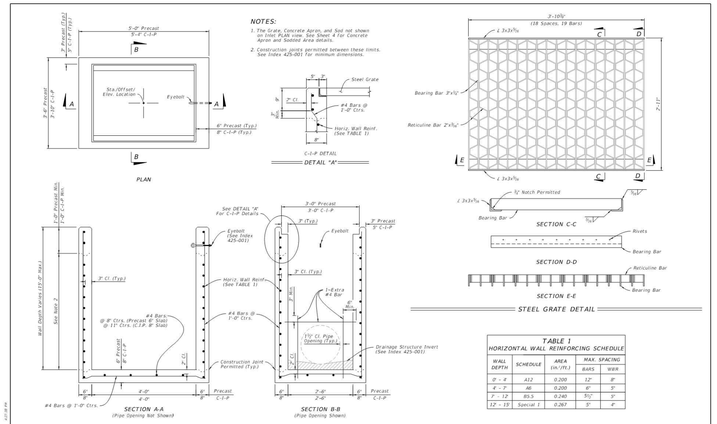
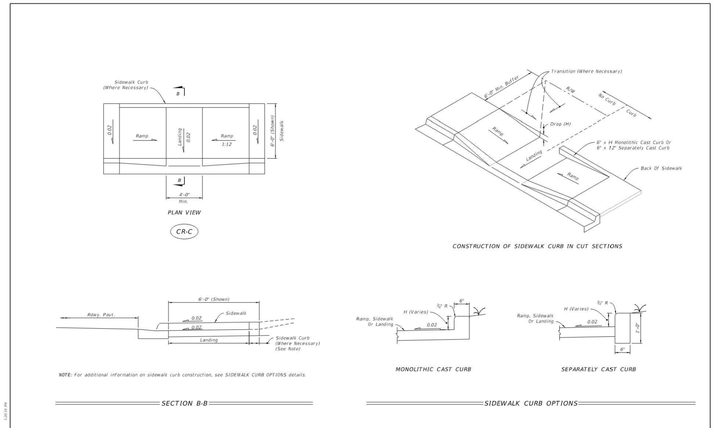


TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWR
0' - 4'	A12	0.200	12"	8"
4' - 7'	A8	0.200	8"	5"
7' - 12'	B5.5	0.240	9½"	9"
12' - 15'	Special 1	0.267	5"	4"

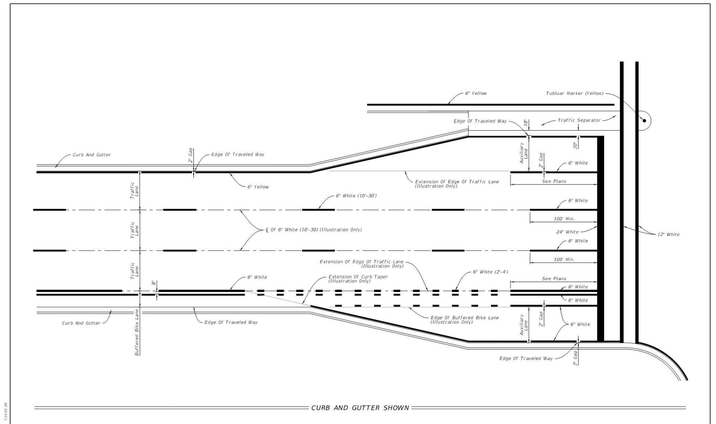
TYPE F - DIMENSIONAL, REINFORCING, AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	DITCH BOTTOM INLET TYPES F AND G	INDEX 425-053	SHEET 2 of 4



SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

LAST REVISION 11/01/21	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 3 of 7



LAST REVISION 11/01/21	DESCRIPTION:	FDOT	FY 2024-25 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 5 of 13

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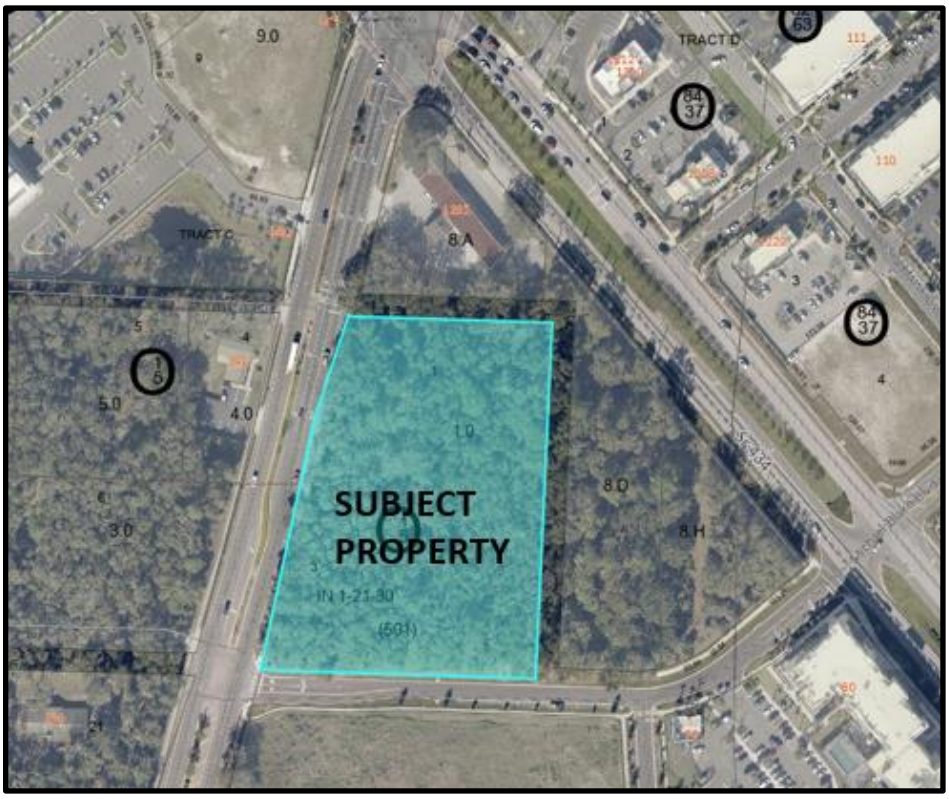
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LS

COMMUNITY WORKSHOP

Date: November 14, 2023 @ 6:00 P.M.

Location: Winter Springs City Hall Chambers.
1126 East State Road 434, Winter Springs, FL 32708

Community Workshop to consider the Final Engineering Plans, Waiver, and Development Agreement in order to construct a 23,517 square foot (SF) hardware store with three additional tenant spaces within the Town Center District on the subject site.



Project: Ace Hardware

Location: NE corner of Tuskawilla Rd. and Michael Blake Blvd.
Parcel ID: 01-21-30-501-0000-0010
Acreage: ± 3.58
Zoning: Town Center District (T5)
Future Land Use: Town Center (TC)
Applicant/Presenter: EPB ENGINEERING & CONSTRUCTION PLLC

DRAINAGE CALCULATION BOOK

For

Sutton Crossings
Tuskawilla Rd and Micheal Blake Blvd.
SEC 38/TWN 21 S/RGE 31 E

Winter Springs, FL 32708

Seminole County

Prepared For:

Prepared By

Florida Business COA # 30780

600 North Westshore Blvd., Suite 950
Tampa, FL 33609

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAS20240828673826, C=US
Date: 2025.02.11 15:32:50-05'00'

This item has been digitally signed and sealed by Kyle Steven Morel, PE, on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Kyle Morel, P.E.
Florida Professional Engineer License No. 77085

January 20, 2025

Table of Contents

Stormwater Narrative

Appendix A..... Project Maps

- Vicinity Map
- Aerial Map
- Pre-Basin Exhibit
- Post-Basin Exhibit
- Perimeter Rings Exhibit
- FEMA Map
- USGS Soils Map

Appendix B.....Stormwater Calculations

Appendix C .....ICPR4 – Summary Tables

STORMWATER NARRATIVE

Project Name: Ace Hardware
Location: Winter Springs, Fl 32708
Permittee: EPB Engineering & Construction, PLLC
Operating Entity: EPB Engineering & Construction, PLLC
Project Area: 6.13 acres
Project Land Use: Commercial use (Zoning T-5)

I. INTRODUCTION

This report provides the necessary engineering information to support the construction plan approval for the Ace Hardware project in Winter Springs, Florida. It addresses drainage and related engineering considerations required for approval.

The project involves the construction of a commercial development, including a 17,170 sq-ft building, a 6,163 sq-ft outdoor storage area, parking, and utility infrastructure. The site comprises Parcel Numbers 01-21-30-501-0000-001 (Schoen property) and 26-20-30-5AR-0A00-008D/H (Schrimsher property), located northeast of the intersection of Tuskawilla Road and Michael Blake Boulevard, and south of State Route 434.

In addition to the Ace Hardware development, the remainder of the site will be cleared, graded, and seeded for future mixed-use commercial development. Proposed drive aisles will provide access from Tuskawilla Road and Michael Blake Boulevard.

II. SUMMARY

The Sutton Crossings – Ace Hardware project is a 6.13-acre development located in Winter Springs, Florida, northeast of Tuskawilla Road and Michael Blake Boulevard, and south of State Route 434. The undeveloped site is primarily wooded with sporadic grass cover. Aerial imagery illustrating the project location is included in the Aerial Exhibit.

Stormwater management for the development will utilize two interconnected stormwater chamber systems and two interconnected dry retention ponds. These systems will discharge via a control structure into the existing stormwater infrastructure along Michael Blake Boulevard. The design complies with the requirements of the St. John’s River Water Management District (SJRWMD) and the City of Winter Springs.

III. OFF-SITE STORMWATER ANALYSIS

Currently, most stormwater runoff from the site flows south toward Michael Blake Boulevard, where it is collected by the existing stormwater system and directed to "Pond 1" within the Tuskawilla Crossings Subdivision.

A review of previously approved downstream projects indicates that runoff from this site was not accounted for. Pegasus Engineering has been tasked with designing repairs and rehabilitation for Pond 1 and evaluating stormwater management options for the Sutton Crossings development.

A Stormwater Management Design Criteria Memo, dated May 8, 2024, concluded that stormwater runoff from Sutton Crossings must be regulated to prevent adverse impacts on existing infrastructure, specifically drainage structures CB-1 and CB-3 in the Tuskawilla Crossings Construction Plans. The memo specifies:

- Maximum Discharge Rate: 15 cfs to Pond 1 with upsized pipes (CB-3 to CB-4 and CB-4 to CB-6) to 24-inch RCP storm sewer pipes.
- Alternative Discharge Rate: 12 cfs without upsizing the existing pipes.

Off-site pipe upsizing will be addressed by Pegasus Engineering.

IV. EXISTING CONDITIONS

Topography:
The Schoen property slopes gently from approximately elevation 45 ft in the northwest to 42 ft in the southeast. Runoff generally flows toward Michael Blake Boulevard.

Flood Zone:
The site lies within FEMA Zone “X” per Map Panel No. 12117C0160F, dated September 28, 2007.

Soil Conditions:
Geotechnical evaluations by Yovaish Engineering Services identified fine sands classified as Paola-St. Lucie sands (#24) and Tavares-Millhopper fine sands (#31). Permeability tests showed vertical hydraulic conductivity ranging from 17 to 38 ft/day, with horizontal conductivity estimated at 1.5 to 2 times the vertical rate.

The project site covers approximately 6.13 acres and is located northeast of the intersection of Tuskawilla Road and Michael Blake Boulevard and south of State Route 434 in Winter Springs, Florida. The site is currently undeveloped. Vegetation consists of mostly woods with sporadic grass coverage across the site.

Summary of Groundwater Observations

Boring	Depth to Encountered Groundwater (feet)	Boring	Depth to Encountered Groundwater (feet)
TB-1	6.2	RB-2	5.8
TB-2	6.7	RB-3	6.7
TB-3	5.9	RB-4	6.7
PB-1	4.5	RB-5	6.1
PB-2	5.5		

V. DEVELOPED SITE CONDITIONS

The proposed development includes:

- A 17,170 sq-ft Ace Hardware building with three additional units and a covered outdoor area.
- Utilities, parking, and drive aisles.
- Stormwater and water quality BMPs designed for the entire 6.13-acre site.

Approximately 1.57 acres of impervious surfaces are proposed for the Ace Hardware site, with future commercial parcels modeled at 85% impervious coverage. Stormwater will drain to either the storm chamber system or dry retention ponds.

VI. STORMWATER MANAGEMENT & FLOW CONTROL

Pre-Development Conditions:
The site consists of a single undeveloped basin with a pervious CN of 30. Runoff flows southeast toward Michael Blake Boulevard.

Post-Development Conditions:
Stormwater will be managed using storm chambers and dry retention ponds designed to attenuate runoff and meet water quality requirements. The 25-year post-development flow rate is limited to 15 cfs, complying with the Stormwater Management Design Criteria Memo.

Runoff calculations and detailed analyses for pre- and post-development conditions are included in Appendices B and C.

Water Quality Treatment:
Storm chambers and dry retention ponds will provide water quality treatment by infiltrating the first flush of runoff. The treatment volume is designed for the greater of 0.5 inches of runoff or 1.25 inches from impervious areas.

PRE-DEVELOPMENT FLOOD ROUTING MODEL

The site pre-development condition consists of a single-basin undeveloped parcel with a pervious CN of 30.0. The basin is modeled as a hydrograph and flows southeast towards the Michael Blake Blvd right-of-way via sheet and overland flows. Basin (PRE) is 6.13 acres with a time of concentration of 28.1 minutes and discharges at Node (PRE).

Drainage calculations including the pervious CN, time of concentration, and ICPR analysis for pre-development conditions can be found in Appendix B of this report.

POST-DEVELOPMENT FLOOD ROUTING MODEL

The post-development condition incorporates storm chambers and two dry retention ponds to meet water quality and quantity requirements. Infiltration into the underlying soils will be utilized for additional treatment and attenuation.

Due to the existing site topography, a portion of the off-site developed area and some on-site areas on the southern portion of the project site cannot be captured and directed to the proposed on-site stormwater system. These areas will discharge unretained into the existing stormwater infrastructure within the Michael Blake Blvd right-of-way. This bypassed area was modeled as directly discharging off-site and included in the total runoff rate leaving the site.

The post-development site consists of a mixed-use commercial development divided into six drainage basins. A summary of the post-development conditions is provided below:

Post Development Basin	Basin Area (acres)	Impervious Area (acres)	Curve Number, CN	Time of Concentration (Minutes)
Basin 1	1.91	1.47	84.4	10
Basin 2	0.52	0.17	58.3	10
Basin 3	1.13	0.96	89.2	10
Basin 4A	1.66	1.41	89.2	10
Basin 4B	0.91	0.77	89.2	10
Bypass	0.39	0.12	57.2	10

ICPR modeling was used to calculate the 25-year flow under developed conditions. The maximum discharge rate for the combined basins was determined to be less than 15 cfs. Detailed drainage calculations, including pervious CN, required treatment volume, and stage-storage volumes for storm chambers and ponds, are provided in Appendix B, while the ICPR analysis for post-development conditions is included in Appendix C..

TAILWATER CONSIDERATIONS

Stormwater from the treatment and attenuation systems will discharge into an existing catch basin located on the north side of Michael Blake Blvd. The catch basin has an invert elevation of 37.67 feet.

WATER QUALITY TREATMENT VOLUME

The stormwater treatment system incorporates storm chambers and dry retention ponds as BMPs to reduce discharges to the downstream basin. The first flush of runoff will be collected within the aggregate storage layer and infiltrated into the surrounding soils to meet water quality treatment volume requirements. The design treatment volume is based on the greater of:

- The first 0.5 inches of runoff from the total site area, or
- 1.25 inches of runoff from the impervious area.

Detailed calculations and treatment volume requirements are included in Appendix B.

EROSION AND SEDIMENT CONTROL PLANS

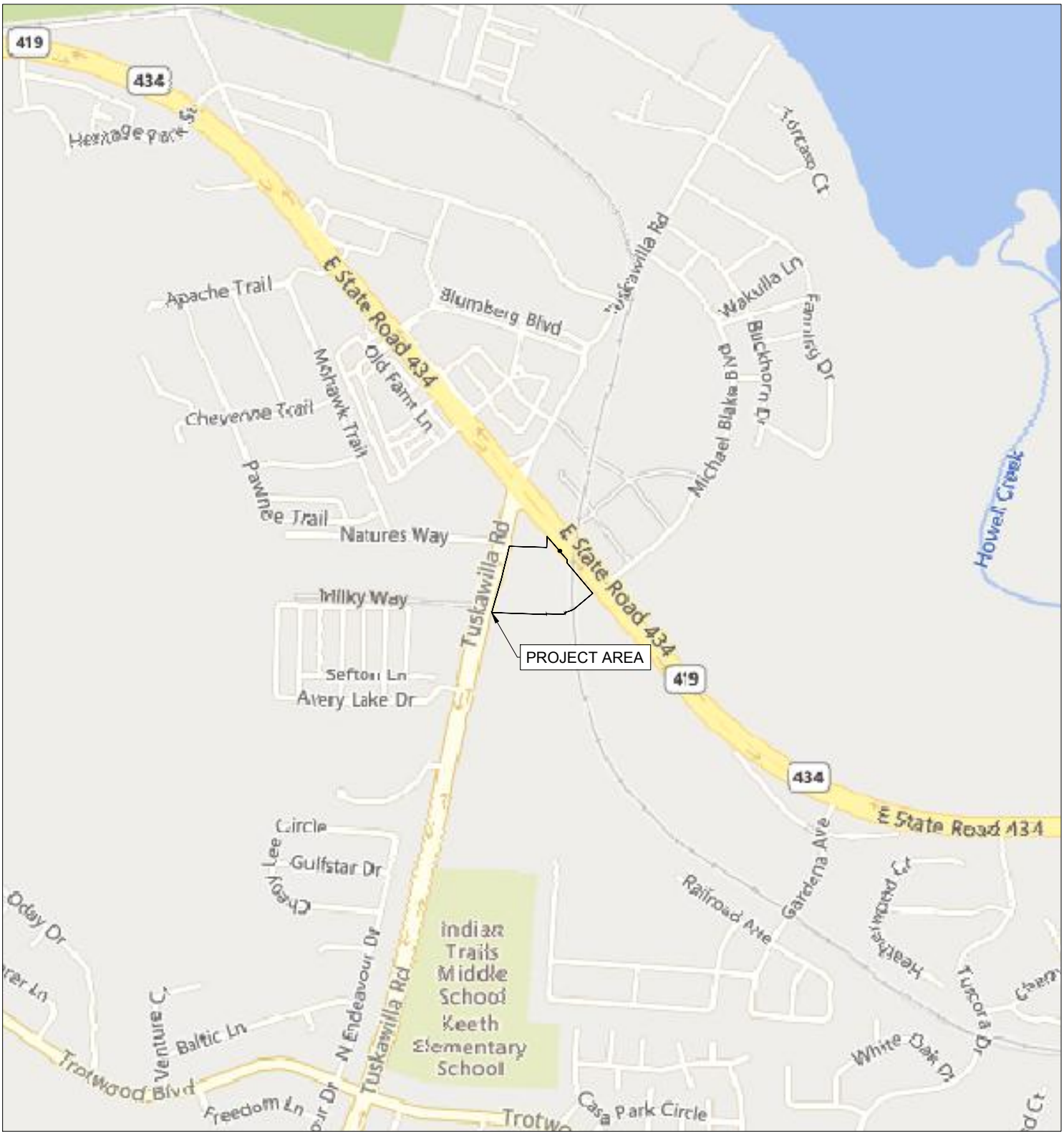
Erosion and sediment control measures will be implemented to minimize soil loss and prevent off-site sediment transport during construction. These measures include:

- Planting trees, shrubs, and sod on all pervious surfaces.
- Installing a 1.5-foot sump in all inlets to trap sediment and fines.
- Sodding or seeding and mulching all lawn and pervious areas.
- Providing a temporary gravel construction entrance to prevent the tracking of fines and sands onto adjacent roadways.
- Installing silt fencing around the site perimeter and inlets to retain sediment on-site.

These measures will ensure compliance with state water quality standards and prevent violations from sediment-laden discharges.

Appendix A

Project Maps



H:\2024\FLA240162.00\CAD\DRAWINGS\EXHIBITS\PRE-POST BASIN EXHIBIT\P-EXHA-FLA240162.00-0A----->LAYOUT: VICINITY MAP

VICINITY MAP

1/8/25| LS | P-EXHA-FLA240162.00-0A | Rev. 0

BOHLER

600 N WESTSHORE BLVD., SUITE 950
TAMPA, FLORIDA 33624
Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

TUSKAWILLA RD & E STATE RD 434
WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

1000 500 250 0 1000

1"=1000'



H:\2024\FLA240162.00\CAD\DRAWINGS\EXHIBITS\PRE-POST BASIN EXHIBIT\P-EXHA-FLA240162.00-0A----->LAYOUT: AERIAL EXHIBIT

AERIAL EXHIBIT

1/14/25| LS | P-EXHA-FLA240162.00-0A | Rev. 0

BOHLER

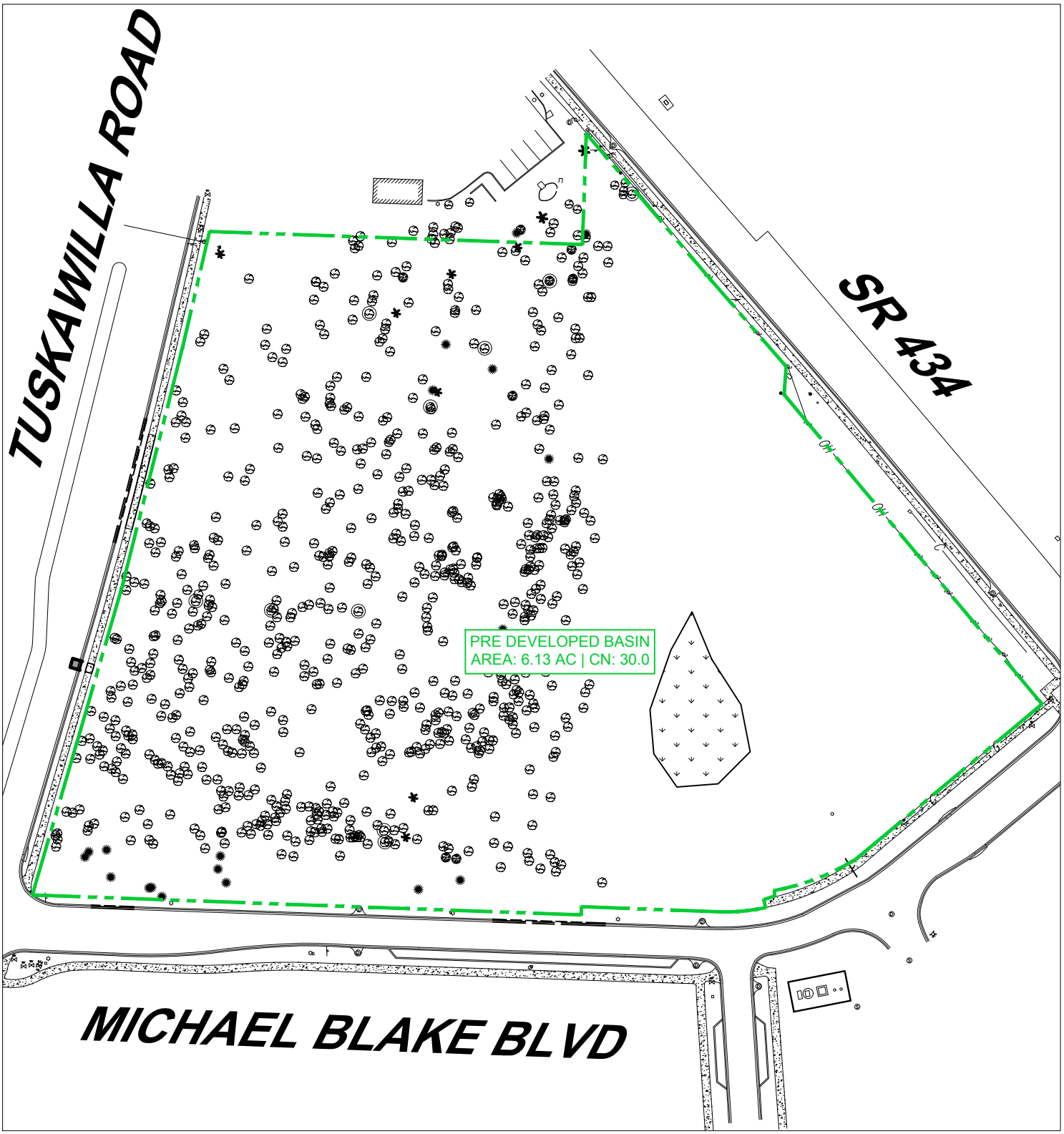
600 N WESTSHORE BLVD., SUITE 950
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Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

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WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

N

150 75 37.5 0
1"=150'



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PRE-BASIN EXHIBIT

7/2/2024 | LS | P-EXHA-FLA240162.00-0A | Rev. 0

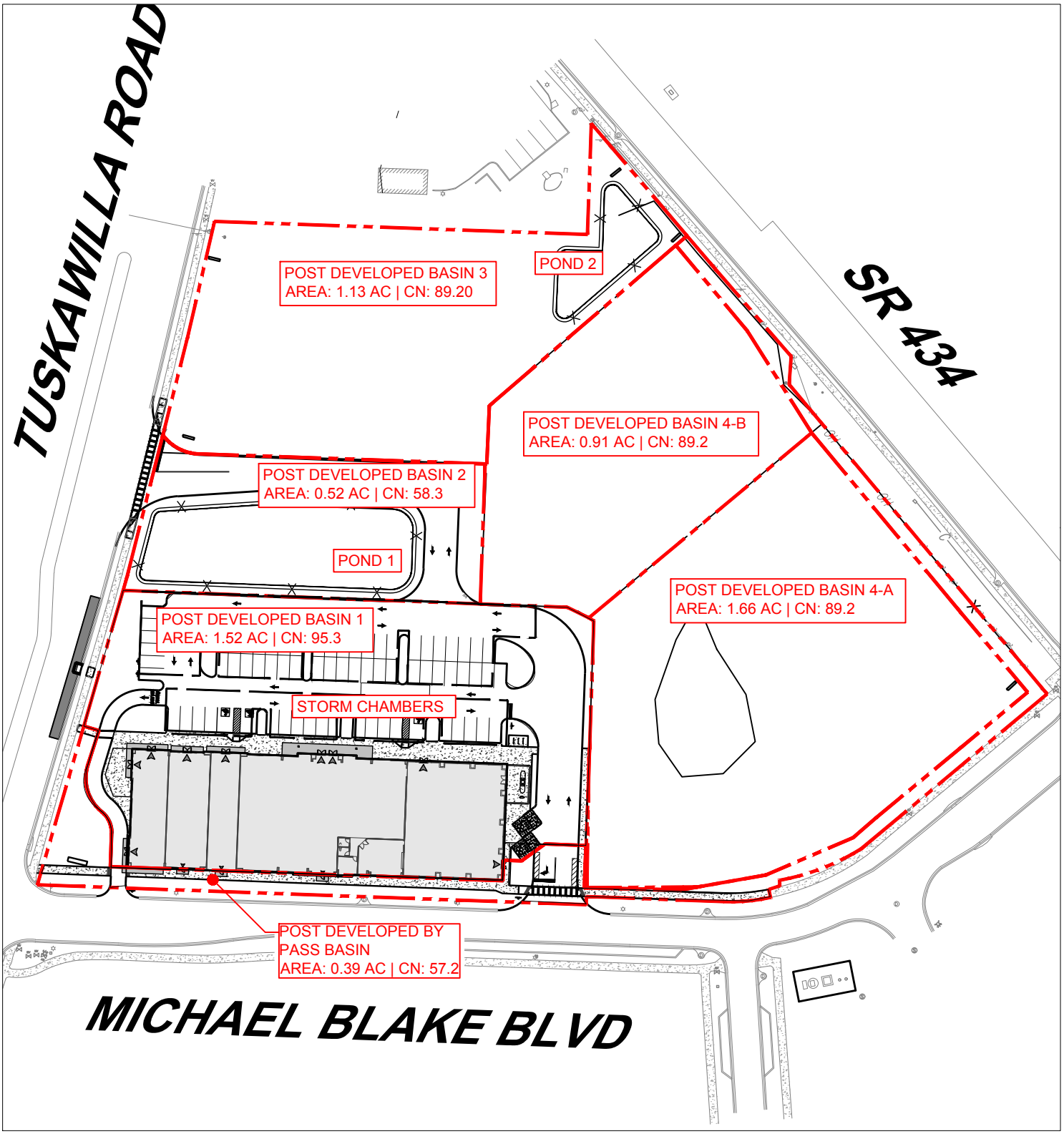
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SEMINOLE COUNTY | PLAN REV. 0

100 50 25 0
1"= 100'



H:\2024\FLA240162.00\CAD\DRAWINGS\EXHIBITS\PRE-POST BASIN EXHIBIT\P-EXHA-FLA240162.00-0AKK----->LAYOUT: POST BASIN EXHIBIT

POST-BASIN EXHIBIT

7/2/2024 | LS | P-EXHA-FLA240162.00-0AKK | Rev. 0

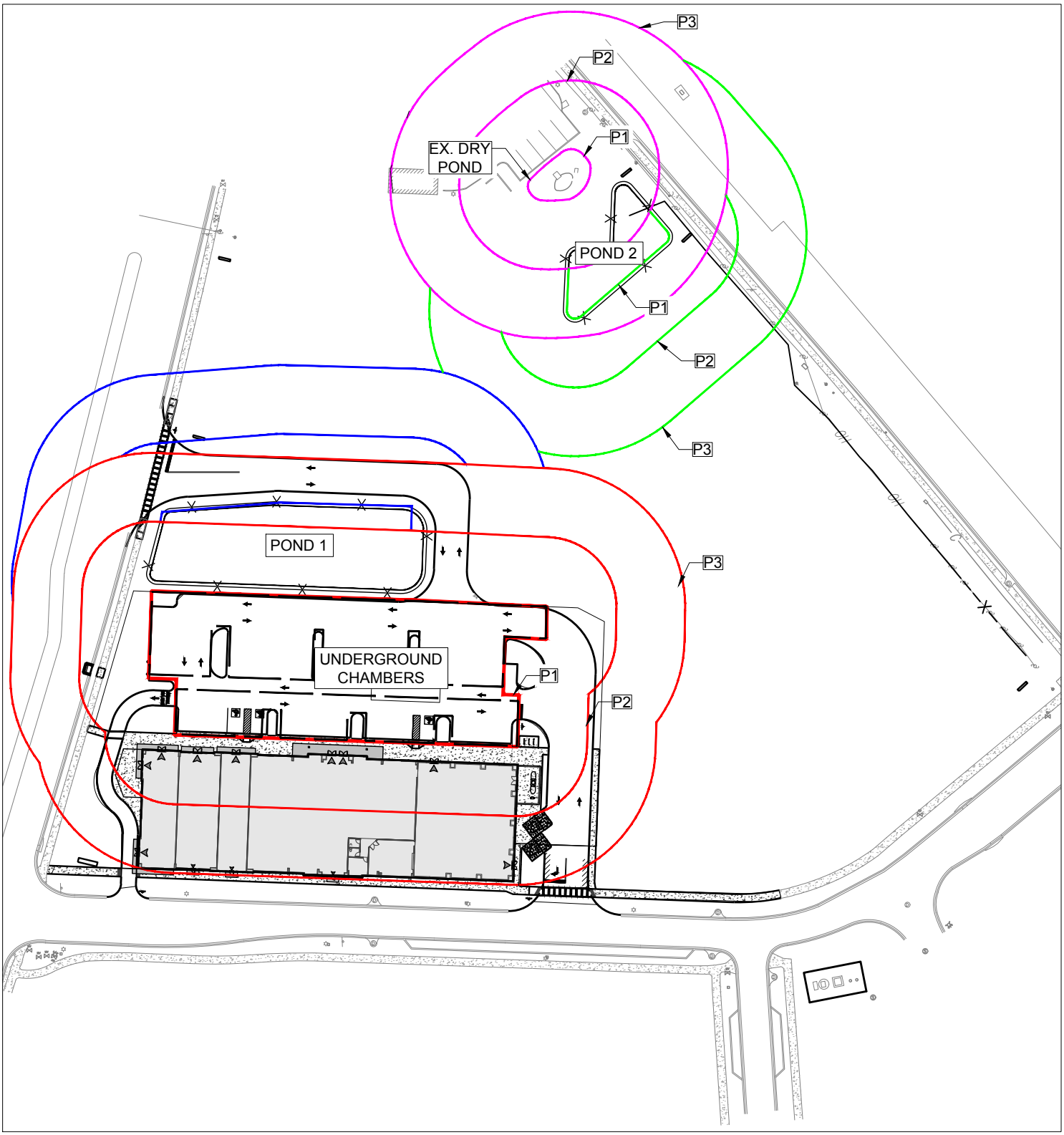
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WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

100 50 25 0
1"= 100'



H:\2024\FLA240162.00\CAD\DRAWINGS\EXHIBITS\PRE-POST BASIN EXHIBIT\P-EXHA-FLA240162.00-0AKK----->LAYOUT: PERIMETER RINGS EXHIBIT

2/11/2025 | LS | P-EXHA-FLA240162.00-0AKK | Rev. 0

PERIMETER RINGS EXHIBIT

TUSKAWILLA RD & E STATE RD 434
WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

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600 N WESTSHORE BLVD., SUITE 950
TAMPA, FLORIDA 33624
Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

100 50 25 0
1"= 100'

National Flood Hazard Layer FIRMette

FEMA

81°16'2"W 28°41'58"N



81°15'25"W 28°41'26"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/9/2025 at 6:02 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



Map Scale: 1:1,420 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Seminole County, Florida
Survey Area Data: Version 23, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
24	Paola-St. Lucie sands, 0 to 5 percent slopes	1.7	23.4%
27	Pomello fine sand, 0 to 5 percent slopes	1.6	22.1%
31	Tavares-Millhopper fine sands, 0 to 5 percent slopes	4.0	54.6%
Totals for Area of Interest		**7.2**	**100.0%**

Seminole County, Florida

24—Paola-St. Lucie sands, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1lmq8
Elevation: 20 to 130 feet
Mean annual precipitation: 46 to 54 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 332 to 362 days
Farmland classification: Not prime farmland

Map Unit Composition

Paola and similar soils: 52 percent
St. lucie and similar soils: 43 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paola

Setting

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 3 inches: sand
E - 3 to 25 inches: sand
C - 25 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 39.96 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A

Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Description of St. Lucie

Setting

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Eolian or sandy marine deposits

Typical profile

A - 0 to 2 inches: sand
C - 2 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 39.96 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Minor Components

Tavares

Percent of map unit: 5 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Seminole County, Florida
Survey Area Data: Version 23, Aug 26, 2024

Seminole County, Florida

27—Pomello fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2v16w
Elevation: 0 to 130 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 287 to 317 days
Farmland classification: Not prime farmland

Map Unit Composition

Pomello and similar soils: 91 percent
Minor components: 9 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pomello

Setting

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser, rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
E - 4 to 55 inches: fine sand
Bh - 55 to 67 inches: fine sand
Bw - 67 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A
Ecological site: F154XA008FL - Moist Sandy Scrubby Flatwoods
Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G154XB131FL)
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G154XB131FL), South Florida Flatwoods (R154XY003FL)
Hydric soil rating: No

Minor Components

Myakka, non-hydric

Percent of map unit: 4 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F154XA007FL - Moist Sandy Wet-Mesic Flatwoods
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)
Hydric soil rating: No

Eaugallie, non-hydric

Percent of map unit: 2 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F154XA007FL - Moist Sandy Wet-Mesic Flatwoods
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)
Hydric soil rating: No

Basinger, hydric

Percent of map unit: 2 percent
Landform: Drainageways
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave, convex
Across-slope shape: Concave, linear
Ecological site: F154XA007FL - Moist Sandy Wet-Mesic Flatwoods
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Hydric soil rating: Yes

Sparr

Percent of map unit: 1 percent
Landform: Flats on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F154XA004FL - Moist Sandy Pine-Hardwood Woodlands

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G154XB131FL)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Seminole County, Florida
Survey Area Data: Version 23, Aug 26, 2024

Seminole County, Florida

31—Tavares-Millhopper fine sands, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2w4gz
Elevation: 20 to 150 feet
Mean annual precipitation: 45 to 56 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Tavares and similar soils: 58 percent
Millhopper and similar soils: 32 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tavares

Setting

Landform: Flats on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits and/or eolian deposits

Typical profile

A - 0 to 6 inches: fine sand
C - 6 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 42 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A

Ecological site: R155XY180FL - Sandy Scrub on Rises, Ridges, and Knolls of Mesic Uplands
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

Description of Millhopper

Setting

Landform: Rises on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: fine sand
E - 6 to 64 inches: fine sand
Bt - 64 to 76 inches: fine sandy loam
Btg - 76 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F154XA004FL - Moist Sandy Pine-Hardwood Woodlands
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

Minor Components

Candler

Percent of map unit: 3 percent
Landform: Ridges on marine terraces, hills on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve, side slope, riser, rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R155XY230FL - Sandy Scrub on Ridges, Knolls, and Dunes of Xeric Uplands
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Felda

Percent of map unit: 2 percent
Landform: Depressions on marine terraces, flats on marine terraces
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear
Across-slope shape: Linear, concave
Ecological site: R155XY080FL - Sandy over Loamy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Astatula

Percent of map unit: 2 percent
Landform: Knolls on marine terraces, ridges on marine terraces, hills on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve, side slope, riser, rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R155XY230FL - Sandy Scrub on Ridges, Knolls, and Dunes of Xeric Uplands
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Myakka

Percent of map unit: 2 percent
Landform: Drainageways on flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear
Across-slope shape: Linear, concave

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Pomello

Percent of map unit: 1 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Interfluve, side slope, riser
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: F155XY150FL - Sandy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

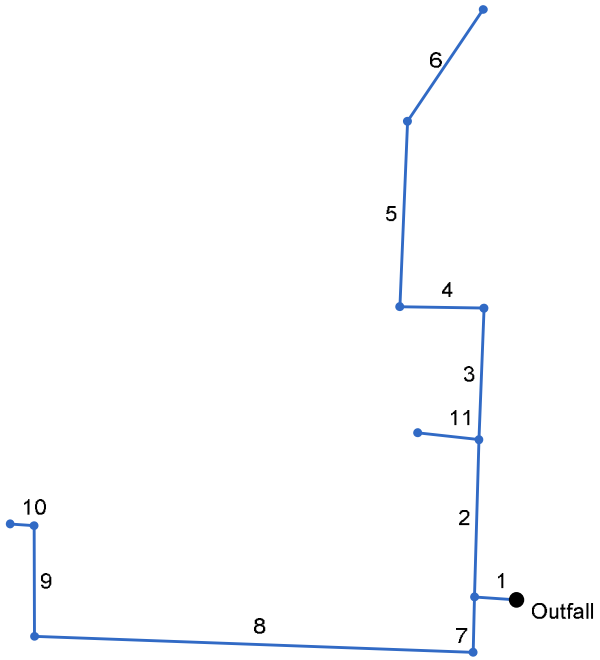
Data Source Information

Soil Survey Area: Seminole County, Florida
Survey Area Data: Version 23, Aug 26, 2024

Appendix B

Stormwater Calculations

Sutton Crossings



Project File: Sutton Crossings Storm Tabs.stm	Number of lines: 11	Date: 2/11/2025

FL-DOT Report 25 YR 24 Hr Storm

Line No	To Line	Type of struc	n - Value	Len	Drainage Area C1 = 0.3 C2 = 0.95 C3 = 0.9			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q / Total Flow	Inlet elev	Elev of HGL / Elev of Crown / Elev of Invert			Rise / Span	HGL / Pipe	ADD / Full Flow		Date: 2/11/2025 / Frequency: 25 yrs / Proj: Sutton Crossings Sto
					Increment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
1	End	Grate	0.012	28.000	0.00 0.07 0.00	1.13 1.73 0.00	0.34 1.64 0.00	18.01	0.17	6.78	1.98	0.00 13.45	42.55	42.42 40.64 38.14	42.39 40.50 38.00	0.03 0.14	30 30 Cir	0.09 0.50	2.74 6.40	13.45 31.42	
2	1	Grate	0.012	105.000	0.00 0.14 0.00	1.13 1.02 0.00	0.34 0.97 0.00	16.77	0.59	7.03	1.31	0.00 9.20	43.17	42.74 40.98 38.98	42.59 40.14 38.14	0.15 0.84	24 24 Cir	0.14 0.80	2.93 6.98	9.20 21.92	
3	2	MH	0.013	88.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	14.96	1.81	7.44	0.34	0.00 2.52	43.40	42.95 41.24 39.24	42.94 40.98 38.98	0.01 0.26	24 24 Cir	0.01 0.30	0.80 3.91	2.52 12.29	
4	3	MH	0.013	56.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	13.84	1.12	7.72	0.34	0.00 2.62	43.85	42.97 41.41 39.41	42.96 41.24 39.24	0.01 0.17	24 24 Cir	0.01 0.30	0.83 3.97	2.62 12.46	
5	4	MH	0.012	124.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	11.56	2.28	8.39	0.34	0.00 2.84	43.85	42.99 41.66 39.66	42.98 41.41 39.41	0.02 0.25	24 24 Cir	0.01 0.20	0.91 3.50	2.84 11.00	
6	5	Genr	0.012	90.000	1.13 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	10.00	1.56	8.92	0.34	0.00 3.03	44.00	43.02 42.00 40.00	43.00 41.66 39.66	0.01 0.34	24 24 Cir	0.02 0.38	0.96 4.79	3.03 15.06	
7	1	MH	0.013	37.000	0.00 0.00 0.00	0.00 0.64 0.00	0.00 0.61 0.00	17.55	0.46	6.87	0.61	0.00 4.18	43.00	42.60 40.27 38.27	42.59 40.14 38.14	0.01 0.13	24 24 Cir	0.03 0.35	1.33 4.27	4.18 13.41	
8	7	Grate	0.013	292.000	0.00 0.56 0.00	0.00 0.64 0.00	0.00 0.61 0.00	14.26	3.29	7.62	0.61	0.00 4.63	44.10	42.75 41.16 39.16	42.63 40.27 38.27	0.12 0.89	24 24 Cir	0.04 0.30	1.47 3.97	4.63 12.49	
9	8	Grate	0.013	74.000	0.00 0.02 0.00	0.00 0.08 0.00	0.00 0.08 0.00	10.93	3.34	8.60	0.08	0.00 0.65	44.66	42.81 41.03 39.53	42.80 40.66 39.16	0.00 0.37	18 18 Cir	0.00 0.50	0.37 4.20	0.65 7.43	
10	9	Grate	0.013	16.000	0.00 0.06 0.00	0.00 0.06 0.00	0.00 0.06 0.00	10.00	0.93	8.92	0.06	0.00 0.51	43.54	42.81 41.08 39.58	42.81 41.03 39.53	0.00 0.05	18 18 Cir	0.00 0.31	0.29 3.32	0.51 5.87	

NOTES: Intensity = 73.72 / (Inlet time + 7.70) ^ 0.73 (in/hr)

Sutton Crossings

FL-DOT Report 25 YR 24 Hr Storm

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q / Total Flow	Inlet elev	Elev of HGL / Elev of Crown / Elev of Invert			Rise / Span	HGL / Pipe	ADD / Full Flow		Date: 2/11/2025 / Frequency: 25 yrs / Proj: Sutton Crossings Sto
					C1 = 0.3 C2 = 0.95 C3 = 0.9																
					Increment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
11	2	Grate	0.012	41.000	0.00 0.88 0.00	0.00 0.88 0.00	0.00 0.84 0.00	10.00	0.29	8.92	0.84	0.00 7.46	43.12	42.98 41.50 39.50	42.94 40.98 38.98	0.04 0.52	24 24 Cir	0.09 1.27	2.37 8.78	7.46 27.59	

NOTES: Intensity = 73.72 / (Inlet time + 7.70) ^ 0.73 (in/hr)

Sutton Crossings

FL-DOT Report

100 YR 24 Hr Storm

Line No	To Line	Type of struc	n - Value	Len (ft)	Drainage Area C1 = 0.3 C2 = 0.95 C3 = 0.9 Increment (ac)	Drainage Area Sub-Total (ac)	Drainage Area Sum CA	Time of conc (min)	Time of Flow in sect (min)	Inten (I) (in/hr)	Total CA	Add Q / Total Flow Q (cfs)	Inlet elev (ft)	Elev of HGL / Elev of Crown / Elev of Invert Up (ft)	Down (ft)	Fall (ft)	Rise / Span Size (in)	HGL / Pipe Slope (%)	ADD / Full Flow Vel (ft/s)	Cap (cfs)	Line description
																					Date: 2/11/2025
																					Frequency: 100 yrs
																					Proj: Sutton Crossings Sto
1	End	Grate	0.012	28.000	0.00 0.07 0.00	1.13 1.73 0.00	0.34 1.64 0.00	17.60	0.16	7.27	1.98	0.00 14.42	42.55	43.09 40.64 38.14	43.06 40.50 38.00	0.03 0.14	30 30 Cir	0.11 0.50	2.94 6.40	14.42 31.42	
2	1	Grate	0.012	105.000	0.00 0.14 0.00	1.13 1.02 0.00	0.34 0.97 0.00	16.43	0.55	7.51	1.31	0.00 9.83	43.17	43.46 40.98 38.98	43.29 40.14 38.14	0.17 0.84	24 24 Cir	0.16 0.80	3.13 6.98	9.83 21.92	
3	2	MH	0.013	88.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	14.72	1.71	7.90	0.34	0.00 2.68	43.40	43.70 41.24 39.24	43.69 40.98 38.98	0.01 0.26	24 24 Cir	0.01 0.30	0.85 3.91	2.68 12.29	
4	3	MH	0.013	56.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	13.66	1.06	8.17	0.34	0.00 2.77	43.85	43.72 41.41 39.41	43.71 41.24 39.24	0.01 0.17	24 24 Cir	0.02 0.30	0.88 3.97	2.77 12.46	
5	4	MH	0.012	124.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	11.49	2.17	8.81	0.34	0.00 2.99	43.85	43.75 41.66 39.66	43.73 41.41 39.41	0.02 0.25	24 24 Cir	0.01 0.20	0.95 3.50	2.99 11.00	
6	5	Genr	0.012	90.000	1.13 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	10.00	1.49	9.33	0.34	0.00 3.16	44.00	43.77 42.00 40.00	43.76 41.66 39.66	0.01 0.34	24 24 Cir	0.02 0.38	1.01 4.79	3.16 15.06	
7	1	MH	0.013	37.000	0.00 0.00 0.00	0.00 0.64 0.00	0.00 0.61 0.00	17.18	0.43	7.36	0.61	0.00 4.47	43.00	43.31 40.27 38.27	43.29 40.14 38.14	0.01 0.13	24 24 Cir	0.04 0.35	1.42 4.27	4.47 13.41	
8	7	Grate	0.013	292.000	0.00 0.56 0.00	0.00 0.64 0.00	0.00 0.61 0.00	14.07	3.11	8.07	0.61	0.00 4.90	44.10	43.47 41.16 39.16	43.34 40.27 38.27	0.14 0.89	24 24 Cir	0.05 0.30	1.56 3.97	4.90 12.49	
9	8	Grate	0.013	74.000	0.00 0.02 0.00	0.00 0.08 0.00	0.00 0.08 0.00	10.89	3.18	9.01	0.08	0.00 0.68	44.66	43.53 41.03 39.53	43.53 40.66 39.16	0.00 0.37	18 18 Cir	0.00 0.50	0.39 4.20	0.68 7.43	
10	9	Grate	0.013	16.000	0.00 0.06 0.00	0.00 0.06 0.00	0.00 0.06 0.00	10.00	0.89	9.33	0.06	0.00 0.53	43.54	43.54 41.08 39.58	43.54 41.03 39.53	0.00 0.05	18 18 Cir	0.00 0.31	0.30 3.32	0.53 5.87	

NOTES: Intensity = 52.22 / (Inlet time + 5.60) ^ 0.63 (in/hr)

Sutton Crossings

FL-DOT Report

100 YR 24 Hr Storm

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q / Total Flow	Inlet elev	Elev of HGL / Elev of Crown / Elev of Invert			Rise / Span	HGL / Pipe	ADD / Full Flow		Date: 2/11/2025 / Frequency: 100 yrs / Proj: Sutton Crossings Sto
					C1 = 0.3 C2 = 0.95 C3 = 0.9																
					Incre-ment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
11	2	Grate	0.012	41.000	0.00 0.88 0.00	0.00 0.88 0.00	0.00 0.84 0.00	10.00	0.28	9.33	0.84	0.00 7.80	43.12	43.73 41.50 39.50	43.69 40.98 38.98	0.04 0.52	24 24 Cir	0.10 1.27	2.48 8.78	7.80 27.59	

NOTES: Intensity = 52.22 / (Inlet time + 5.60) ^ 0.63 (in/hr)

Sutton Crossings

PROJECT NAME: **SUTTON CROSSINGS**
PROJECT #: **FLA240162.00**

SUMMARY OF GROUND COVER DATA

ON-SITE AREA

BASIN	Land Use Description	Runoff Coefficient	CN	Area (ac.)	Total Area (ac)	Weighted CN	Weighted Runoff Coefficient
PRE-DEVELOPMENT BASIN	Impervious	0.95	98	0.00	6.13	**30.0**	**0.3**
	Woods (Hydrologic Soil Group A)	0.30	30	6.13			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 1	Impervious	0.95	98	1.45	1.52	**95.3**	**0.9**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.07			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 2	Impervious	0.95	98	0.17	0.52	**58.3**	**0.5**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.35			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 3	Impervious	0.95	98	0.96	1.13	**89.1**	**0.9**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.17			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 4-A	Impervious	0.95	98	1.41	1.66	**89.1**	**0.9**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.25			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 4-B	Impervious	0.95	98	0.77	0.91	**88.9**	**0.9**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.14			
	Open Water	1.00	100	0.00			
POST-BP BYPASS	Impervious	0.95	98	0.12	0.39	**57.2**	**0.5**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.27			
	Open Water	1.00	100	0.00			

Notes:
1.) See Appendix D for NRCS Soils Map
2.) CN Values based on Hydrologic Soil Group information provided within the geotechnical report
3.) CN numbers per TR-55, Urban Hydrology for Small Watersheds

LOT	AREA (AC)	PROPOSED IMPERVIOUS AREA (AC)	TOTAL ALLOWABLE IMPERVIOUS (AC)	TOTAL REMIAINING IMPERVIOUS (AC)	%
LOT 1	1.91	1.57	1.57	0.00	82%
LOT 2	0.52	0.17	0.17	0.00	33%
LOT 3	1.13	0.00	0.96	0.96	85%
LOT 4-A	1.66	0.00	1.41	1.41	85%
LOT 4-B	0.91	0.00	0.77	0.77	85%
TOTAL	6.13	1.74	4.88	3.14	

PROJECT: **SUTTON CROSSINGS**
PROJECT #: **FLA240162.00**

PRE DEVELOPMENT - Time of Concentration (Tc) Summary

Flow Parameter	Pre Development
Overland Flow	
Length (ft)	100
Slope (%)	1.00%
Manning n (1)	0.4
P (in) (2)	4.50
Tc (min) (3)	23.89
Shallow Concentrated Flow	
Swale Length (ft)	425
Swale Slope (%)	1.10%
Tc (min) (4)	4.19
TOTAL Tc	**28.1**

NOTES:

(1) From Table 2.2 of FDOT Drainage Manual, 2020 dense grass
(2) 2yr/24hr rainfall depth from NOAA rainfall data
(3) From Eq. 1 of "Tc Methodology by Flow Regime"
(4) From Eqs. 2 and 3 of "Tc Methodology by Flow Regime"
(5) Cross sectional area of inner pipe
(6) Perimeter of inner pipe
(7) Hydraulic Radius where R=A/P
(8) From Table T-1 of FDOT Hydrology Handbook, 2000

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 1)

IMPERVIOUS AREA	**(ac)**	1.45
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.151 6579

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 1)

BASIN AREA	**(ac)**	1.52
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.063 2759

SJRWMD ADDTIONAL REQUIRED TREATMENT

BASIN AREA	**(ac)**	1.52
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.063 2759

TOTAL REQUIRED TREATMENT (BASIN 1)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.214 9338

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 2)

IMPERVIOUS AREA	**(ac)**	0.17
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.018 771

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 2)

BASIN AREA	**(ac)**	0.52
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.022 946

SJRWMD ADDTIONAL REQUIRED TREATMENT (BASIN 2)

BASIN AREA	**(ac)**	0.52
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.022 946

TOTAL REQUIRED TREATMENT (BASIN 2)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.043 1891

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 3)

IMPERVIOUS AREA	**(ac)**	0.96
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.100 4356

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 3)

BASIN AREA	**(ac)**	1.13
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.047 2051

SJRWMD ADDTIONAL REQUIRED TREATMENT (BASIN 3)

BASIN AREA	**(ac)**	1.13
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.047 2051

TOTAL REQUIRED TREATMENT (BASIN 3)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.147 6407

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 4-A)

IMPERVIOUS AREA	**(ac)**	1.41
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.147 6398

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 4-A)

BASIN AREA	**(ac)**	1.66
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.069 3013

SJRWMD ADDTIONAL REQUIRED TREATMENT (BASIN 4-A)

BASIN AREA	**(ac)**	1.66
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.069 3013

TOTAL REQUIRED TREATMENT (BASIN 4-A)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.216 9411

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 4-B)

IMPERVIOUS AREA	**(ac)**	0.77
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.080 3494

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 4-B)

BASIN AREA	**(ac)**	0.91
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.038 1652

SJRWMD ADDTIONAL REQUIRED TREATMENT (BASIN 4-B)

BASIN AREA	**(ac)**	0.91
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.038 1652

TOTAL REQUIRED TREATMENT (BASIN 4-B)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.118 5146

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

Stage - Storage Calculations

DRY RETENTION - POND 1

Elevation+7:787:18 (ft NGVD)	Area (sq ft)	Area (acres)	Incremental Volume (ac-ft)	Cumulative Volume (ac-ft)	Cumulative Volume (c-ft)
40.00	10,800	0.248	0.000	0.000	0
40.07	10,800	0.248	0.017	0.017	720
40.15	10,800	0.248	0.021	0.037	1620
40.23	10,800	0.248	0.021	0.058	2520
40.32	10,800	0.248	0.021	0.079	3420
40.40	10,800	0.248	0.021	0.099	4320
40.48	10,800	0.248	0.021	0.120	5220
40.57	10,800	0.248	0.021	0.140	6120
40.65	10,800	0.248	0.021	0.161	7020
40.73	10,800	0.248	0.021	0.182	7920
40.82	10,800	0.248	0.021	0.202	8820
40.90	10,800	0.248	0.021	0.223	9720
40.98	10,800	0.248	0.021	0.244	10620
41.07	10,800	0.248	0.021	0.264	11520
41.15	10,800	0.248	0.021	0.285	12420
41.23	10,800	0.248	0.021	0.306	13320
41.32	10,800	0.248	0.021	0.326	14220
41.40	10,800	0.248	0.021	0.347	15120
41.48	10,800	0.248	0.021	0.368	16020
41.57	10,800	0.248	0.021	0.388	16920
41.65	10,800	0.248	0.021	0.409	17820
41.73	10,800	0.248	0.021	0.430	18720
41.82	10,800	0.248	0.021	0.450	19620
41.90	10,800	0.248	0.021	0.471	20520
41.98	10,800	0.248	0.021	0.492	21420
42.07	10,800	0.248	0.021	0.512	22320
42.15	10,800	0.248	0.021	0.533	23220
42.23	10,800	0.248	0.021	0.554	24120
44.00	10,800	0.248	0.438	0.992	43200

DRY RETENTION - POND 2

Elevation (ft NGVD)	Area (sq ft)	Area (acres)	Incremental Volume (ac-ft)	Cumulative Volume (ac-ft)	Cumulative Volume (c-ft)
40.00	3,104	0.071	0.000	0.000	0
40.07	3,104	0.071	0.005	0.005	207
40.15	3,104	0.071	0.006	0.011	466
40.23	3,104	0.071	0.006	0.017	724
40.32	3,104	0.071	0.006	0.023	983
40.40	3,104	0.071	0.006	0.029	1242
40.48	3,104	0.071	0.006	0.034	1500
40.57	3,104	0.071	0.006	0.040	1759
40.65	3,104	0.071	0.006	0.046	2018
40.73	3,104	0.071	0.006	0.052	2276
40.82	3,104	0.071	0.006	0.058	2535
40.90	3,104	0.071	0.006	0.064	2794
40.98	3,104	0.071	0.006	0.070	3052
41.07	3,104	0.071	0.006	0.076	3311
41.15	3,104	0.071	0.006	0.082	3570
41.23	3,104	0.071	0.006	0.088	3828
41.32	3,104	0.071	0.006	0.094	4087
41.40	3,104	0.071	0.006	0.100	4346
41.48	3,104	0.071	0.006	0.106	4604
41.57	3,104	0.071	0.006	0.112	4863
41.65	3,104	0.071	0.006	0.118	5122
41.73	3,104	0.071	0.006	0.124	5380
41.82	3,104	0.071	0.006	0.129	5639
41.90	3,104	0.071	0.006	0.135	5898
41.98	3,104	0.071	0.006	0.141	6156
42.07	3,104	0.071	0.006	0.147	6415
42.15	3,104	0.071	0.006	0.153	6674
42.23	3,104	0.071	0.006	0.159	6932
44.00	3,104	0.071	0.126	0.285	12416

DRY RETENTION - UNDERGROUND CHAMBERS

Elevation (ft NGVD)	Area (sq ft)	Area (acres)	Incremental Volume (ac-ft)	Cumulative Volume (ac-ft)	Cumulative Volume (c-ft)
39.90	8961.54	0.206	**0**	**0**	**0**
39.98	8961.54	0.206	0.017	0.017	747
40.00	8961.54	0.206	0.003	0.021	896
40.07	8961.54	0.206	0.014	0.034	1494
40.15	8961.54	0.206	0.017	0.051	2240
40.23	8961.54	0.206	0.017	0.069	2987
40.32	8961.54	0.206	0.017	0.086	3734
40.40	8961.54	0.206	0.017	0.103	4481
40.48	19507.70	0.448	0.027	0.130	5667
40.57	19289.96	0.443	0.037	0.167	7284
40.65	18995.82	0.436	0.037	0.204	8879
40.73	18698.69	0.429	0.036	0.240	10449
40.82	18333.45	0.421	0.035	0.275	11992
40.90	17892.81	0.411	0.035	0.310	13502
40.98	17446.90	0.401	0.034	0.344	14974
41.07	17007.82	0.390	0.033	0.377	16410
41.15	16422.99	0.377	0.032	0.409	17803
41.23	15758.15	0.362	0.031	0.439	19144
41.32	15022.83	0.345	0.029	0.469	20426
41.40	14137.10	0.325	0.028	0.497	21641
41.48	12966.42	0.298	0.026	0.523	22771
41.57	10915.95	0.251	0.023	0.546	23766
41.65	10098.87	0.232	0.020	0.566	24641
41.73	9393.81	0.216	0.019	0.584	25454
41.82	8961.54	0.206	0.018	0.602	26218
41.90	8961.54	0.206	0.017	0.619	26965
41.98	8961.54	0.206	0.017	0.636	27712
42.07	8961.54	0.206	0.017	0.653	28459
42.15	8961.54	0.206	0.017	0.670	29206
42.23	8961.54	0.206	0.017	0.688	29952

TOTAL STAGE VOLUME

Elevation (ft NGVD)	Incremental Volume (ac-ft)	Cumulative Volume (ac-ft)	Cumulative Volume (c-ft)
39.90	0.000	0.000	0
39.98	0.017	0.017	747
40.00	0.003	0.021	896
40.07	0.035	0.056	2421
40.15	0.044	0.099	4326
40.23	0.044	0.143	6231
40.32	0.044	0.187	8137
40.40	0.044	0.231	10042
40.48	0.054	0.284	12387
40.57	0.064	0.348	15162
40.65	0.063	0.411	17916
40.73	0.063	0.474	20646
40.82	0.062	0.536	23347
40.90	0.061	0.597	26015
40.98	0.060	0.658	28647
41.07	0.060	0.717	31241
41.15	0.059	0.776	33792
41.23	0.057	0.833	36292
41.32	0.056	0.889	38733
41.40	0.054	0.944	41107
41.48	0.053	0.996	43395
41.57	0.049	1.046	45549
41.65	0.047	1.092	47583
41.73	0.045	1.138	49554
41.82	0.044	1.182	51477
41.90	0.044	1.225	53383
41.98	0.044	1.269	55288
42.07	0.044	1.313	57194
42.15	0.044	1.357	59099
42.23	0.044	1.400	61005
44.00	0.564	1.964	85568

TOTAL QUALITY WATER BASIN 1

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.214
	(cu-ft)	9338

TOTAL QUALITY WATER BASIN 2

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.043
	(cu-ft)	1891

TOTAL QUALITY WATER BASIN 3

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.147
	(cu-ft)	6407

TOTAL QUALITY WATER BASIN 4-A

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.216
	(cu-ft)	9411

TOTAL QUALITY WATER BASIN 4-B

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.118
	(cu-ft)	5146

TOTAL QUALITY WATER BASIN

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.739
	(cu-ft)	32193
WATER QUALITY ELEVATION	**(ft)**	41.10

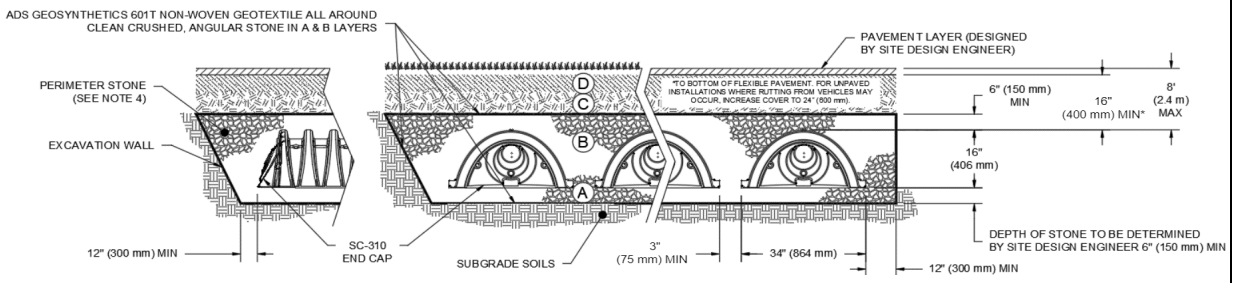
Project: SUTTON CROSSINGS

Area of System	22405	*sf*
Stone Porosity	40	*%*
Bottom of System EL	39.90	*ft*
Top of Storage EL		*ft*
Bottom of Storage EL		*ft*
Chamber Height	16	*in*
Chamber Length	85.4	*in*
Chamber Width	34	*in*
Row Space	3	*in*
Chamber Installed Footprint	21.9	*sf*
Stone Above Chambers	6	*in*
Stone Below Chambers	6	*in*
Chamber Total in System Area	1021	*qty*

Total Volume	
29952.32	
Vol. Below Top EL	
29952.32	
Vol. Below Bot EL	
0.00	
Design Volume	
29952.32	

StormTech SC-310 Cumulative Storage Volumes

Height of System *(inches)*	Incremental Chamber Storage *(cubic feet)*	Incremental Stone Storage *(cubic feet)*	Incremental Chamber & Stone *(cubic feet)*	Cumulative Total *(cubic feet)*	Elevation *(feet)*
28	0.00	746.80	746.80	29952.32	42.23
27	0.00	746.80	746.80	29205.52	42.15
26	0.00	746.80	746.80	28458.73	42.07
25	0.00	746.80	746.80	27711.93	41.98
24	0.00	746.80	746.80	26965.14	41.90
23	0.00	746.80	746.80	26218.34	41.82
22	60.04	722.78	782.82	25471.54	41.73
21	157.96	683.61	841.57	24688.73	41.65
20	271.45	638.22	909.66	23847.16	41.57
19	556.23	524.30	1080.54	22937.49	41.48
18	718.83	459.26	1178.09	21856.96	41.40
17	841.85	410.06	1251.90	20678.87	41.32
16	943.97	369.21	1313.18	19426.96	41.23
15	1036.31	332.27	1368.58	18113.78	41.15
14	1117.54	299.78	1417.32	16745.20	41.07
13	1178.52	275.39	1453.91	15327.88	40.98
12	1240.45	250.61	1491.07	13873.97	40.90
11	1301.65	226.13	1527.79	12382.91	40.82
10	1352.38	205.84	1558.22	10855.12	40.73
9	1393.65	189.34	1582.99	9296.90	40.65
8	1434.50	172.99	1607.50	7713.91	40.57
7	1464.74	160.90	1625.64	6106.41	40.48
6	0.00	746.80	746.80	4480.77	40.40
5	0.00	746.80	746.80	3733.98	40.32
4	0.00	746.80	746.80	2987.18	40.23
3	0.00	746.80	746.80	2240.39	40.15
2	0.00	746.80	746.80	1493.59	40.07
1	0.00	746.80	746.80	746.80	39.98



NOTE: If the software program being used allows for Stage Volume data, it is recommended to use the stage volume data from this spreadsheet. Software programs typically use linear interpolation to take stage area data and estimate stage volume data. Due to rounding differences over the total number of stages provided in this spreadsheet, the accuracy of the estimated volume could be off as much as 1%. It is recommended that the user check the software estimated volume and compare it to the volume listed in this spreadsheet to ensure the accuracy is within acceptable levels.

Stage Area Data

Height of System *(inches)*	Depth *(feet)*	Elevation *(feet)*	Area *(ft^2)*	Area *(acres)*
28	2.33	42.23	8961.54	0.2057
27	2.25	42.15	8961.54	0.2057
26	2.17	42.07	8961.54	0.2057
25	2.08	41.98	8961.54	0.2057
24	2.00	41.90	8961.54	0.2057
23	1.92	41.82	8961.54	0.2057
22	1.83	41.73	9393.81	0.2157
21	1.75	41.65	10098.87	0.2318
20	1.67	41.57	10915.95	0.2506
19	1.58	41.48	12966.42	0.2977
18	1.50	41.40	14137.10	0.3245
17	1.42	41.32	15022.83	0.3449
16	1.33	41.23	15758.15	0.3618
15	1.25	41.15	16422.99	0.3770
14	1.17	41.07	17007.82	0.3904
13	1.08	40.98	17446.90	0.4005
12	1.00	40.90	17892.81	0.4108
11	0.92	40.82	18333.45	0.4209
10	0.83	40.73	18698.69	0.4293
9	0.75	40.65	18995.82	0.4361
8	0.67	40.57	19289.96	0.4428
7	0.58	40.48	19507.70	0.4478
6	0.50	40.40	8961.54	0.2057
5	0.42	40.32	8961.54	0.2057
4	0.33	40.23	8961.54	0.2057
3	0.25	40.15	8961.54	0.2057
2	0.17	40.07	8961.54	0.2057
1	0.08	39.98	8961.54	0.2057
0	0.00	39.90	8961.54	0.2057

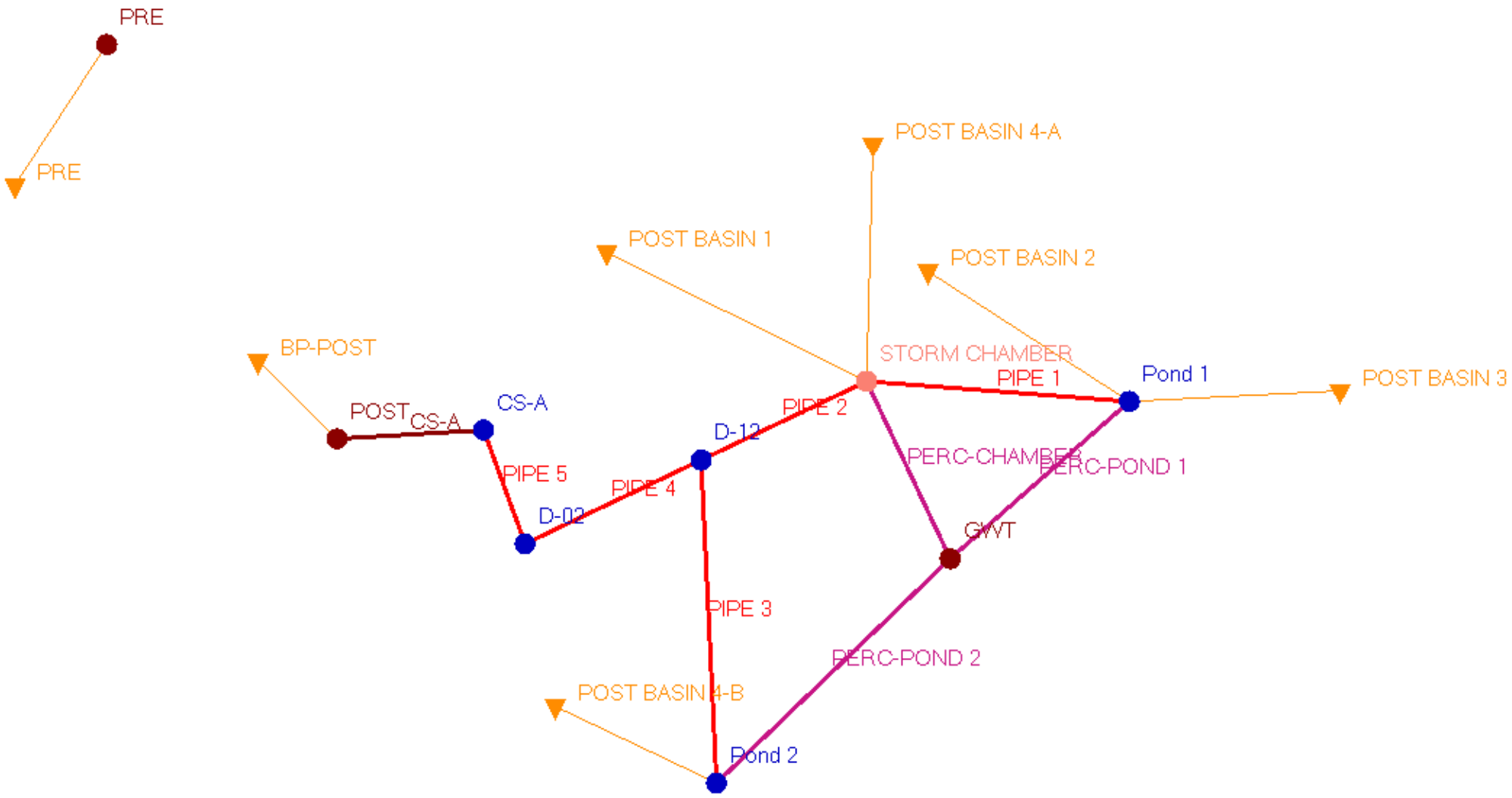
PROJECT NAME: **SUTTON CROSSINGS**
PROJECT NUMBER: **FLA240162.00**

Max Stage		
Simulation	**Node Name**	**Pond Stage (ft)**
010Y-24H	POND 1	41.79
010Y-24H	POND 2	41.78
010Y-24H	STORM CHAMBER	41.79
100Y-24H	POND 1	43.06
100Y-24H	POND 2	42.99
100Y-24H	STORM CHAMBER	43.05
025Y-24H	POND 1	42.39
025Y-24H	POND 2	42.36
025Y-24H	STORM CHAMBER	42.39
MEAN	POND 1	41.28
MEAN	POND 2	41.28
MEAN	STORM CHAMBER	41.28

Simulation	**Pre Q (cfs)**	**Post Q (cfs)**
MEAN	0	0.28
010Y-24H	0.14	5.20
025Y-24H	0.57	11.60
100Y-24H	2.01	16.08

Appendix C

ICPR4 - Summary Tables


PRE
PRE
POST BASIN 4-A
POST BASIN 1
POST BASIN 2
BP-POST
STORM CHAMBER
PIPE 1
Pond 1
POST BASIN 3
POST
CS-A
CS-A
PIPE 2
D-12
PERC-CHAMBER
PERC-POND 1
PIPE 5
PIPE 4
D-02
GWT
PIPE 3
PERC-POND 2
POST BASIN 4-B
Pond 2

Simple Basin:

Scenario:	Scenario1
Node:	
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	0.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	
Peaking Factor:	0.0
Area:	0.0000 ac
Curve Number:	0.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BP-POST

Scenario:	Scenario1
Node:	POST
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.3900 ac
Curve Number:	57.2
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 1

Scenario:	Scenario1
Node:	STORM CHAMBER
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1.5200 ac
Curve Number:	95.3
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 2

Scenario:	Scenario1
Node:	Pond 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.5200 ac
Curve Number:	58.3
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 3

Scenario:	Scenario1
Node:	Pond 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	99999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1.1300 ac
Curve Number:	89.2
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 4-A

Scenario:	Scenario1
Node:	STORM CHAMBER
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1.6600 ac
Curve Number:	89.2
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 4-B

Scenario:	Scenario1
Node:	Pond 2
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.9100 ac
Curve Number:	89.2
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: PRE

Scenario:	Scenario1
Node:	PRE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	28.1000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	6.1300 ac
Curve Number:	30.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: CS-A

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	38.90 ft
Warning Stage:	44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0001	4
999.00	0.0010	44

Comment:

Node: D-02

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	38.90 ft
Warning Stage:	44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0010	44
999.00	0.0010	44

Comment:

Node: D-12

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0001	4
999.00	0.0010	44

Comment:

Node: GWT

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 38.90 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	38.90
0	0	0	72.0000	38.90

Comment:

Node: POST

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Comment:

Node: PRE

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs

Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Comment:

Node: Pond 1

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
40.00	0.2480	10803
41.00	0.2480	10803
42.00	0.2480	10803
43.00	0.2480	10803
44.00	0.2480	10803

Comment:

Node: Pond 2

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
40.00	0.0710	3093
41.00	0.0710	3093
42.00	0.0710	3093
43.00	0.0710	3093
44.00	0.0710	3093

Comment:

Node: STORM CHAMBER

Scenario: Scenario1
Type: Stage/Volume

Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 44.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
39.90	0.00	0
40.48	0.14	6098
40.90	0.32	13939
41.40	0.50	21780
41.90	0.62	27007
42.23	0.69	30056

Comment: Used StormTech Calculator to developed Z-V table.

SC-310 chambers

Drop Structure Link: CS-A		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario1	Invert:	38.00 ft	Invert:	37.67 ft
From Node:	CS-A	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	POST	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	94.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Sharp Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	41.20 ft	Ref Node:	
Control Elevation:	41.20 ft	Discharge Coefficients	
Max Depth:	9999.00 ft	Weir Default:	3.200
Max Width:	4.00 ft	Weir Table:	
Fillet:	0.00 ft		

Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Percolation Link: PERC-CHAMBER

Scenario:	Scenario1	Surface Area Option:	User Specified
From Node:	STORM CHAMBER	Bottom Elevation:	39.90 ft
To Node:	GWT	Surface Area:	0.6000 ac
Link Count:	1	Vertical Flow Termination:	Horizontal Flow Algorithm
Flow Direction:	Both	Perimeter 1:	807.00 ft
Aquifer Base Elevation:	34.00 ft	Perimeter 2:	1074.00 ft
Water Table Elevation:	38.90 ft	Perimeter 3:	1385.00 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	22.250 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	14.830 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.250	# of Cells P2 to P3:	29
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: PERC-POND 1

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond 1		
To Node:	GWT	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	208.00 ft
Flow Direction:	Both	Perimeter 2:	262.00 ft
Aquifer Base Elevation:	34.00 ft	Perimeter 3:	519.00 ft
Water Table Elevation:	38.90 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	16.270 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.120 fpd	# of Cells P2 to P3:	29
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: PERC-POND 2

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond 2		
To Node:	GWT	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	156.00 ft

Flow Direction:	Both		
Aquifer Base Elevation:	36.00 ft	Perimeter 2:	272.00 ft
Water Table Elevation:	38.07 ft	Perimeter 3:	594.00 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	14.290 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	8.890 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.250	# of Cells P2 to P3:	29
Layer Thickness:	1.93 ft		

Comment:

Pipe Link: PIPE 1		Upstream		Downstream	
Scenario:	Scenario1	Invert:	40.00 ft	Invert:	40.00 ft
From Node:	Pond 1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	STORM CHAMBER	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	8.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: PIPE 2		Upstream		Downstream	
Scenario:	Scenario1	Invert:	39.50 ft	Invert:	38.98 ft
From Node:	STORM CHAMBER	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	D-12	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	40.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: PIPE 3		Upstream		Downstream	
Scenario:	Scenario1	Invert:	40.00 ft	Invert:	38.98 ft
From Node:	Pond 2	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	D-12	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	349.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000
Comment:					

Pipe Link: PIPE 4		Upstream		Downstream	
Scenario:	Scenario1	Invert:	38.98 ft	Invert:	38.14 ft
From Node:	D-12	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	D-02	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	106.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000
Comment:					

Pipe Link: PIPE 5		Upstream		Downstream	
Scenario:	Scenario1	Invert:	38.14 ft	Invert:	38.00 ft
From Node:	D-02	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	CS-A	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	28.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			

Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Simulation: 010Y-24H

Scenario: Scenario1
Run Date/Time: 2/11/2025 1:02:36 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	30.0000	0.0500
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSIII-24
		Rainfall Amount:	6.80 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 025Y-24H

Scenario: Scenario1
Run Date/Time: 2/11/2025 1:03:17 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	30.0000	0.0500
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSIII-24
		Rainfall Amount:	8.60 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100Y-24H

Scenario: Scenario1
Run Date/Time: 2/11/2025 1:04:16 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

Year	Month	Day	Hour [hr]

Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	10.80 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2

Energy Switch (1D): Energy

Comment:

Simulation: MEAN

Scenario: Scenario1
Run Date/Time: 2/11/2025 1:05:00 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		60.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	4.50 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
POST	010Y-24H	0.00	0.00	0.0000	5.20	0.00	0
PRE	010Y-24H	0.00	0.00	0.0000	0.14	0.00	0
Pond 1	010Y-24H	44.00	41.79	0.0007	8.87	1.63	10811
Pond 2	010Y-24H	44.00	41.78	0.0008	3.91	1.65	3431
STORM CHAMBER	010Y-24H	44.00	41.79	0.0010	15.25	4.75	17215
POST	025Y-24H	0.00	0.00	0.0000	11.60	0.00	0
PRE	025Y-24H	0.00	0.00	0.0000	0.57	0.00	0
Pond 1	025Y-24H	44.00	42.39	0.0006	11.10	3.84	10811
Pond 2	025Y-24H	44.00	42.36	0.0006	5.05	2.40	3430
STORM CHAMBER	025Y-24H	44.00	42.39	-0.0010	18.15	9.95	17216
POST	100Y-24H	0.00	0.00	0.0000	16.08	0.00	0
PRE	100Y-24H	0.00	0.00	0.0000	2.01	0.00	0
Pond 1	100Y-24H	44.00	43.06	0.0010	14.99	5.70	10811
Pond 2	100Y-24H	44.00	42.99	0.0009	6.98	3.33	3430
STORM CHAMBER	100Y-24H	44.00	43.05	0.0010	24.71	13.63	17216
POST	MEAN	0.00	0.00	0.0000	0.28	0.00	0
PRE	MEAN	0.00	0.00	0.0000	0.00	0.00	0
Pond 1	MEAN	44.00	41.28	0.0010	6.71	1.27	10811
Pond 2	MEAN	44.00	41.28	0.0005	2.60	1.25	3431
STORM CHAMBER	MEAN	44.00	41.28	0.0010	10.34	4.73	17216

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	0.0000	41.10	0.00
RECOVERY	Pond 1	0.2506	40.75	1.27
RECOVERY	Pond 1	0.5003	40.68	1.27
RECOVERY	Pond 1	0.7506	40.62	0.24
RECOVERY	Pond 1	1.0000	40.60	0.28
RECOVERY	Pond 1	1.2509	40.58	0.25
RECOVERY	Pond 1	1.5001	40.56	0.23
RECOVERY	Pond 1	1.7510	40.54	0.14
RECOVERY	Pond 1	2.0026	40.53	0.13
RECOVERY	Pond 1	2.2513	40.52	0.11
RECOVERY	Pond 1	2.5010	40.51	0.10
RECOVERY	Pond 1	2.7501	40.51	0.09
RECOVERY	Pond 1	3.0006	40.50	0.09
RECOVERY	Pond 1	3.2503	40.49	0.08
RECOVERY	Pond 1	3.5032	40.48	0.08
RECOVERY	Pond 1	3.7509	40.48	0.07
RECOVERY	Pond 1	4.0036	40.47	0.07
RECOVERY	Pond 1	4.2515	40.47	0.07
RECOVERY	Pond 1	4.5007	40.46	0.07
RECOVERY	Pond 1	4.7506	40.45	0.06
RECOVERY	Pond 1	5.0034	40.45	0.06
RECOVERY	Pond 1	5.2506	40.44	0.06
RECOVERY	Pond 1	5.5001	40.44	0.06
RECOVERY	Pond 1	5.7514	40.43	0.06
RECOVERY	Pond 1	6.0001	40.43	0.06
RECOVERY	Pond 1	6.2539	40.42	0.05
RECOVERY	Pond 1	6.5024	40.42	0.05
RECOVERY	Pond 1	6.7536	40.42	0.05
RECOVERY	Pond 1	7.0025	40.41	0.05
RECOVERY	Pond 1	7.2526	40.41	0.05
RECOVERY	Pond 1	7.5022	40.40	0.05
RECOVERY	Pond 1	7.7509	40.40	0.05
RECOVERY	Pond 1	8.0012	40.40	0.05
RECOVERY	Pond 1	8.2529	40.39	0.05
RECOVERY	Pond 1	8.5043	40.39	0.04
RECOVERY	Pond 1	8.7504	40.38	0.04
RECOVERY	Pond 1	9.0037	40.38	0.04
RECOVERY	Pond 1	9.2512	40.38	0.04
RECOVERY	Pond 1	9.5001	40.37	0.04
RECOVERY	Pond 1	9.7515	40.37	0.04
RECOVERY	Pond 1	10.0002	40.37	0.04
RECOVERY	Pond 1	10.2502	40.36	0.04

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	10.5008	40.36	0.04
RECOVERY	Pond 1	10.7553	40.36	0.04
RECOVERY	Pond 1	11.0053	40.35	0.04
RECOVERY	Pond 1	11.2547	40.35	0.04
RECOVERY	Pond 1	11.5039	40.35	0.04
RECOVERY	Pond 1	11.7501	40.34	0.04
RECOVERY	Pond 1	12.0022	40.34	0.04
RECOVERY	Pond 1	12.2518	40.34	0.04
RECOVERY	Pond 1	12.5036	40.34	0.04
RECOVERY	Pond 1	12.7510	40.33	0.04
RECOVERY	Pond 1	13.0000	40.33	0.03
RECOVERY	Pond 1	13.2531	40.33	0.03
RECOVERY	Pond 1	13.5018	40.32	0.03
RECOVERY	Pond 1	13.7507	40.32	0.03
RECOVERY	Pond 1	14.0037	40.32	0.03
RECOVERY	Pond 1	14.2539	40.32	0.03
RECOVERY	Pond 1	14.5037	40.31	0.03
RECOVERY	Pond 1	14.7505	40.31	0.03
RECOVERY	Pond 1	15.0045	40.31	0.03
RECOVERY	Pond 1	15.2535	40.30	0.03
RECOVERY	Pond 1	15.5033	40.30	0.03
RECOVERY	Pond 1	15.7518	40.30	0.03
RECOVERY	Pond 1	16.0009	40.30	0.03
RECOVERY	Pond 1	16.2534	40.29	0.03
RECOVERY	Pond 1	16.5040	40.29	0.03
RECOVERY	Pond 1	16.7519	40.29	0.03
RECOVERY	Pond 1	17.0036	40.29	0.03
RECOVERY	Pond 1	17.2514	40.28	0.03
RECOVERY	Pond 1	17.5006	40.28	0.03
RECOVERY	Pond 1	17.7580	40.28	0.03
RECOVERY	Pond 1	18.0023	40.28	0.03
RECOVERY	Pond 1	18.2545	40.27	0.03
RECOVERY	Pond 1	18.5003	40.27	0.03
RECOVERY	Pond 1	18.7519	40.27	0.03
RECOVERY	Pond 1	19.0023	40.27	0.03
RECOVERY	Pond 1	19.2501	40.27	0.03
RECOVERY	Pond 1	19.5012	40.26	0.03
RECOVERY	Pond 1	19.7524	40.26	0.03
RECOVERY	Pond 1	20.0035	40.26	0.03
RECOVERY	Pond 1	20.2536	40.26	0.03
RECOVERY	Pond 1	20.5044	40.25	0.03
RECOVERY	Pond 1	20.7500	40.25	0.03

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	21.0043	40.25	0.03
RECOVERY	Pond 1	21.2515	40.25	0.03
RECOVERY	Pond 1	21.5010	40.25	0.03
RECOVERY	Pond 1	21.7511	40.24	0.03
RECOVERY	Pond 1	22.0003	40.24	0.03
RECOVERY	Pond 1	22.2548	40.24	0.03
RECOVERY	Pond 1	22.5027	40.24	0.03
RECOVERY	Pond 1	22.7568	40.23	0.02
RECOVERY	Pond 1	23.0025	40.23	0.02
RECOVERY	Pond 1	23.2534	40.23	0.02
RECOVERY	Pond 1	23.5040	40.23	0.02
RECOVERY	Pond 1	23.7501	40.23	0.02
RECOVERY	Pond 1	24.0009	40.22	0.02
RECOVERY	Pond 1	24.2516	40.22	0.02
RECOVERY	Pond 1	24.5016	40.22	0.02
RECOVERY	Pond 1	24.7532	40.22	0.02
RECOVERY	Pond 1	25.0002	40.22	0.02
RECOVERY	Pond 1	25.2506	40.21	0.02
RECOVERY	Pond 1	25.5037	40.21	0.02
RECOVERY	Pond 1	25.7531	40.21	0.02
RECOVERY	Pond 1	26.0063	40.21	0.02
RECOVERY	Pond 1	26.2590	40.21	0.02
RECOVERY	Pond 1	26.5071	40.20	0.02
RECOVERY	Pond 1	26.7543	40.20	0.02
RECOVERY	Pond 1	27.0066	40.20	0.02
RECOVERY	Pond 1	27.2529	40.20	0.02
RECOVERY	Pond 1	27.5005	40.20	0.02
RECOVERY	Pond 1	27.7509	40.20	0.02
RECOVERY	Pond 1	28.0058	40.19	0.02
RECOVERY	Pond 1	28.2501	40.19	0.02
RECOVERY	Pond 1	28.5018	40.19	0.02
RECOVERY	Pond 1	28.7551	40.19	0.02
RECOVERY	Pond 1	29.0017	40.19	0.02
RECOVERY	Pond 1	29.2553	40.18	0.02
RECOVERY	Pond 1	29.5062	40.18	0.02
RECOVERY	Pond 1	29.7509	40.18	0.02
RECOVERY	Pond 1	30.0084	40.18	0.02
RECOVERY	Pond 1	30.2504	40.18	0.02
RECOVERY	Pond 1	30.5069	40.18	0.02
RECOVERY	Pond 1	30.7572	40.17	0.02
RECOVERY	Pond 1	31.0048	40.17	0.02
RECOVERY	Pond 1	31.2509	40.17	0.02

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	31.5063	40.17	0.02
RECOVERY	Pond 1	31.7513	40.17	0.02
RECOVERY	Pond 1	32.0009	40.17	0.02
RECOVERY	Pond 1	32.2502	40.16	0.02
RECOVERY	Pond 1	32.5024	40.16	0.02
RECOVERY	Pond 1	32.7543	40.16	0.02
RECOVERY	Pond 1	33.0020	40.16	0.02
RECOVERY	Pond 1	33.2562	40.16	0.02
RECOVERY	Pond 1	33.5007	40.16	0.02
RECOVERY	Pond 1	33.7505	40.15	0.02
RECOVERY	Pond 1	34.0057	40.15	0.02
RECOVERY	Pond 1	34.2533	40.15	0.02
RECOVERY	Pond 1	34.5098	40.15	0.02
RECOVERY	Pond 1	34.7527	40.15	0.02
RECOVERY	Pond 1	35.0001	40.15	0.02
RECOVERY	Pond 1	35.2570	40.14	0.02
RECOVERY	Pond 1	35.5107	40.14	0.02
RECOVERY	Pond 1	35.7598	40.14	0.02
RECOVERY	Pond 1	36.0040	40.14	0.02
RECOVERY	Pond 1	36.2528	40.14	0.02
RECOVERY	Pond 1	36.5027	40.14	0.02
RECOVERY	Pond 1	36.7544	40.13	0.02
RECOVERY	Pond 1	37.0082	40.13	0.02
RECOVERY	Pond 1	37.2515	40.13	0.02
RECOVERY	Pond 1	37.5050	40.13	0.02
RECOVERY	Pond 1	37.7578	40.13	0.02
RECOVERY	Pond 1	38.0028	40.13	0.02
RECOVERY	Pond 1	38.2500	40.13	0.02
RECOVERY	Pond 1	38.5006	40.12	0.02
RECOVERY	Pond 1	38.7534	40.12	0.02
RECOVERY	Pond 1	39.0062	40.12	0.02
RECOVERY	Pond 1	39.2532	40.12	0.02
RECOVERY	Pond 1	39.5025	40.12	0.02
RECOVERY	Pond 1	39.7512	40.12	0.02
RECOVERY	Pond 1	40.0032	40.12	0.02
RECOVERY	Pond 1	40.2535	40.11	0.02
RECOVERY	Pond 1	40.5023	40.11	0.02
RECOVERY	Pond 1	40.7550	40.11	0.02
RECOVERY	Pond 1	41.0056	40.11	0.02
RECOVERY	Pond 1	41.2574	40.11	0.02
RECOVERY	Pond 1	41.5058	40.11	0.02
RECOVERY	Pond 1	41.7566	40.10	0.02

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	42.0041	40.10	0.02
RECOVERY	Pond 1	42.2522	40.10	0.02
RECOVERY	Pond 1	42.5031	40.10	0.02
RECOVERY	Pond 1	42.7517	40.10	0.02
RECOVERY	Pond 1	43.0011	40.10	0.02
RECOVERY	Pond 1	43.2573	40.10	0.02
RECOVERY	Pond 1	43.5045	40.10	0.02
RECOVERY	Pond 1	43.7549	40.09	0.02
RECOVERY	Pond 1	44.0022	40.09	0.02
RECOVERY	Pond 1	44.2506	40.09	0.02
RECOVERY	Pond 1	44.5054	40.09	0.02
RECOVERY	Pond 1	44.7505	40.09	0.02
RECOVERY	Pond 1	45.0072	40.09	0.02
RECOVERY	Pond 1	45.2520	40.09	0.02
RECOVERY	Pond 1	45.5009	40.08	0.02
RECOVERY	Pond 1	45.7538	40.08	0.02
RECOVERY	Pond 1	46.0015	40.08	0.02
RECOVERY	Pond 1	46.2502	40.08	0.02
RECOVERY	Pond 1	46.5029	40.08	0.02
RECOVERY	Pond 1	46.7508	40.08	0.02
RECOVERY	Pond 1	47.0005	40.08	0.02
RECOVERY	Pond 1	47.2537	40.07	0.02
RECOVERY	Pond 1	47.5043	40.07	0.02
RECOVERY	Pond 1	47.7561	40.07	0.02
RECOVERY	Pond 1	48.0094	40.07	0.02
RECOVERY	Pond 1	48.2507	40.07	0.02
RECOVERY	Pond 1	48.5043	40.07	0.02
RECOVERY	Pond 1	48.7500	40.07	0.01
RECOVERY	Pond 1	49.0008	40.07	0.01
RECOVERY	Pond 1	49.2513	40.06	0.01
RECOVERY	Pond 1	49.5033	40.06	0.01
RECOVERY	Pond 1	49.7518	40.06	0.01
RECOVERY	Pond 1	50.0039	40.06	0.01
RECOVERY	Pond 1	50.2533	40.06	0.01
RECOVERY	Pond 1	50.5023	40.06	0.01
RECOVERY	Pond 1	50.7528	40.06	0.01
RECOVERY	Pond 1	51.0020	40.06	0.01
RECOVERY	Pond 1	51.2547	40.06	0.01
RECOVERY	Pond 1	51.5020	40.05	0.01
RECOVERY	Pond 1	51.7504	40.05	0.01
RECOVERY	Pond 1	52.0024	40.05	0.01
RECOVERY	Pond 1	52.2537	40.05	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	52.5045	40.05	0.01
RECOVERY	Pond 1	52.7526	40.05	0.01
RECOVERY	Pond 1	53.0059	40.05	0.01
RECOVERY	Pond 1	53.2521	40.05	0.01
RECOVERY	Pond 1	53.5037	40.05	0.01
RECOVERY	Pond 1	53.7560	40.05	0.01
RECOVERY	Pond 1	54.0015	40.04	0.01
RECOVERY	Pond 1	54.2523	40.04	0.01
RECOVERY	Pond 1	54.5007	40.04	0.01
RECOVERY	Pond 1	54.7511	40.04	0.01
RECOVERY	Pond 1	55.0066	40.04	0.01
RECOVERY	Pond 1	55.2511	40.04	0.01
RECOVERY	Pond 1	55.5018	40.04	0.01
RECOVERY	Pond 1	55.7546	40.04	0.01
RECOVERY	Pond 1	56.0049	40.04	0.01
RECOVERY	Pond 1	56.2505	40.04	0.01
RECOVERY	Pond 1	56.5047	40.04	0.01
RECOVERY	Pond 1	56.7556	40.04	0.01
RECOVERY	Pond 1	57.0017	40.04	0.01
RECOVERY	Pond 1	57.2509	40.04	0.01
RECOVERY	Pond 1	57.5000	40.03	0.01
RECOVERY	Pond 1	57.7510	40.03	0.01
RECOVERY	Pond 1	58.0043	40.03	0.01
RECOVERY	Pond 1	58.2516	40.03	0.01
RECOVERY	Pond 1	58.5070	40.03	0.01
RECOVERY	Pond 1	58.7510	40.03	0.01
RECOVERY	Pond 1	59.0039	40.03	0.01
RECOVERY	Pond 1	59.2515	40.03	0.01
RECOVERY	Pond 1	59.5012	40.03	0.01
RECOVERY	Pond 1	59.7567	40.03	0.01
RECOVERY	Pond 1	60.0038	40.03	0.01
RECOVERY	Pond 1	60.2557	40.03	0.01
RECOVERY	Pond 1	60.5019	40.03	0.01
RECOVERY	Pond 1	60.7551	40.03	0.01
RECOVERY	Pond 1	61.0023	40.03	0.01
RECOVERY	Pond 1	61.2552	40.03	0.01
RECOVERY	Pond 1	61.5026	40.03	0.01
RECOVERY	Pond 1	61.7544	40.02	0.01
RECOVERY	Pond 1	62.0015	40.02	0.01
RECOVERY	Pond 1	62.2534	40.02	0.01
RECOVERY	Pond 1	62.5025	40.02	0.01
RECOVERY	Pond 1	62.7537	40.02	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	63.0021	40.02	0.01
RECOVERY	Pond 1	63.2546	40.02	0.01
RECOVERY	Pond 1	63.5039	40.02	0.01
RECOVERY	Pond 1	63.7504	40.02	0.01
RECOVERY	Pond 1	64.0005	40.02	0.01
RECOVERY	Pond 1	64.2520	40.02	0.01
RECOVERY	Pond 1	64.5042	40.02	0.01
RECOVERY	Pond 1	64.7517	40.02	0.01
RECOVERY	Pond 1	65.0050	40.02	0.01
RECOVERY	Pond 1	65.2576	40.02	0.01
RECOVERY	Pond 1	65.5005	40.02	0.01
RECOVERY	Pond 1	65.7530	40.02	0.01
RECOVERY	Pond 1	66.0037	40.02	0.01
RECOVERY	Pond 1	66.2567	40.02	0.01
RECOVERY	Pond 1	66.5031	40.02	0.01
RECOVERY	Pond 1	66.7552	40.02	0.00
RECOVERY	Pond 1	67.0034	40.02	0.00
RECOVERY	Pond 1	67.2515	40.01	0.00
RECOVERY	Pond 1	67.5013	40.01	0.00
RECOVERY	Pond 1	67.7505	40.01	0.00
RECOVERY	Pond 1	68.0044	40.01	0.00
RECOVERY	Pond 1	68.2517	40.01	0.00
RECOVERY	Pond 1	68.5040	40.01	0.00
RECOVERY	Pond 1	68.7553	40.01	0.00
RECOVERY	Pond 1	69.0061	40.01	0.00
RECOVERY	Pond 1	69.2535	40.01	0.00
RECOVERY	Pond 1	69.5009	40.01	0.00
RECOVERY	Pond 1	69.7577	40.01	0.00
RECOVERY	Pond 1	70.0009	40.01	0.00
RECOVERY	Pond 1	70.2528	40.01	0.00
RECOVERY	Pond 1	70.5051	40.01	0.01
RECOVERY	Pond 1	70.7525	40.01	0.01
RECOVERY	Pond 1	71.0003	40.01	0.01
RECOVERY	Pond 1	71.2550	40.01	0.01
RECOVERY	Pond 1	71.5005	40.01	0.01
RECOVERY	Pond 1	71.7556	40.01	0.01
RECOVERY	Pond 1	72.0006	40.01	0.01
RECOVERY	Pond 1	72.2524	40.01	0.01
RECOVERY	Pond 1	72.5040	40.01	0.01
RECOVERY	Pond 1	72.7569	40.01	0.01
RECOVERY	Pond 1	73.0019	40.00	0.01
RECOVERY	Pond 1	73.2550	40.00	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	73.5028	40.00	0.01
RECOVERY	Pond 1	73.7513	40.00	0.00
RECOVERY	Pond 1	74.0023	40.00	0.00
RECOVERY	Pond 1	74.2544	40.00	0.00
RECOVERY	Pond 1	74.5030	40.00	0.00
RECOVERY	Pond 1	74.7535	40.00	0.00
RECOVERY	Pond 1	75.0004	40.00	0.00
RECOVERY	Pond 1	75.2524	40.00	0.00
RECOVERY	Pond 1	75.5008	40.00	0.00
RECOVERY	Pond 1	75.7504	40.00	0.00
RECOVERY	Pond 1	76.0014	40.00	0.00
RECOVERY	Pond 1	76.2518	40.00	0.00
RECOVERY	Pond 1	76.5020	40.00	0.00
RECOVERY	Pond 1	76.7537	40.00	0.00
RECOVERY	Pond 1	77.0008	40.00	0.00
RECOVERY	Pond 1	77.2541	40.00	0.00
RECOVERY	Pond 1	77.5012	40.00	0.00
RECOVERY	Pond 1	77.7542	40.00	0.00
RECOVERY	Pond 1	78.0023	40.00	0.00
RECOVERY	Pond 1	78.2543	40.00	0.00
RECOVERY	Pond 1	78.5023	40.00	0.00
RECOVERY	Pond 1	78.7542	40.00	0.00
RECOVERY	Pond 1	79.0074	40.00	0.00
RECOVERY	Pond 1	79.2532	40.00	0.00
RECOVERY	Pond 1	79.5023	40.00	0.00
RECOVERY	Pond 1	79.7506	40.00	0.00
RECOVERY	Pond 1	80.0040	40.00	0.00
RECOVERY	Pond 1	80.2560	40.00	0.00
RECOVERY	Pond 1	80.5008	40.00	0.00
RECOVERY	Pond 1	80.7520	40.00	0.00
RECOVERY	Pond 1	81.0017	40.00	0.00
RECOVERY	Pond 1	81.2505	40.00	0.00
RECOVERY	Pond 1	81.5049	40.00	0.00
RECOVERY	Pond 1	81.7509	40.00	0.00
RECOVERY	Pond 1	82.0030	40.00	0.00
RECOVERY	Pond 1	82.2517	40.00	0.00
RECOVERY	Pond 1	82.5032	40.00	0.00
RECOVERY	Pond 1	82.7524	40.00	0.00
RECOVERY	Pond 1	83.0022	40.00	0.00
RECOVERY	Pond 1	83.2567	40.00	0.00
RECOVERY	Pond 1	83.5039	40.00	0.00
RECOVERY	Pond 1	83.7512	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	84.0025	40.00	0.00
RECOVERY	Pond 1	84.2505	40.00	0.00
RECOVERY	Pond 1	84.5068	40.00	0.00
RECOVERY	Pond 1	84.7530	40.00	0.00
RECOVERY	Pond 1	85.0002	40.00	0.00
RECOVERY	Pond 1	85.2513	40.00	0.00
RECOVERY	Pond 1	85.5037	40.00	0.00
RECOVERY	Pond 1	85.7535	40.00	0.00
RECOVERY	Pond 1	86.0072	40.00	0.00
RECOVERY	Pond 1	86.2505	40.00	0.00
RECOVERY	Pond 1	86.5037	40.00	0.00
RECOVERY	Pond 1	86.7509	40.00	0.00
RECOVERY	Pond 1	87.0052	40.00	0.00
RECOVERY	Pond 1	87.2544	40.00	0.00
RECOVERY	Pond 1	87.5039	40.00	0.00
RECOVERY	Pond 1	87.7541	40.00	0.00
RECOVERY	Pond 1	88.0016	40.00	0.00
RECOVERY	Pond 1	88.2507	40.00	0.00
RECOVERY	Pond 1	88.5063	40.00	0.00
RECOVERY	Pond 1	88.7509	40.00	0.00
RECOVERY	Pond 1	89.0012	40.00	0.00
RECOVERY	Pond 1	89.2513	40.00	0.00
RECOVERY	Pond 1	89.5038	40.00	0.00
RECOVERY	Pond 1	89.7513	40.00	0.00
RECOVERY	Pond 1	90.0035	40.00	0.00
RECOVERY	Pond 1	90.2503	40.00	0.00
RECOVERY	Pond 1	90.5014	40.00	0.00
RECOVERY	Pond 1	90.7530	40.00	0.00
RECOVERY	Pond 1	91.0033	40.00	0.00
RECOVERY	Pond 1	91.2538	40.00	0.00
RECOVERY	Pond 1	91.5048	40.00	0.00
RECOVERY	Pond 1	91.7518	40.00	0.00
RECOVERY	Pond 1	92.0053	40.00	0.00
RECOVERY	Pond 1	92.2524	40.00	0.00
RECOVERY	Pond 1	92.5013	40.00	0.00
RECOVERY	Pond 1	92.7537	40.00	0.00
RECOVERY	Pond 1	93.0072	40.00	0.00
RECOVERY	Pond 1	93.2535	40.00	0.00
RECOVERY	Pond 1	93.5063	40.00	0.00
RECOVERY	Pond 1	93.7509	40.00	0.00
RECOVERY	Pond 1	94.0010	40.00	0.00
RECOVERY	Pond 1	94.2560	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	94.5104	40.00	0.00
RECOVERY	Pond 1	94.7507	40.00	0.00
RECOVERY	Pond 1	95.0011	40.00	0.00
RECOVERY	Pond 1	95.2523	40.00	0.00
RECOVERY	Pond 1	95.5059	40.00	0.00
RECOVERY	Pond 1	95.7536	40.00	0.00
RECOVERY	Pond 1	96.0022	40.00	0.00
RECOVERY	Pond 1	96.2528	40.00	0.00
RECOVERY	Pond 1	96.5046	40.00	0.00
RECOVERY	Pond 1	96.7522	40.00	0.00
RECOVERY	Pond 1	97.0013	40.00	0.00
RECOVERY	Pond 1	97.2554	40.00	0.00
RECOVERY	Pond 1	97.5027	40.00	0.00
RECOVERY	Pond 1	97.7534	40.00	0.00
RECOVERY	Pond 1	98.0035	40.00	0.00
RECOVERY	Pond 1	98.2517	40.00	0.00
RECOVERY	Pond 1	98.5008	40.00	0.00
RECOVERY	Pond 1	98.7501	40.00	0.00
RECOVERY	Pond 1	99.0024	40.00	0.00
RECOVERY	Pond 1	99.2526	40.00	0.00
RECOVERY	Pond 1	99.5063	40.00	0.00
RECOVERY	Pond 1	99.7535	40.00	0.00
RECOVERY	Pond 1	100.0025	40.00	0.00
RECOVERY	Pond 1	100.2548	40.00	0.00
RECOVERY	Pond 1	100.5041	40.00	0.00
RECOVERY	Pond 1	100.7520	40.00	0.00
RECOVERY	Pond 1	101.0065	40.00	0.00
RECOVERY	Pond 1	101.2569	40.00	0.00
RECOVERY	Pond 1	101.5038	40.00	0.00
RECOVERY	Pond 1	101.7506	40.00	0.00
RECOVERY	Pond 1	102.0030	40.00	0.00
RECOVERY	Pond 1	102.2542	40.00	0.00
RECOVERY	Pond 1	102.5014	40.00	0.00
RECOVERY	Pond 1	102.7540	40.00	0.00
RECOVERY	Pond 1	103.0040	40.00	0.00
RECOVERY	Pond 1	103.2558	40.00	0.00
RECOVERY	Pond 1	103.5028	40.00	0.00
RECOVERY	Pond 1	103.7512	40.00	0.00
RECOVERY	Pond 1	104.0032	40.00	0.00
RECOVERY	Pond 1	104.2503	40.00	0.00
RECOVERY	Pond 1	104.5050	40.00	0.00
RECOVERY	Pond 1	104.7545	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	105.0016	40.00	0.00
RECOVERY	Pond 1	105.2542	40.00	0.00
RECOVERY	Pond 1	105.5022	40.00	0.00
RECOVERY	Pond 1	105.7528	40.00	0.00
RECOVERY	Pond 1	106.0002	40.00	0.00
RECOVERY	Pond 1	106.2539	40.00	0.00
RECOVERY	Pond 1	106.5039	40.00	0.00
RECOVERY	Pond 1	106.7527	40.00	0.00
RECOVERY	Pond 1	107.0019	40.00	0.00
RECOVERY	Pond 1	107.2509	40.00	0.00
RECOVERY	Pond 1	107.5039	40.00	0.00
RECOVERY	Pond 1	107.7551	40.00	0.00
RECOVERY	Pond 1	108.0038	40.00	0.00
RECOVERY	Pond 1	108.2512	40.00	0.00
RECOVERY	Pond 1	108.5008	40.00	0.00
RECOVERY	Pond 1	108.7522	40.00	0.00
RECOVERY	Pond 1	109.0028	40.00	0.00
RECOVERY	Pond 1	109.2554	40.00	0.00
RECOVERY	Pond 1	109.5006	40.00	0.00
RECOVERY	Pond 1	109.7517	40.00	0.00
RECOVERY	Pond 1	110.0054	40.00	0.00
RECOVERY	Pond 1	110.2503	40.00	0.00
RECOVERY	Pond 1	110.5041	40.00	0.00
RECOVERY	Pond 1	110.7525	40.00	0.00
RECOVERY	Pond 1	111.0005	40.00	0.00
RECOVERY	Pond 1	111.2532	40.00	0.00
RECOVERY	Pond 1	111.5013	40.00	0.00
RECOVERY	Pond 1	111.7517	40.00	0.00
RECOVERY	Pond 1	112.0020	40.00	0.00
RECOVERY	Pond 1	112.2582	40.00	0.00
RECOVERY	Pond 1	112.5021	40.00	0.00
RECOVERY	Pond 1	112.7529	40.00	0.00
RECOVERY	Pond 1	113.0010	40.00	0.00
RECOVERY	Pond 1	113.2528	40.00	0.00
RECOVERY	Pond 1	113.5022	40.00	0.00
RECOVERY	Pond 1	113.7533	40.00	0.00
RECOVERY	Pond 1	114.0009	40.00	0.00
RECOVERY	Pond 1	114.2504	40.00	0.00
RECOVERY	Pond 1	114.5017	40.00	0.00
RECOVERY	Pond 1	114.7507	40.00	0.00
RECOVERY	Pond 1	115.0046	40.00	0.00
RECOVERY	Pond 1	115.2512	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	115.5036	40.00	0.00
RECOVERY	Pond 1	115.7533	40.00	0.00
RECOVERY	Pond 1	116.0057	40.00	0.00
RECOVERY	Pond 1	116.2516	40.00	0.00
RECOVERY	Pond 1	116.5025	40.00	0.00
RECOVERY	Pond 1	116.7520	40.00	0.00
RECOVERY	Pond 1	117.0059	40.00	0.00
RECOVERY	Pond 1	117.2547	40.00	0.00
RECOVERY	Pond 1	117.5003	40.00	0.00
RECOVERY	Pond 1	117.7521	40.00	0.00
RECOVERY	Pond 1	118.0021	40.00	0.00
RECOVERY	Pond 1	118.2516	40.00	0.00
RECOVERY	Pond 1	118.5029	40.00	0.00
RECOVERY	Pond 1	118.7567	40.00	0.00
RECOVERY	Pond 1	119.0054	40.00	0.00
RECOVERY	Pond 1	119.2505	40.00	0.00
RECOVERY	Pond 1	119.5013	40.00	0.00
RECOVERY	Pond 1	119.7546	40.00	0.00
RECOVERY	Pond 1	120.0011	40.00	0.00
RECOVERY	Pond 2	0.0000	41.10	0.00
RECOVERY	Pond 2	0.2506	40.75	0.32
RECOVERY	Pond 2	0.5003	40.68	0.32
RECOVERY	Pond 2	0.7506	40.62	0.32
RECOVERY	Pond 2	1.0000	40.59	0.32
RECOVERY	Pond 2	1.2509	40.57	0.32
RECOVERY	Pond 2	1.5001	40.55	0.32
RECOVERY	Pond 2	1.7510	40.54	0.10
RECOVERY	Pond 2	2.0026	40.53	0.09
RECOVERY	Pond 2	2.2513	40.52	0.07
RECOVERY	Pond 2	2.5010	40.51	0.06
RECOVERY	Pond 2	2.7501	40.50	0.06
RECOVERY	Pond 2	3.0006	40.49	0.05
RECOVERY	Pond 2	3.2503	40.49	0.04
RECOVERY	Pond 2	3.5032	40.48	0.04
RECOVERY	Pond 2	3.7509	40.47	0.04
RECOVERY	Pond 2	4.0036	40.47	0.04
RECOVERY	Pond 2	4.2515	40.46	0.03
RECOVERY	Pond 2	4.5007	40.46	0.03
RECOVERY	Pond 2	4.7506	40.45	0.03
RECOVERY	Pond 2	5.0034	40.45	0.03
RECOVERY	Pond 2	5.2506	40.44	0.03
RECOVERY	Pond 2	5.5001	40.44	0.03

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	5.7514	40.43	0.02
RECOVERY	Pond 2	6.0001	40.43	0.02
RECOVERY	Pond 2	6.2539	40.42	0.02
RECOVERY	Pond 2	6.5024	40.42	0.02
RECOVERY	Pond 2	6.7536	40.41	0.02
RECOVERY	Pond 2	7.0025	40.41	0.02
RECOVERY	Pond 2	7.2526	40.41	0.02
RECOVERY	Pond 2	7.5022	40.40	0.02
RECOVERY	Pond 2	7.7509	40.40	0.02
RECOVERY	Pond 2	8.0012	40.39	0.02
RECOVERY	Pond 2	8.2529	40.39	0.02
RECOVERY	Pond 2	8.5043	40.39	0.02
RECOVERY	Pond 2	8.7504	40.38	0.02
RECOVERY	Pond 2	9.0037	40.38	0.02
RECOVERY	Pond 2	9.2512	40.38	0.02
RECOVERY	Pond 2	9.5001	40.37	0.02
RECOVERY	Pond 2	9.7515	40.37	0.02
RECOVERY	Pond 2	10.0002	40.36	0.02
RECOVERY	Pond 2	10.2502	40.36	0.02
RECOVERY	Pond 2	10.5008	40.36	0.02
RECOVERY	Pond 2	10.7553	40.35	0.02
RECOVERY	Pond 2	11.0053	40.35	0.02
RECOVERY	Pond 2	11.2547	40.35	0.02
RECOVERY	Pond 2	11.5039	40.35	0.01
RECOVERY	Pond 2	11.7501	40.34	0.01
RECOVERY	Pond 2	12.0022	40.34	0.01
RECOVERY	Pond 2	12.2518	40.34	0.01
RECOVERY	Pond 2	12.5036	40.33	0.01
RECOVERY	Pond 2	12.7510	40.33	0.01
RECOVERY	Pond 2	13.0000	40.33	0.01
RECOVERY	Pond 2	13.2531	40.32	0.01
RECOVERY	Pond 2	13.5018	40.32	0.01
RECOVERY	Pond 2	13.7507	40.32	0.01
RECOVERY	Pond 2	14.0037	40.32	0.01
RECOVERY	Pond 2	14.2539	40.31	0.01
RECOVERY	Pond 2	14.5037	40.31	0.01
RECOVERY	Pond 2	14.7505	40.31	0.01
RECOVERY	Pond 2	15.0045	40.30	0.01
RECOVERY	Pond 2	15.2535	40.30	0.01
RECOVERY	Pond 2	15.5033	40.30	0.01
RECOVERY	Pond 2	15.7518	40.30	0.01
RECOVERY	Pond 2	16.0009	40.29	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	16.2534	40.29	0.01
RECOVERY	Pond 2	16.5040	40.29	0.01
RECOVERY	Pond 2	16.7519	40.29	0.01
RECOVERY	Pond 2	17.0036	40.28	0.01
RECOVERY	Pond 2	17.2514	40.28	0.01
RECOVERY	Pond 2	17.5006	40.28	0.01
RECOVERY	Pond 2	17.7580	40.28	0.01
RECOVERY	Pond 2	18.0023	40.27	0.01
RECOVERY	Pond 2	18.2545	40.27	0.01
RECOVERY	Pond 2	18.5003	40.27	0.01
RECOVERY	Pond 2	18.7519	40.27	0.01
RECOVERY	Pond 2	19.0023	40.27	0.01
RECOVERY	Pond 2	19.2501	40.26	0.01
RECOVERY	Pond 2	19.5012	40.26	0.01
RECOVERY	Pond 2	19.7524	40.26	0.01
RECOVERY	Pond 2	20.0035	40.26	0.01
RECOVERY	Pond 2	20.2536	40.25	0.01
RECOVERY	Pond 2	20.5044	40.25	0.01
RECOVERY	Pond 2	20.7500	40.25	0.01
RECOVERY	Pond 2	21.0043	40.25	0.01
RECOVERY	Pond 2	21.2515	40.25	0.01
RECOVERY	Pond 2	21.5010	40.24	0.01
RECOVERY	Pond 2	21.7511	40.24	0.01
RECOVERY	Pond 2	22.0003	40.24	0.01
RECOVERY	Pond 2	22.2548	40.24	0.01
RECOVERY	Pond 2	22.5027	40.23	0.01
RECOVERY	Pond 2	22.7568	40.23	0.01
RECOVERY	Pond 2	23.0025	40.23	0.01
RECOVERY	Pond 2	23.2534	40.23	0.01
RECOVERY	Pond 2	23.5040	40.23	0.01
RECOVERY	Pond 2	23.7501	40.22	0.01
RECOVERY	Pond 2	24.0009	40.22	0.01
RECOVERY	Pond 2	24.2516	40.22	0.01
RECOVERY	Pond 2	24.5016	40.22	0.01
RECOVERY	Pond 2	24.7532	40.22	0.01
RECOVERY	Pond 2	25.0002	40.21	0.01
RECOVERY	Pond 2	25.2506	40.21	0.01
RECOVERY	Pond 2	25.5037	40.21	0.01
RECOVERY	Pond 2	25.7531	40.21	0.01
RECOVERY	Pond 2	26.0063	40.21	0.01
RECOVERY	Pond 2	26.2590	40.20	0.01
RECOVERY	Pond 2	26.5071	40.20	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	26.7543	40.20	0.01
RECOVERY	Pond 2	27.0066	40.20	0.01
RECOVERY	Pond 2	27.2529	40.20	0.01
RECOVERY	Pond 2	27.5005	40.19	0.01
RECOVERY	Pond 2	27.7509	40.19	0.01
RECOVERY	Pond 2	28.0058	40.19	0.01
RECOVERY	Pond 2	28.2501	40.19	0.01
RECOVERY	Pond 2	28.5018	40.19	0.01
RECOVERY	Pond 2	28.7551	40.19	0.01
RECOVERY	Pond 2	29.0017	40.18	0.01
RECOVERY	Pond 2	29.2553	40.18	0.01
RECOVERY	Pond 2	29.5062	40.18	0.01
RECOVERY	Pond 2	29.7509	40.18	0.01
RECOVERY	Pond 2	30.0084	40.18	0.01
RECOVERY	Pond 2	30.2504	40.18	0.01
RECOVERY	Pond 2	30.5069	40.17	0.01
RECOVERY	Pond 2	30.7572	40.17	0.01
RECOVERY	Pond 2	31.0048	40.17	0.01
RECOVERY	Pond 2	31.2509	40.17	0.01
RECOVERY	Pond 2	31.5063	40.17	0.01
RECOVERY	Pond 2	31.7513	40.16	0.01
RECOVERY	Pond 2	32.0009	40.16	0.01
RECOVERY	Pond 2	32.2502	40.16	0.01
RECOVERY	Pond 2	32.5024	40.16	0.01
RECOVERY	Pond 2	32.7543	40.16	0.01
RECOVERY	Pond 2	33.0020	40.16	0.01
RECOVERY	Pond 2	33.2562	40.15	0.01
RECOVERY	Pond 2	33.5007	40.15	0.01
RECOVERY	Pond 2	33.7505	40.15	0.01
RECOVERY	Pond 2	34.0057	40.15	0.01
RECOVERY	Pond 2	34.2533	40.15	0.01
RECOVERY	Pond 2	34.5098	40.15	0.01
RECOVERY	Pond 2	34.7527	40.14	0.01
RECOVERY	Pond 2	35.0001	40.14	0.01
RECOVERY	Pond 2	35.2570	40.14	0.01
RECOVERY	Pond 2	35.5107	40.14	0.01
RECOVERY	Pond 2	35.7598	40.14	0.01
RECOVERY	Pond 2	36.0040	40.14	0.01
RECOVERY	Pond 2	36.2528	40.14	0.01
RECOVERY	Pond 2	36.5027	40.13	0.01
RECOVERY	Pond 2	36.7544	40.13	0.01
RECOVERY	Pond 2	37.0082	40.13	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	37.2515	40.13	0.01
RECOVERY	Pond 2	37.5050	40.13	0.01
RECOVERY	Pond 2	37.7578	40.13	0.01
RECOVERY	Pond 2	38.0028	40.12	0.01
RECOVERY	Pond 2	38.2500	40.12	0.01
RECOVERY	Pond 2	38.5006	40.12	0.01
RECOVERY	Pond 2	38.7534	40.12	0.01
RECOVERY	Pond 2	39.0062	40.12	0.01
RECOVERY	Pond 2	39.2532	40.12	0.01
RECOVERY	Pond 2	39.5025	40.12	0.01
RECOVERY	Pond 2	39.7512	40.11	0.01
RECOVERY	Pond 2	40.0032	40.11	0.01
RECOVERY	Pond 2	40.2535	40.11	0.01
RECOVERY	Pond 2	40.5023	40.11	0.01
RECOVERY	Pond 2	40.7550	40.11	0.01
RECOVERY	Pond 2	41.0056	40.11	0.01
RECOVERY	Pond 2	41.2574	40.10	0.01
RECOVERY	Pond 2	41.5058	40.10	0.01
RECOVERY	Pond 2	41.7566	40.10	0.01
RECOVERY	Pond 2	42.0041	40.10	0.01
RECOVERY	Pond 2	42.2522	40.10	0.01
RECOVERY	Pond 2	42.5031	40.10	0.01
RECOVERY	Pond 2	42.7517	40.10	0.01
RECOVERY	Pond 2	43.0011	40.09	0.01
RECOVERY	Pond 2	43.2573	40.09	0.01
RECOVERY	Pond 2	43.5045	40.09	0.01
RECOVERY	Pond 2	43.7549	40.09	0.01
RECOVERY	Pond 2	44.0022	40.09	0.01
RECOVERY	Pond 2	44.2506	40.09	0.01
RECOVERY	Pond 2	44.5054	40.09	0.01
RECOVERY	Pond 2	44.7505	40.08	0.01
RECOVERY	Pond 2	45.0072	40.08	0.01
RECOVERY	Pond 2	45.2520	40.08	0.01
RECOVERY	Pond 2	45.5009	40.08	0.01
RECOVERY	Pond 2	45.7538	40.08	0.01
RECOVERY	Pond 2	46.0015	40.08	0.01
RECOVERY	Pond 2	46.2502	40.08	0.01
RECOVERY	Pond 2	46.5029	40.07	0.01
RECOVERY	Pond 2	46.7508	40.07	0.01
RECOVERY	Pond 2	47.0005	40.07	0.01
RECOVERY	Pond 2	47.2537	40.07	0.01
RECOVERY	Pond 2	47.5043	40.07	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	47.7561	40.07	0.01
RECOVERY	Pond 2	48.0094	40.07	0.01
RECOVERY	Pond 2	48.2507	40.07	0.01
RECOVERY	Pond 2	48.5043	40.06	0.01
RECOVERY	Pond 2	48.7500	40.06	0.01
RECOVERY	Pond 2	49.0008	40.06	0.01
RECOVERY	Pond 2	49.2513	40.06	0.01
RECOVERY	Pond 2	49.5033	40.06	0.01
RECOVERY	Pond 2	49.7518	40.06	0.01
RECOVERY	Pond 2	50.0039	40.06	0.01
RECOVERY	Pond 2	50.2533	40.05	0.01
RECOVERY	Pond 2	50.5023	40.05	0.01
RECOVERY	Pond 2	50.7528	40.05	0.01
RECOVERY	Pond 2	51.0020	40.05	0.01
RECOVERY	Pond 2	51.2547	40.05	0.01
RECOVERY	Pond 2	51.5020	40.05	0.01
RECOVERY	Pond 2	51.7504	40.05	0.01
RECOVERY	Pond 2	52.0024	40.04	0.01
RECOVERY	Pond 2	52.2537	40.04	0.01
RECOVERY	Pond 2	52.5045	40.04	0.01
RECOVERY	Pond 2	52.7526	40.04	0.01
RECOVERY	Pond 2	53.0059	40.04	0.01
RECOVERY	Pond 2	53.2521	40.04	0.01
RECOVERY	Pond 2	53.5037	40.04	0.01
RECOVERY	Pond 2	53.7560	40.03	0.01
RECOVERY	Pond 2	54.0015	40.03	0.01
RECOVERY	Pond 2	54.2523	40.03	0.01
RECOVERY	Pond 2	54.5007	40.03	0.01
RECOVERY	Pond 2	54.7511	40.03	0.01
RECOVERY	Pond 2	55.0066	40.03	0.01
RECOVERY	Pond 2	55.2511	40.03	0.01
RECOVERY	Pond 2	55.5018	40.02	0.01
RECOVERY	Pond 2	55.7546	40.02	0.01
RECOVERY	Pond 2	56.0049	40.02	0.01
RECOVERY	Pond 2	56.2505	40.02	0.01
RECOVERY	Pond 2	56.5047	40.02	0.01
RECOVERY	Pond 2	56.7556	40.02	0.01
RECOVERY	Pond 2	57.0017	40.02	0.01
RECOVERY	Pond 2	57.2509	40.01	0.01
RECOVERY	Pond 2	57.5000	40.01	0.01
RECOVERY	Pond 2	57.7510	40.01	0.01
RECOVERY	Pond 2	58.0043	40.01	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	58.2516	40.01	0.00
RECOVERY	Pond 2	58.5070	40.01	0.00
RECOVERY	Pond 2	58.7510	40.01	0.00
RECOVERY	Pond 2	59.0039	40.01	0.00
RECOVERY	Pond 2	59.2515	40.00	0.00
RECOVERY	Pond 2	59.5012	40.00	0.00
RECOVERY	Pond 2	59.7567	40.00	0.00
RECOVERY	Pond 2	60.0038	40.00	0.00
RECOVERY	Pond 2	60.2557	40.00	0.00
RECOVERY	Pond 2	60.5019	40.00	0.00
RECOVERY	Pond 2	60.7551	40.00	0.00
RECOVERY	Pond 2	61.0023	40.00	0.00
RECOVERY	Pond 2	61.2552	40.00	0.00
RECOVERY	Pond 2	61.5026	40.00	0.00
RECOVERY	Pond 2	61.7544	40.00	0.00
RECOVERY	Pond 2	62.0015	40.00	0.00
RECOVERY	Pond 2	62.2534	40.00	0.00
RECOVERY	Pond 2	62.5025	40.00	0.00
RECOVERY	Pond 2	62.7537	40.00	0.00
RECOVERY	Pond 2	63.0021	40.00	0.00
RECOVERY	Pond 2	63.2546	40.00	0.00
RECOVERY	Pond 2	63.5039	40.00	0.00
RECOVERY	Pond 2	63.7504	40.00	0.00
RECOVERY	Pond 2	64.0005	40.00	0.00
RECOVERY	Pond 2	64.2520	40.00	0.00
RECOVERY	Pond 2	64.5042	40.00	0.00
RECOVERY	Pond 2	64.7517	40.00	0.00
RECOVERY	Pond 2	65.0050	40.00	0.00
RECOVERY	Pond 2	65.2576	40.00	0.00
RECOVERY	Pond 2	65.5005	40.00	0.00
RECOVERY	Pond 2	65.7530	40.00	0.00
RECOVERY	Pond 2	66.0037	40.00	0.00
RECOVERY	Pond 2	66.2567	40.00	0.00
RECOVERY	Pond 2	66.5031	40.00	0.00
RECOVERY	Pond 2	66.7552	40.00	0.00
RECOVERY	Pond 2	67.0034	40.00	0.00
RECOVERY	Pond 2	67.2515	40.00	0.00
RECOVERY	Pond 2	67.5013	40.00	0.00
RECOVERY	Pond 2	67.7505	40.00	0.00
RECOVERY	Pond 2	68.0044	40.00	0.00
RECOVERY	Pond 2	68.2517	40.00	0.00
RECOVERY	Pond 2	68.5040	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	68.7553	40.00	0.00
RECOVERY	Pond 2	69.0061	40.00	0.00
RECOVERY	Pond 2	69.2535	40.00	0.00
RECOVERY	Pond 2	69.5009	40.00	0.00
RECOVERY	Pond 2	69.7577	40.00	0.00
RECOVERY	Pond 2	70.0009	40.00	0.00
RECOVERY	Pond 2	70.2528	40.00	0.00
RECOVERY	Pond 2	70.5051	40.00	0.00
RECOVERY	Pond 2	70.7525	40.00	0.00
RECOVERY	Pond 2	71.0003	40.00	0.00
RECOVERY	Pond 2	71.2550	40.00	0.00
RECOVERY	Pond 2	71.5005	40.00	0.00
RECOVERY	Pond 2	71.7556	40.00	0.00
RECOVERY	Pond 2	72.0006	40.00	0.00
RECOVERY	Pond 2	72.2524	40.00	0.00
RECOVERY	Pond 2	72.5040	40.00	0.00
RECOVERY	Pond 2	72.7569	40.00	0.00
RECOVERY	Pond 2	73.0019	40.00	0.00
RECOVERY	Pond 2	73.2550	40.00	0.00
RECOVERY	Pond 2	73.5028	40.00	0.00
RECOVERY	Pond 2	73.7513	40.00	0.00
RECOVERY	Pond 2	74.0023	40.00	0.00
RECOVERY	Pond 2	74.2544	40.00	0.00
RECOVERY	Pond 2	74.5030	40.00	0.00
RECOVERY	Pond 2	74.7535	40.00	0.00
RECOVERY	Pond 2	75.0004	40.00	0.00
RECOVERY	Pond 2	75.2524	40.00	0.00
RECOVERY	Pond 2	75.5008	40.00	0.00
RECOVERY	Pond 2	75.7504	40.00	0.00
RECOVERY	Pond 2	76.0014	40.00	0.00
RECOVERY	Pond 2	76.2518	40.00	0.00
RECOVERY	Pond 2	76.5020	40.00	0.00
RECOVERY	Pond 2	76.7537	40.00	0.00
RECOVERY	Pond 2	77.0008	40.00	0.00
RECOVERY	Pond 2	77.2541	40.00	0.00
RECOVERY	Pond 2	77.5012	40.00	0.00
RECOVERY	Pond 2	77.7542	40.00	0.00
RECOVERY	Pond 2	78.0023	40.00	0.00
RECOVERY	Pond 2	78.2543	40.00	0.00
RECOVERY	Pond 2	78.5023	40.00	0.00
RECOVERY	Pond 2	78.7542	40.00	0.00
RECOVERY	Pond 2	79.0074	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	79.2532	40.00	0.00
RECOVERY	Pond 2	79.5023	40.00	0.00
RECOVERY	Pond 2	79.7506	40.00	0.00
RECOVERY	Pond 2	80.0040	40.00	0.00
RECOVERY	Pond 2	80.2560	40.00	0.00
RECOVERY	Pond 2	80.5008	40.00	0.00
RECOVERY	Pond 2	80.7520	40.00	0.00
RECOVERY	Pond 2	81.0017	40.00	0.00
RECOVERY	Pond 2	81.2505	40.00	0.00
RECOVERY	Pond 2	81.5049	40.00	0.00
RECOVERY	Pond 2	81.7509	40.00	0.00
RECOVERY	Pond 2	82.0030	40.00	0.00
RECOVERY	Pond 2	82.2517	40.00	0.00
RECOVERY	Pond 2	82.5032	40.00	0.00
RECOVERY	Pond 2	82.7524	40.00	0.00
RECOVERY	Pond 2	83.0022	40.00	0.00
RECOVERY	Pond 2	83.2567	40.00	0.00
RECOVERY	Pond 2	83.5039	40.00	0.00
RECOVERY	Pond 2	83.7512	40.00	0.00
RECOVERY	Pond 2	84.0025	40.00	0.00
RECOVERY	Pond 2	84.2505	40.00	0.00
RECOVERY	Pond 2	84.5068	40.00	0.00
RECOVERY	Pond 2	84.7530	40.00	0.00
RECOVERY	Pond 2	85.0002	40.00	0.00
RECOVERY	Pond 2	85.2513	40.00	0.00
RECOVERY	Pond 2	85.5037	40.00	0.00
RECOVERY	Pond 2	85.7535	40.00	0.00
RECOVERY	Pond 2	86.0072	40.00	0.00
RECOVERY	Pond 2	86.2505	40.00	0.00
RECOVERY	Pond 2	86.5037	40.00	0.00
RECOVERY	Pond 2	86.7509	40.00	0.00
RECOVERY	Pond 2	87.0052	40.00	0.00
RECOVERY	Pond 2	87.2544	40.00	0.00
RECOVERY	Pond 2	87.5039	40.00	0.00
RECOVERY	Pond 2	87.7541	40.00	0.00
RECOVERY	Pond 2	88.0016	40.00	0.00
RECOVERY	Pond 2	88.2507	40.00	0.00
RECOVERY	Pond 2	88.5063	40.00	0.00
RECOVERY	Pond 2	88.7509	40.00	0.00
RECOVERY	Pond 2	89.0012	40.00	0.00
RECOVERY	Pond 2	89.2513	40.00	0.00
RECOVERY	Pond 2	89.5038	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	89.7513	40.00	0.00
RECOVERY	Pond 2	90.0035	40.00	0.00
RECOVERY	Pond 2	90.2503	40.00	0.00
RECOVERY	Pond 2	90.5014	40.00	0.00
RECOVERY	Pond 2	90.7530	40.00	0.00
RECOVERY	Pond 2	91.0033	40.00	0.00
RECOVERY	Pond 2	91.2538	40.00	0.00
RECOVERY	Pond 2	91.5048	40.00	0.00
RECOVERY	Pond 2	91.7518	40.00	0.00
RECOVERY	Pond 2	92.0053	40.00	0.00
RECOVERY	Pond 2	92.2524	40.00	0.00
RECOVERY	Pond 2	92.5013	40.00	0.00
RECOVERY	Pond 2	92.7537	40.00	0.00
RECOVERY	Pond 2	93.0072	40.00	0.00
RECOVERY	Pond 2	93.2535	40.00	0.00
RECOVERY	Pond 2	93.5063	40.00	0.00
RECOVERY	Pond 2	93.7509	40.00	0.00
RECOVERY	Pond 2	94.0010	40.00	0.00
RECOVERY	Pond 2	94.2560	40.00	0.00
RECOVERY	Pond 2	94.5104	40.00	0.00
RECOVERY	Pond 2	94.7507	40.00	0.00
RECOVERY	Pond 2	95.0011	40.00	0.00
RECOVERY	Pond 2	95.2523	40.00	0.00
RECOVERY	Pond 2	95.5059	40.00	0.00
RECOVERY	Pond 2	95.7536	40.00	0.00
RECOVERY	Pond 2	96.0022	40.00	0.00
RECOVERY	Pond 2	96.2528	40.00	0.00
RECOVERY	Pond 2	96.5046	40.00	0.00
RECOVERY	Pond 2	96.7522	40.00	0.00
RECOVERY	Pond 2	97.0013	40.00	0.00
RECOVERY	Pond 2	97.2554	40.00	0.00
RECOVERY	Pond 2	97.5027	40.00	0.00
RECOVERY	Pond 2	97.7534	40.00	0.00
RECOVERY	Pond 2	98.0035	40.00	0.00
RECOVERY	Pond 2	98.2517	40.00	0.00
RECOVERY	Pond 2	98.5008	40.00	0.00
RECOVERY	Pond 2	98.7501	40.00	0.00
RECOVERY	Pond 2	99.0024	40.00	0.00
RECOVERY	Pond 2	99.2526	40.00	0.00
RECOVERY	Pond 2	99.5063	40.00	0.00
RECOVERY	Pond 2	99.7535	40.00	0.00
RECOVERY	Pond 2	100.0025	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	100.2548	40.00	0.00
RECOVERY	Pond 2	100.5041	40.00	0.00
RECOVERY	Pond 2	100.7520	40.00	0.00
RECOVERY	Pond 2	101.0065	40.00	0.00
RECOVERY	Pond 2	101.2569	40.00	0.00
RECOVERY	Pond 2	101.5038	40.00	0.00
RECOVERY	Pond 2	101.7506	40.00	0.00
RECOVERY	Pond 2	102.0030	40.00	0.00
RECOVERY	Pond 2	102.2542	40.00	0.00
RECOVERY	Pond 2	102.5014	40.00	0.00
RECOVERY	Pond 2	102.7540	40.00	0.00
RECOVERY	Pond 2	103.0040	40.00	0.00
RECOVERY	Pond 2	103.2558	40.00	0.00
RECOVERY	Pond 2	103.5028	40.00	0.00
RECOVERY	Pond 2	103.7512	40.00	0.00
RECOVERY	Pond 2	104.0032	40.00	0.00
RECOVERY	Pond 2	104.2503	40.00	0.00
RECOVERY	Pond 2	104.5050	40.00	0.00
RECOVERY	Pond 2	104.7545	40.00	0.00
RECOVERY	Pond 2	105.0016	40.00	0.00
RECOVERY	Pond 2	105.2542	40.00	0.00
RECOVERY	Pond 2	105.5022	40.00	0.00
RECOVERY	Pond 2	105.7528	40.00	0.00
RECOVERY	Pond 2	106.0002	40.00	0.00
RECOVERY	Pond 2	106.2539	40.00	0.00
RECOVERY	Pond 2	106.5039	40.00	0.00
RECOVERY	Pond 2	106.7527	40.00	0.00
RECOVERY	Pond 2	107.0019	40.00	0.00
RECOVERY	Pond 2	107.2509	40.00	0.00
RECOVERY	Pond 2	107.5039	40.00	0.00
RECOVERY	Pond 2	107.7551	40.00	0.00
RECOVERY	Pond 2	108.0038	40.00	0.00
RECOVERY	Pond 2	108.2512	40.00	0.00
RECOVERY	Pond 2	108.5008	40.00	0.00
RECOVERY	Pond 2	108.7522	40.00	0.00
RECOVERY	Pond 2	109.0028	40.00	0.00
RECOVERY	Pond 2	109.2554	40.00	0.00
RECOVERY	Pond 2	109.5006	40.00	0.00
RECOVERY	Pond 2	109.7517	40.00	0.00
RECOVERY	Pond 2	110.0054	40.00	0.00
RECOVERY	Pond 2	110.2503	40.00	0.00
RECOVERY	Pond 2	110.5041	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	110.7525	40.00	0.00
RECOVERY	Pond 2	111.0005	40.00	0.00
RECOVERY	Pond 2	111.2532	40.00	0.00
RECOVERY	Pond 2	111.5013	40.00	0.00
RECOVERY	Pond 2	111.7517	40.00	0.00
RECOVERY	Pond 2	112.0020	40.00	0.00
RECOVERY	Pond 2	112.2582	40.00	0.00
RECOVERY	Pond 2	112.5021	40.00	0.00
RECOVERY	Pond 2	112.7529	40.00	0.00
RECOVERY	Pond 2	113.0010	40.00	0.00
RECOVERY	Pond 2	113.2528	40.00	0.00
RECOVERY	Pond 2	113.5022	40.00	0.00
RECOVERY	Pond 2	113.7533	40.00	0.00
RECOVERY	Pond 2	114.0009	40.00	0.00
RECOVERY	Pond 2	114.2504	40.00	0.00
RECOVERY	Pond 2	114.5017	40.00	0.00
RECOVERY	Pond 2	114.7507	40.00	0.00
RECOVERY	Pond 2	115.0046	40.00	0.00
RECOVERY	Pond 2	115.2512	40.00	0.00
RECOVERY	Pond 2	115.5036	40.00	0.00
RECOVERY	Pond 2	115.7533	40.00	0.00
RECOVERY	Pond 2	116.0057	40.00	0.00
RECOVERY	Pond 2	116.2516	40.00	0.00
RECOVERY	Pond 2	116.5025	40.00	0.00
RECOVERY	Pond 2	116.7520	40.00	0.00
RECOVERY	Pond 2	117.0059	40.00	0.00
RECOVERY	Pond 2	117.2547	40.00	0.00
RECOVERY	Pond 2	117.5003	40.00	0.00
RECOVERY	Pond 2	117.7521	40.00	0.00
RECOVERY	Pond 2	118.0021	40.00	0.00
RECOVERY	Pond 2	118.2516	40.00	0.00
RECOVERY	Pond 2	118.5029	40.00	0.00
RECOVERY	Pond 2	118.7567	40.00	0.00
RECOVERY	Pond 2	119.0054	40.00	0.00
RECOVERY	Pond 2	119.2505	40.00	0.00
RECOVERY	Pond 2	119.5013	40.00	0.00
RECOVERY	Pond 2	119.7546	40.00	0.00
RECOVERY	Pond 2	120.0011	40.00	0.00
RECOVERY	STORM CHAMBER	0.0000	41.10	0.00
RECOVERY	STORM CHAMBER	0.2506	40.75	1.29
RECOVERY	STORM CHAMBER	0.5003	40.68	1.12
RECOVERY	STORM CHAMBER	0.7506	40.62	0.60

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	1.0000	40.60	0.54
RECOVERY	STORM CHAMBER	1.2509	40.58	0.38
RECOVERY	STORM CHAMBER	1.5001	40.56	0.43
RECOVERY	STORM CHAMBER	1.7510	40.54	0.27
RECOVERY	STORM CHAMBER	2.0026	40.53	0.22
RECOVERY	STORM CHAMBER	2.2513	40.52	0.22
RECOVERY	STORM CHAMBER	2.5010	40.51	0.19
RECOVERY	STORM CHAMBER	2.7501	40.50	0.18
RECOVERY	STORM CHAMBER	3.0006	40.50	0.17
RECOVERY	STORM CHAMBER	3.2503	40.49	0.16
RECOVERY	STORM CHAMBER	3.5032	40.48	0.15
RECOVERY	STORM CHAMBER	3.7509	40.48	0.14
RECOVERY	STORM CHAMBER	4.0036	40.47	0.14
RECOVERY	STORM CHAMBER	4.2515	40.46	0.13
RECOVERY	STORM CHAMBER	4.5007	40.46	0.13
RECOVERY	STORM CHAMBER	4.7506	40.45	0.12
RECOVERY	STORM CHAMBER	5.0034	40.45	0.12
RECOVERY	STORM CHAMBER	5.2506	40.44	0.11
RECOVERY	STORM CHAMBER	5.5001	40.44	0.11
RECOVERY	STORM CHAMBER	5.7514	40.43	0.11
RECOVERY	STORM CHAMBER	6.0001	40.43	0.10
RECOVERY	STORM CHAMBER	6.2539	40.42	0.10
RECOVERY	STORM CHAMBER	6.5024	40.42	0.10
RECOVERY	STORM CHAMBER	6.7536	40.41	0.10
RECOVERY	STORM CHAMBER	7.0025	40.41	0.09
RECOVERY	STORM CHAMBER	7.2526	40.41	0.09
RECOVERY	STORM CHAMBER	7.5022	40.40	0.09
RECOVERY	STORM CHAMBER	7.7509	40.40	0.09
RECOVERY	STORM CHAMBER	8.0012	40.39	0.08
RECOVERY	STORM CHAMBER	8.2529	40.39	0.08
RECOVERY	STORM CHAMBER	8.5043	40.39	0.08
RECOVERY	STORM CHAMBER	8.7504	40.38	0.08
RECOVERY	STORM CHAMBER	9.0037	40.38	0.08
RECOVERY	STORM CHAMBER	9.2512	40.38	0.08
RECOVERY	STORM CHAMBER	9.5001	40.37	0.08
RECOVERY	STORM CHAMBER	9.7515	40.37	0.07
RECOVERY	STORM CHAMBER	10.0002	40.37	0.07
RECOVERY	STORM CHAMBER	10.2502	40.36	0.07
RECOVERY	STORM CHAMBER	10.5008	40.36	0.07
RECOVERY	STORM CHAMBER	10.7553	40.36	0.07
RECOVERY	STORM CHAMBER	11.0053	40.35	0.07
RECOVERY	STORM CHAMBER	11.2547	40.35	0.07

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	11.5039	40.35	0.07
RECOVERY	STORM CHAMBER	11.7501	40.34	0.07
RECOVERY	STORM CHAMBER	12.0022	40.34	0.07
RECOVERY	STORM CHAMBER	12.2518	40.34	0.06
RECOVERY	STORM CHAMBER	12.5036	40.33	0.06
RECOVERY	STORM CHAMBER	12.7510	40.33	0.06
RECOVERY	STORM CHAMBER	13.0000	40.33	0.06
RECOVERY	STORM CHAMBER	13.2531	40.33	0.06
RECOVERY	STORM CHAMBER	13.5018	40.32	0.06
RECOVERY	STORM CHAMBER	13.7507	40.32	0.06
RECOVERY	STORM CHAMBER	14.0037	40.32	0.06
RECOVERY	STORM CHAMBER	14.2539	40.31	0.06
RECOVERY	STORM CHAMBER	14.5037	40.31	0.06
RECOVERY	STORM CHAMBER	14.7505	40.31	0.06
RECOVERY	STORM CHAMBER	15.0045	40.31	0.06
RECOVERY	STORM CHAMBER	15.2535	40.30	0.06
RECOVERY	STORM CHAMBER	15.5033	40.30	0.06
RECOVERY	STORM CHAMBER	15.7518	40.30	0.05
RECOVERY	STORM CHAMBER	16.0009	40.30	0.05
RECOVERY	STORM CHAMBER	16.2534	40.29	0.05
RECOVERY	STORM CHAMBER	16.5040	40.29	0.05
RECOVERY	STORM CHAMBER	16.7519	40.29	0.05
RECOVERY	STORM CHAMBER	17.0036	40.29	0.05
RECOVERY	STORM CHAMBER	17.2514	40.28	0.05
RECOVERY	STORM CHAMBER	17.5006	40.28	0.05
RECOVERY	STORM CHAMBER	17.7580	40.28	0.05
RECOVERY	STORM CHAMBER	18.0023	40.28	0.05
RECOVERY	STORM CHAMBER	18.2545	40.27	0.05
RECOVERY	STORM CHAMBER	18.5003	40.27	0.05
RECOVERY	STORM CHAMBER	18.7519	40.27	0.05
RECOVERY	STORM CHAMBER	19.0023	40.27	0.05
RECOVERY	STORM CHAMBER	19.2501	40.26	0.05
RECOVERY	STORM CHAMBER	19.5012	40.26	0.05
RECOVERY	STORM CHAMBER	19.7524	40.26	0.05
RECOVERY	STORM CHAMBER	20.0035	40.26	0.05
RECOVERY	STORM CHAMBER	20.2536	40.25	0.05
RECOVERY	STORM CHAMBER	20.5044	40.25	0.04
RECOVERY	STORM CHAMBER	20.7500	40.25	0.05
RECOVERY	STORM CHAMBER	21.0043	40.25	0.04
RECOVERY	STORM CHAMBER	21.2515	40.25	0.04
RECOVERY	STORM CHAMBER	21.5010	40.24	0.04
RECOVERY	STORM CHAMBER	21.7511	40.24	0.04

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	22.0003	40.24	0.04
RECOVERY	STORM CHAMBER	22.2548	40.24	0.04
RECOVERY	STORM CHAMBER	22.5027	40.24	0.04
RECOVERY	STORM CHAMBER	22.7568	40.23	0.04
RECOVERY	STORM CHAMBER	23.0025	40.23	0.04
RECOVERY	STORM CHAMBER	23.2534	40.23	0.04
RECOVERY	STORM CHAMBER	23.5040	40.23	0.04
RECOVERY	STORM CHAMBER	23.7501	40.22	0.04
RECOVERY	STORM CHAMBER	24.0009	40.22	0.04
RECOVERY	STORM CHAMBER	24.2516	40.22	0.04
RECOVERY	STORM CHAMBER	24.5016	40.22	0.04
RECOVERY	STORM CHAMBER	24.7532	40.22	0.04
RECOVERY	STORM CHAMBER	25.0002	40.21	0.04
RECOVERY	STORM CHAMBER	25.2506	40.21	0.04
RECOVERY	STORM CHAMBER	25.5037	40.21	0.04
RECOVERY	STORM CHAMBER	25.7531	40.21	0.04
RECOVERY	STORM CHAMBER	26.0063	40.21	0.04
RECOVERY	STORM CHAMBER	26.2590	40.20	0.04
RECOVERY	STORM CHAMBER	26.5071	40.20	0.04
RECOVERY	STORM CHAMBER	26.7543	40.20	0.04
RECOVERY	STORM CHAMBER	27.0066	40.20	0.04
RECOVERY	STORM CHAMBER	27.2529	40.20	0.04
RECOVERY	STORM CHAMBER	27.5005	40.20	0.04
RECOVERY	STORM CHAMBER	27.7509	40.19	0.04
RECOVERY	STORM CHAMBER	28.0058	40.19	0.04
RECOVERY	STORM CHAMBER	28.2501	40.19	0.04
RECOVERY	STORM CHAMBER	28.5018	40.19	0.04
RECOVERY	STORM CHAMBER	28.7551	40.19	0.04
RECOVERY	STORM CHAMBER	29.0017	40.18	0.04
RECOVERY	STORM CHAMBER	29.2553	40.18	0.03
RECOVERY	STORM CHAMBER	29.5062	40.18	0.03
RECOVERY	STORM CHAMBER	29.7509	40.18	0.04
RECOVERY	STORM CHAMBER	30.0084	40.18	0.04
RECOVERY	STORM CHAMBER	30.2504	40.18	0.03
RECOVERY	STORM CHAMBER	30.5069	40.17	0.03
RECOVERY	STORM CHAMBER	30.7572	40.17	0.03
RECOVERY	STORM CHAMBER	31.0048	40.17	0.03
RECOVERY	STORM CHAMBER	31.2509	40.17	0.03
RECOVERY	STORM CHAMBER	31.5063	40.17	0.03
RECOVERY	STORM CHAMBER	31.7513	40.17	0.03
RECOVERY	STORM CHAMBER	32.0009	40.16	0.03
RECOVERY	STORM CHAMBER	32.2502	40.16	0.03

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	32.5024	40.16	0.03
RECOVERYS	TORM CHAMBER	32.7543	40.16	0.03
RECOVERYS	TORM CHAMBER	33.0020	40.16	0.03
RECOVERYS	TORM CHAMBER	33.2562	40.16	0.03
RECOVERYS	TORM CHAMBER	33.5007	40.15	0.03
RECOVERYS	TORM CHAMBER	33.7505	40.15	0.03
RECOVERYS	TORM CHAMBER	34.0057	40.15	0.03
RECOVERYS	TORM CHAMBER	34.2533	40.15	0.03
RECOVERYS	TORM CHAMBER	34.5098	40.15	0.03
RECOVERYS	TORM CHAMBER	34.7527	40.15	0.03
RECOVERYS	TORM CHAMBER	35.0001	40.14	0.03
RECOVERYS	TORM CHAMBER	35.2570	40.14	0.03
RECOVERYS	TORM CHAMBER	35.5107	40.14	0.03
RECOVERYS	TORM CHAMBER	35.7598	40.14	0.03
RECOVERYS	TORM CHAMBER	36.0040	40.14	0.03
RECOVERYS	TORM CHAMBER	36.2528	40.14	0.03
RECOVERYS	TORM CHAMBER	36.5027	40.13	0.03
RECOVERYS	TORM CHAMBER	36.7544	40.13	0.03
RECOVERYS	TORM CHAMBER	37.0082	40.13	0.03
RECOVERYS	TORM CHAMBER	37.2515	40.13	0.03
RECOVERYS	TORM CHAMBER	37.5050	40.13	0.03
RECOVERYS	TORM CHAMBER	37.7578	40.13	0.03
RECOVERYS	TORM CHAMBER	38.0028	40.12	0.03
RECOVERYS	TORM CHAMBER	38.2500	40.12	0.03
RECOVERYS	TORM CHAMBER	38.5006	40.12	0.03
RECOVERYS	TORM CHAMBER	38.7534	40.12	0.03
RECOVERYS	TORM CHAMBER	39.0062	40.12	0.03
RECOVERYS	TORM CHAMBER	39.2532	40.12	0.03
RECOVERYS	TORM CHAMBER	39.5025	40.12	0.03
RECOVERYS	TORM CHAMBER	39.7512	40.11	0.03
RECOVERYS	TORM CHAMBER	40.0032	40.11	0.03
RECOVERYS	TORM CHAMBER	40.2535	40.11	0.03
RECOVERYS	TORM CHAMBER	40.5023	40.11	0.03
RECOVERYS	TORM CHAMBER	40.7550	40.11	0.03
RECOVERYS	TORM CHAMBER	41.0056	40.11	0.03
RECOVERYS	TORM CHAMBER	41.2574	40.11	0.03
RECOVERYS	TORM CHAMBER	41.5058	40.10	0.03
RECOVERYS	TORM CHAMBER	41.7566	40.10	0.03
RECOVERYS	TORM CHAMBER	42.0041	40.10	0.03
RECOVERYS	TORM CHAMBER	42.2522	40.10	0.03
RECOVERYS	TORM CHAMBER	42.5031	40.10	0.03
RECOVERYS	TORM CHAMBER	42.7517	40.10	0.03

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	43.0011	40.10	0.03
RECOVERYS	TORM CHAMBER	43.2573	40.09	0.03
RECOVERYS	TORM CHAMBER	43.5045	40.09	0.03
RECOVERYS	TORM CHAMBER	43.7549	40.09	0.03
RECOVERYS	TORM CHAMBER	44.0022	40.09	0.03
RECOVERYS	TORM CHAMBER	44.2506	40.09	0.03
RECOVERYS	TORM CHAMBER	44.5054	40.09	0.03
RECOVERYS	TORM CHAMBER	44.7505	40.09	0.03
RECOVERYS	TORM CHAMBER	45.0072	40.08	0.03
RECOVERYS	TORM CHAMBER	45.2520	40.08	0.03
RECOVERYS	TORM CHAMBER	45.5009	40.08	0.03
RECOVERYS	TORM CHAMBER	45.7538	40.08	0.03
RECOVERYS	TORM CHAMBER	46.0015	40.08	0.02
RECOVERYS	TORM CHAMBER	46.2502	40.08	0.02
RECOVERYS	TORM CHAMBER	46.5029	40.08	0.02
RECOVERYS	TORM CHAMBER	46.7508	40.07	0.02
RECOVERYS	TORM CHAMBER	47.0005	40.07	0.02
RECOVERYS	TORM CHAMBER	47.2537	40.07	0.02
RECOVERYS	TORM CHAMBER	47.5043	40.07	0.02
RECOVERYS	TORM CHAMBER	47.7561	40.07	0.02
RECOVERYS	TORM CHAMBER	48.0094	40.07	0.02
RECOVERYS	TORM CHAMBER	48.2507	40.07	0.02
RECOVERYS	TORM CHAMBER	48.5043	40.06	0.02
RECOVERYS	TORM CHAMBER	48.7500	40.06	0.02
RECOVERYS	TORM CHAMBER	49.0008	40.06	0.02
RECOVERYS	TORM CHAMBER	49.2513	40.06	0.02
RECOVERYS	TORM CHAMBER	49.5033	40.06	0.02
RECOVERYS	TORM CHAMBER	49.7518	40.06	0.02
RECOVERYS	TORM CHAMBER	50.0039	40.06	0.02
RECOVERYS	TORM CHAMBER	50.2533	40.05	0.02
RECOVERYS	TORM CHAMBER	50.5023	40.05	0.02
RECOVERYS	TORM CHAMBER	50.7528	40.05	0.02
RECOVERYS	TORM CHAMBER	51.0020	40.05	0.02
RECOVERYS	TORM CHAMBER	51.2547	40.05	0.02
RECOVERYS	TORM CHAMBER	51.5020	40.05	0.02
RECOVERYS	TORM CHAMBER	51.7504	40.05	0.02
RECOVERYS	TORM CHAMBER	52.0024	40.04	0.02
RECOVERYS	TORM CHAMBER	52.2537	40.04	0.02
RECOVERYS	TORM CHAMBER	52.5045	40.04	0.02
RECOVERYS	TORM CHAMBER	52.7526	40.04	0.02
RECOVERYS	TORM CHAMBER	53.0059	40.04	0.02
RECOVERYS	TORM CHAMBER	53.2521	40.04	0.02

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	53.5037	40.04	0.02
RECOVERYS	TORM CHAMBER	53.7560	40.03	0.02
RECOVERYS	TORM CHAMBER	54.0015	40.03	0.02
RECOVERYS	TORM CHAMBER	54.2523	40.03	0.02
RECOVERYS	TORM CHAMBER	54.5007	40.03	0.02
RECOVERYS	TORM CHAMBER	54.7511	40.03	0.02
RECOVERYS	TORM CHAMBER	55.0066	40.03	0.02
RECOVERYS	TORM CHAMBER	55.2511	40.02	0.02
RECOVERYS	TORM CHAMBER	55.5018	40.02	0.02
RECOVERYS	TORM CHAMBER	55.7546	40.02	0.02
RECOVERYS	TORM CHAMBER	56.0049	40.02	0.02
RECOVERYS	TORM CHAMBER	56.2505	40.02	0.02
RECOVERYS	TORM CHAMBER	56.5047	40.02	0.02
RECOVERYS	TORM CHAMBER	56.7556	40.01	0.02
RECOVERYS	TORM CHAMBER	57.0017	40.01	0.02
RECOVERYS	TORM CHAMBER	57.2509	40.01	0.02
RECOVERYS	TORM CHAMBER	57.5000	40.01	0.02
RECOVERYS	TORM CHAMBER	57.7510	40.01	0.02
RECOVERYS	TORM CHAMBER	58.0043	40.01	0.02
RECOVERYS	TORM CHAMBER	58.2516	40.00	0.02
RECOVERYS	TORM CHAMBER	58.5070	40.00	0.02
RECOVERYS	TORM CHAMBER	58.7510	40.00	0.02
RECOVERYS	TORM CHAMBER	59.0039	40.00	0.02
RECOVERYS	TORM CHAMBER	59.2515	40.00	0.02
RECOVERYS	TORM CHAMBER	59.5012	40.00	0.02
RECOVERYS	TORM CHAMBER	59.7567	39.99	0.02
RECOVERYS	TORM CHAMBER	60.0038	39.99	0.02
RECOVERYS	TORM CHAMBER	60.2557	39.99	0.02
RECOVERYS	TORM CHAMBER	60.5019	39.99	0.02
RECOVERYS	TORM CHAMBER	60.7551	39.99	0.02
RECOVERYS	TORM CHAMBER	61.0023	39.99	0.02
RECOVERYS	TORM CHAMBER	61.2552	39.98	0.02
RECOVERYS	TORM CHAMBER	61.5026	39.98	0.02
RECOVERYS	TORM CHAMBER	61.7544	39.98	0.02
RECOVERYS	TORM CHAMBER	62.0015	39.98	0.02
RECOVERYS	TORM CHAMBER	62.2534	39.98	0.02
RECOVERYS	TORM CHAMBER	62.5025	39.97	0.02
RECOVERYS	TORM CHAMBER	62.7537	39.97	0.02
RECOVERYS	TORM CHAMBER	63.0021	39.97	0.02
RECOVERYS	TORM CHAMBER	63.2546	39.97	0.02
RECOVERYS	TORM CHAMBER	63.5039	39.97	0.02
RECOVERYS	TORM CHAMBER	63.7504	39.97	0.02

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	64.0005	39.96	0.02
RECOVERYS	TORM CHAMBER	64.2520	39.96	0.02
RECOVERYS	TORM CHAMBER	64.5042	39.96	0.02
RECOVERYS	TORM CHAMBER	64.7517	39.96	0.02
RECOVERYS	TORM CHAMBER	65.0050	39.96	0.02
RECOVERYS	TORM CHAMBER	65.2576	39.95	0.02
RECOVERYS	TORM CHAMBER	65.5005	39.95	0.02
RECOVERYS	TORM CHAMBER	65.7530	39.95	0.02
RECOVERYS	TORM CHAMBER	66.0037	39.95	0.02
RECOVERYS	TORM CHAMBER	66.2567	39.95	0.02
RECOVERYS	TORM CHAMBER	66.5031	39.95	0.02
RECOVERYS	TORM CHAMBER	66.7552	39.94	0.02
RECOVERYS	TORM CHAMBER	67.0034	39.94	0.02
RECOVERYS	TORM CHAMBER	67.2515	39.94	0.02
RECOVERYS	TORM CHAMBER	67.5013	39.94	0.02
RECOVERYS	TORM CHAMBER	67.7505	39.94	0.02
RECOVERYS	TORM CHAMBER	68.0044	39.93	0.02
RECOVERYS	TORM CHAMBER	68.2517	39.93	0.01
RECOVERYS	TORM CHAMBER	68.5040	39.93	0.01
RECOVERYS	TORM CHAMBER	68.7553	39.93	0.01
RECOVERYS	TORM CHAMBER	69.0061	39.93	0.01
RECOVERYS	TORM CHAMBER	69.2535	39.93	0.01
RECOVERYS	TORM CHAMBER	69.5009	39.92	0.01
RECOVERYS	TORM CHAMBER	69.7577	39.92	0.02
RECOVERYS	TORM CHAMBER	70.0009	39.92	0.01
RECOVERYS	TORM CHAMBER	70.2528	39.92	0.01
RECOVERYS	TORM CHAMBER	70.5051	39.92	0.01
RECOVERYS	TORM CHAMBER	70.7525	39.92	0.01
RECOVERYS	TORM CHAMBER	71.0003	39.91	0.01
RECOVERYS	TORM CHAMBER	71.2550	39.91	0.01
RECOVERYS	TORM CHAMBER	71.5005	39.91	0.01
RECOVERYS	TORM CHAMBER	71.7556	39.91	0.01
RECOVERYS	TORM CHAMBER	72.0006	39.91	0.02
RECOVERYS	TORM CHAMBER	72.2524	39.91	0.01
RECOVERYS	TORM CHAMBER	72.5040	39.90	0.01
RECOVERYS	TORM CHAMBER	72.7569	39.90	0.01
RECOVERYS	TORM CHAMBER	73.0019	39.90	0.01
RECOVERYS	TORM CHAMBER	73.2550	39.90	0.00
RECOVERYS	TORM CHAMBER	73.5028	39.90	0.00
RECOVERYS	TORM CHAMBER	73.7513	39.90	0.00
RECOVERYS	TORM CHAMBER	74.0023	39.90	0.00
RECOVERYS	TORM CHAMBER	74.2544	39.90	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	74.5030	39.90	0.00
RECOVERY	STORM CHAMBER	74.7535	39.90	0.00
RECOVERY	STORM CHAMBER	75.0004	39.90	0.00
RECOVERY	STORM CHAMBER	75.2524	39.90	0.00
RECOVERY	STORM CHAMBER	75.5008	39.90	0.00
RECOVERY	STORM CHAMBER	75.7504	39.90	0.00
RECOVERY	STORM CHAMBER	76.0014	39.90	0.00
RECOVERY	STORM CHAMBER	76.2518	39.90	0.00
RECOVERY	STORM CHAMBER	76.5020	39.90	0.00
RECOVERY	STORM CHAMBER	76.7537	39.90	0.00
RECOVERY	STORM CHAMBER	77.0008	39.90	0.00
RECOVERY	STORM CHAMBER	77.2541	39.90	0.00
RECOVERY	STORM CHAMBER	77.5012	39.90	0.00
RECOVERY	STORM CHAMBER	77.7542	39.90	0.00
RECOVERY	STORM CHAMBER	78.0023	39.90	0.00
RECOVERY	STORM CHAMBER	78.2543	39.90	0.00
RECOVERY	STORM CHAMBER	78.5023	39.90	0.00
RECOVERY	STORM CHAMBER	78.7542	39.90	0.00
RECOVERY	STORM CHAMBER	79.0074	39.90	0.00
RECOVERY	STORM CHAMBER	79.2532	39.90	0.00
RECOVERY	STORM CHAMBER	79.5023	39.90	0.00
RECOVERY	STORM CHAMBER	79.7506	39.90	0.00
RECOVERY	STORM CHAMBER	80.0040	39.90	0.00
RECOVERY	STORM CHAMBER	80.2560	39.90	0.00
RECOVERY	STORM CHAMBER	80.5008	39.90	0.00
RECOVERY	STORM CHAMBER	80.7520	39.90	0.00
RECOVERY	STORM CHAMBER	81.0017	39.90	0.00
RECOVERY	STORM CHAMBER	81.2505	39.90	0.00
RECOVERY	STORM CHAMBER	81.5049	39.90	0.00
RECOVERY	STORM CHAMBER	81.7509	39.90	0.00
RECOVERY	STORM CHAMBER	82.0030	39.90	0.00
RECOVERY	STORM CHAMBER	82.2517	39.90	0.00
RECOVERY	STORM CHAMBER	82.5032	39.90	0.00
RECOVERY	STORM CHAMBER	82.7524	39.90	0.00
RECOVERY	STORM CHAMBER	83.0022	39.90	0.00
RECOVERY	STORM CHAMBER	83.2567	39.90	0.00
RECOVERY	STORM CHAMBER	83.5039	39.90	0.00
RECOVERY	STORM CHAMBER	83.7512	39.90	0.00
RECOVERY	STORM CHAMBER	84.0025	39.90	0.00
RECOVERY	STORM CHAMBER	84.2505	39.90	0.00
RECOVERY	STORM CHAMBER	84.5068	39.90	0.00
RECOVERY	STORM CHAMBER	84.7530	39.90	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	85.0002	39.90	0.00
RECOVERYS	TORM CHAMBER	85.2513	39.90	0.00
RECOVERYS	TORM CHAMBER	85.5037	39.90	0.00
RECOVERYS	TORM CHAMBER	85.7535	39.90	0.00
RECOVERYS	TORM CHAMBER	86.0072	39.90	0.00
RECOVERYS	TORM CHAMBER	86.2505	39.90	0.00
RECOVERYS	TORM CHAMBER	86.5037	39.90	0.00
RECOVERYS	TORM CHAMBER	86.7509	39.90	0.00
RECOVERYS	TORM CHAMBER	87.0052	39.90	0.00
RECOVERYS	TORM CHAMBER	87.2544	39.90	0.00
RECOVERYS	TORM CHAMBER	87.5039	39.90	0.00
RECOVERYS	TORM CHAMBER	87.7541	39.90	0.00
RECOVERYS	TORM CHAMBER	88.0016	39.90	0.00
RECOVERYS	TORM CHAMBER	88.2507	39.90	0.00
RECOVERYS	TORM CHAMBER	88.5063	39.90	0.00
RECOVERYS	TORM CHAMBER	88.7509	39.90	0.00
RECOVERYS	TORM CHAMBER	89.0012	39.90	0.00
RECOVERYS	TORM CHAMBER	89.2513	39.90	0.00
RECOVERYS	TORM CHAMBER	89.5038	39.90	0.00
RECOVERYS	TORM CHAMBER	89.7513	39.90	0.00
RECOVERYS	TORM CHAMBER	90.0035	39.90	0.00
RECOVERYS	TORM CHAMBER	90.2503	39.90	0.00
RECOVERYS	TORM CHAMBER	90.5014	39.90	0.00
RECOVERYS	TORM CHAMBER	90.7530	39.90	0.00
RECOVERYS	TORM CHAMBER	91.0033	39.90	0.00
RECOVERYS	TORM CHAMBER	91.2538	39.90	0.00
RECOVERYS	TORM CHAMBER	91.5048	39.90	0.00
RECOVERYS	TORM CHAMBER	91.7518	39.90	0.00
RECOVERYS	TORM CHAMBER	92.0053	39.90	0.00
RECOVERYS	TORM CHAMBER	92.2524	39.90	0.00
RECOVERYS	TORM CHAMBER	92.5013	39.90	0.00
RECOVERYS	TORM CHAMBER	92.7537	39.90	0.00
RECOVERYS	TORM CHAMBER	93.0072	39.90	0.00
RECOVERYS	TORM CHAMBER	93.2535	39.90	0.00
RECOVERYS	TORM CHAMBER	93.5063	39.90	0.00
RECOVERYS	TORM CHAMBER	93.7509	39.90	0.00
RECOVERYS	TORM CHAMBER	94.0010	39.90	0.00
RECOVERYS	TORM CHAMBER	94.2560	39.90	0.00
RECOVERYS	TORM CHAMBER	94.5104	39.90	0.00
RECOVERYS	TORM CHAMBER	94.7507	39.90	0.00
RECOVERYS	TORM CHAMBER	95.0011	39.90	0.00
RECOVERYS	TORM CHAMBER	95.2523	39.90	0.00

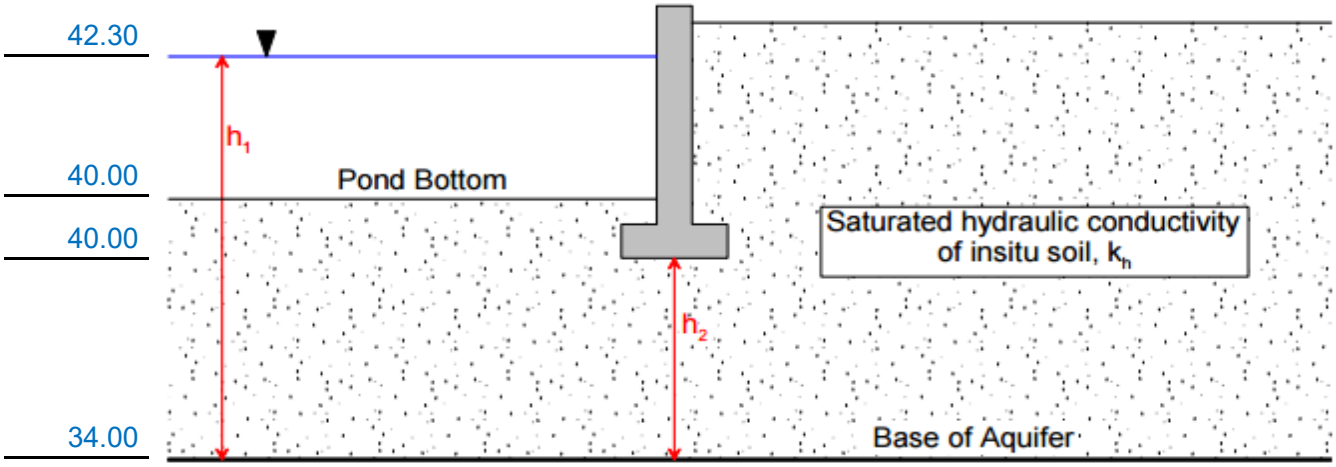
Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	95.5059	39.90	0.00
RECOVERY	STORM CHAMBER	95.7536	39.90	0.00
RECOVERY	STORM CHAMBER	96.0022	39.90	0.00
RECOVERY	STORM CHAMBER	96.2528	39.90	0.00
RECOVERY	STORM CHAMBER	96.5046	39.90	0.00
RECOVERY	STORM CHAMBER	96.7522	39.90	0.00
RECOVERY	STORM CHAMBER	97.0013	39.90	0.00
RECOVERY	STORM CHAMBER	97.2554	39.90	0.00
RECOVERY	STORM CHAMBER	97.5027	39.90	0.00
RECOVERY	STORM CHAMBER	97.7534	39.90	0.00
RECOVERY	STORM CHAMBER	98.0035	39.90	0.00
RECOVERY	STORM CHAMBER	98.2517	39.90	0.00
RECOVERY	STORM CHAMBER	98.5008	39.90	0.00
RECOVERY	STORM CHAMBER	98.7501	39.90	0.00
RECOVERY	STORM CHAMBER	99.0024	39.90	0.00
RECOVERY	STORM CHAMBER	99.2526	39.90	0.00
RECOVERY	STORM CHAMBER	99.5063	39.90	0.00
RECOVERY	STORM CHAMBER	99.7535	39.90	0.00
RECOVERY	STORM CHAMBER	100.0025	39.90	0.00
RECOVERY	STORM CHAMBER	100.2548	39.90	0.00
RECOVERY	STORM CHAMBER	100.5041	39.90	0.00
RECOVERY	STORM CHAMBER	100.7520	39.90	0.00
RECOVERY	STORM CHAMBER	101.0065	39.90	0.00
RECOVERY	STORM CHAMBER	101.2569	39.90	0.00
RECOVERY	STORM CHAMBER	101.5038	39.90	0.00
RECOVERY	STORM CHAMBER	101.7506	39.90	0.00
RECOVERY	STORM CHAMBER	102.0030	39.90	0.00
RECOVERY	STORM CHAMBER	102.2542	39.90	0.00
RECOVERY	STORM CHAMBER	102.5014	39.90	0.00
RECOVERY	STORM CHAMBER	102.7540	39.90	0.00
RECOVERY	STORM CHAMBER	103.0040	39.90	0.00
RECOVERY	STORM CHAMBER	103.2558	39.90	0.00
RECOVERY	STORM CHAMBER	103.5028	39.90	0.00
RECOVERY	STORM CHAMBER	103.7512	39.90	0.00
RECOVERY	STORM CHAMBER	104.0032	39.90	0.00
RECOVERY	STORM CHAMBER	104.2503	39.90	0.00
RECOVERY	STORM CHAMBER	104.5050	39.90	0.00
RECOVERY	STORM CHAMBER	104.7545	39.90	0.00
RECOVERY	STORM CHAMBER	105.0016	39.90	0.00
RECOVERY	STORM CHAMBER	105.2542	39.90	0.00
RECOVERY	STORM CHAMBER	105.5022	39.90	0.00
RECOVERY	STORM CHAMBER	105.7528	39.90	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	106.0002	39.90	0.00
RECOVERYS	TORM CHAMBER	106.2539	39.90	0.00
RECOVERYS	TORM CHAMBER	106.5039	39.90	0.00
RECOVERYS	TORM CHAMBER	106.7527	39.90	0.00
RECOVERYS	TORM CHAMBER	107.0019	39.90	0.00
RECOVERYS	TORM CHAMBER	107.2509	39.90	0.00
RECOVERYS	TORM CHAMBER	107.5039	39.90	0.00
RECOVERYS	TORM CHAMBER	107.7551	39.90	0.00
RECOVERYS	TORM CHAMBER	108.0038	39.90	0.00
RECOVERYS	TORM CHAMBER	108.2512	39.90	0.00
RECOVERYS	TORM CHAMBER	108.5008	39.90	0.00
RECOVERYS	TORM CHAMBER	108.7522	39.90	0.00
RECOVERYS	TORM CHAMBER	109.0028	39.90	0.00
RECOVERYS	TORM CHAMBER	109.2554	39.90	0.00
RECOVERYS	TORM CHAMBER	109.5006	39.90	0.00
RECOVERYS	TORM CHAMBER	109.7517	39.90	0.00
RECOVERYS	TORM CHAMBER	110.0054	39.90	0.00
RECOVERYS	TORM CHAMBER	110.2503	39.90	0.00
RECOVERYS	TORM CHAMBER	110.5041	39.90	0.00
RECOVERYS	TORM CHAMBER	110.7525	39.90	0.00
RECOVERYS	TORM CHAMBER	111.0005	39.90	0.00
RECOVERYS	TORM CHAMBER	111.2532	39.90	0.00
RECOVERYS	TORM CHAMBER	111.5013	39.90	0.00
RECOVERYS	TORM CHAMBER	111.7517	39.90	0.00
RECOVERYS	TORM CHAMBER	112.0020	39.90	0.00
RECOVERYS	TORM CHAMBER	112.2582	39.90	0.00
RECOVERYS	TORM CHAMBER	112.5021	39.90	0.00
RECOVERYS	TORM CHAMBER	112.7529	39.90	0.00
RECOVERYS	TORM CHAMBER	113.0010	39.90	0.00
RECOVERYS	TORM CHAMBER	113.2528	39.90	0.00
RECOVERYS	TORM CHAMBER	113.5022	39.90	0.00
RECOVERYS	TORM CHAMBER	113.7533	39.90	0.00
RECOVERYS	TORM CHAMBER	114.0009	39.90	0.00
RECOVERYS	TORM CHAMBER	114.2504	39.90	0.00
RECOVERYS	TORM CHAMBER	114.5017	39.90	0.00
RECOVERYS	TORM CHAMBER	114.7507	39.90	0.00
RECOVERYS	TORM CHAMBER	115.0046	39.90	0.00
RECOVERYS	TORM CHAMBER	115.2512	39.90	0.00
RECOVERYS	TORM CHAMBER	115.5036	39.90	0.00
RECOVERYS	TORM CHAMBER	115.7533	39.90	0.00
RECOVERYS	TORM CHAMBER	116.0057	39.90	0.00
RECOVERYS	TORM CHAMBER	116.2516	39.90	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	116.5025	39.90	0.00
RECOVERY	STORM CHAMBER	116.7520	39.90	0.00
RECOVERY	STORM CHAMBER	117.0059	39.90	0.00
RECOVERY	STORM CHAMBER	117.2547	39.90	0.00
RECOVERY	STORM CHAMBER	117.5003	39.90	0.00
RECOVERY	STORM CHAMBER	117.7521	39.90	0.00
RECOVERY	STORM CHAMBER	118.0021	39.90	0.00
RECOVERY	STORM CHAMBER	118.2516	39.90	0.00
RECOVERY	STORM CHAMBER	118.5029	39.90	0.00
RECOVERY	STORM CHAMBER	118.7567	39.90	0.00
RECOVERY	STORM CHAMBER	119.0054	39.90	0.00
RECOVERY	STORM CHAMBER	119.2505	39.90	0.00
RECOVERY	STORM CHAMBER	119.5013	39.90	0.00
RECOVERY	STORM CHAMBER	119.7546	39.90	0.00
RECOVERY	STORM CHAMBER	120.0011	39.90	0.00

PROJECT: **Sutton Crossings**
PROJECT #: **FLA240162.00**

K Value Calculations Pond 1



$$k_{avg} = \left(\frac{L_{Unwalled}}{L_{Total}} X\ k_h\right) + \left(\frac{L_{Walled}}{L_{Total}} X\ \frac{h_2}{h_1} X\ k_h\right)$$

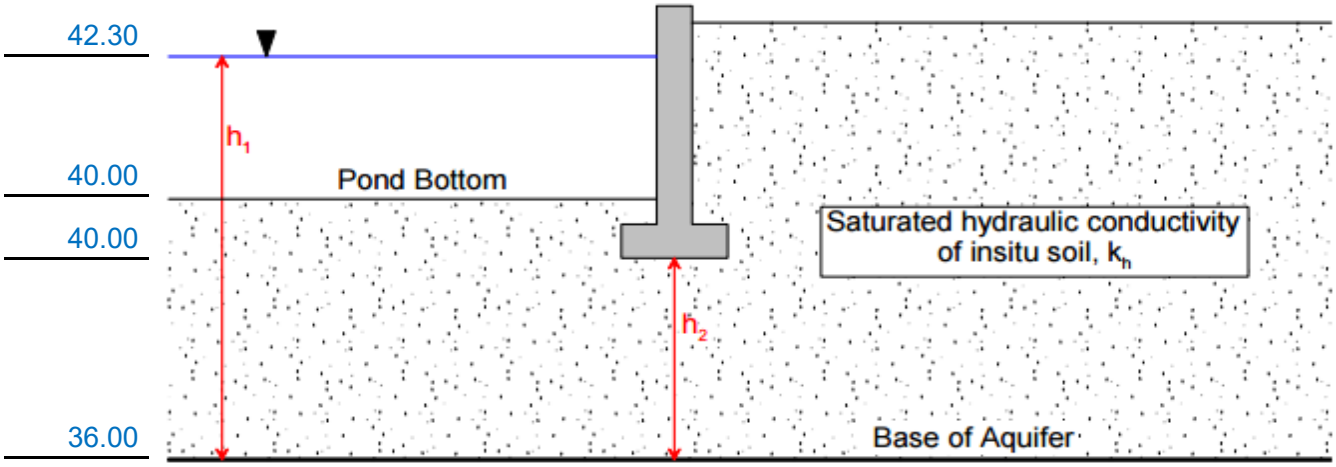
L_{Total} is the total perimeter
L_{Walled} is the total perimeter
$L_{Unwalled}$ is the total perimeter

L_{Total} (Ft)	480
$L_{Unwalled}$ (Ft)	0
L_{Walled} (Ft)	480
h_1 (Ft)	8.30
h_2 (Ft)	6
k_h (Ft/day)	22.5
k_{avg} (Ft/day)	**16.27**

L_{Total} (Ft)	480
$L_{Unwalled}$ (Ft)	0
L_{Walled} (Ft)	480
h_1 (Ft)	8.3
h_2 (Ft)	6
k_v (Ft/day)	14
k_{avg} (Ft/day)	**10.12**

PROJECT: **Sutton Crossings**
PROJECT #: **FLA240162.00**

K Value Calculations Basin 1



$$k_{avg} = \left(\frac{L_{Unwalled}}{L_{Total}} X\ k_h\right) + \left(\frac{L_{Walled}}{L_{Total}} X\ \frac{h_2}{h_1} X\ k_h\right)$$

L_{Total} is the total perimeter
L_{Walled} is the total perimeter
$L_{Unwalled}$ is the total perimeter

L_{Total} (Ft)	277
$L_{Unwalled}$ (Ft)	0
L_{Walled} (Ft)	277
h_1 (Ft)	6.30
h_2 (Ft)	4
k_h (Ft/day)	22.5
k_{avg} (Ft/day)	**14.29**

L_{Total} (Ft)	277
$L_{Unwalled}$ (Ft)	0
L_{Walled} (Ft)	277
h_1 (Ft)	6.3
h_2 (Ft)	4
k_v (Ft/day)	14
k_{avg} (Ft/day)	**8.89**

ATLANTIC ECOLOGICAL SERVICES

201 Basque Road
St. Augustine, FL 32080
Tel. (904) 347-9133
Fax (904) 512-0459
www.atlanticeco.com

October 19, 2022

EQX-HRP Winter Springs, LLC
Attn: Ryan P. Stahl
630 S. Maitland Avenue, Suite 100
Maitland, FL 32751

RE: Tuskawilla/434 Development
Seminole County, FL
AES #22-056

Dear Mr. Stahl,

Atlantic Ecological Services, LLC (AES) visited the Tuscawilla/434 Development Property for the purposes of conducting a review for the presence of protected species based on direct and indirect observations, as well as to determine potential for occurrence of protected species based on suitable habitat. The site assessment was conducted on April 5, 2022. The property is located on State Road 434 in Winter Springs, Florida and is approximately 5.88 acres in total size. The Seminole County Parcel ID #'s are 26-20-30-5AR-0A00-008D, 01-21-30-501-0000-0010, and 26-20-30-5AR-0A00-00. The subject property is located in Section 6, Township 21 South, Range 31 East in Seminole County, Florida. Please see the attached Location and Aerial Maps. During the field review of the subject property AES also assessed the Right-of-Way (ROW) areas found traversing between the parcels which are included as a part of this report and findings. Please note those areas found on the Aerial Map.

This general area is known to be occupied by the protected gopher tortoise (*Gopherus polyphemus*) and bald eagle (*Haliaeetus l. leucocephalus*). The proposed project is to construct commercial buildings. Prior to construction a gopher tortoise survey is required by Seminole County and the Florida Fish & Wildlife Conservation Commission (FWC). The results are documented within this letter report.

Mr. Jacob Doyle of AES performed the protected species review on the subject property. Mr. Doyle currently holds certification from the FWC as an Authorized Gopher Tortoise Agent under permit #GTA-21-00052.

METHODS

Habitat Mapping

Each community and land use area was categorized according to the Florida Department of Transportation's (FDOT) 1999 *Florida Land Use, Cover and Forms Classification System* (FLUCCS). The boundaries of each FLUCCS code were delineated based on vegetative composition, soil characteristics, topography, and aerial interpretation. See the Results Section below for a description of the habitats found. Please also see the attached Habitat Map depicting the findings.

Protected Species Review

Prior to visiting the site, a background literature search was conducted to compile a list of state and federally protected animal and plant species that could occur on-site. The three primary sources of literature reviewed include the Florida Fish and Wildlife Conservation Commission's (FWC) *Florida's Endangered Species, Threatened Species, And Species of Special Concern*, the United States Fish and Wildlife Service's (USFWS) Threatened and Endangered Species System (TESS) database, and the Florida Department of Agriculture and Consumer Services (FDACS), Division of Plant Industry's (DPI) *Notes on Florida's Endangered and Threatened Plants*. Additional information was gathered from the Florida Natural Areas Inventory (FNAI) *Field Guides to the Rare Animals/Plants of Florida*, and the Florida Committee on Rare and Endangered Plants and Animals (FCREPA) *Rare and Endangered Biota of Florida*: Volumes 1-5, and the FWC's Eagle Nest Locator web site were also reviewed to obtain location data recorded by others for those species.

RESULTS

Habitats

Uplands

Pine-Mesic Oak (FLUCCS 414) – The majority of the property exists as pine-mesic oak (hammock) habitat. The predominate canopy consists of sweetgum (*Liquidambar styraciflua*), slash pine (*Pinus elliotii*), longleaf pine (*Pinus palustris*), laurel oak (*Quercus laurifolia*), and live oak (*Quercus virginiana*), with scattered southern magnolia (*Magnolia grandiflora*) and sabal palm (*Sabal palmetto*). The predominate understory exists as grapevine (*Vitis rotundifolia*), saw palmetto (*Serenoa repens*), bracken fern (*Pteridium* sp.), Caesar weed (*Urena lobata*), with scattered beggartick (*Bidens alba*) and American beautyberry (*Callicarpa americana*).

Open Land (FLUCCS 190) – There is a strip of open land bisecting the eastern parcel. The predominate vegetation of the open land is bahia grass (*Paspalum notatum*), grape vine, and broom sedge (*Andropogon* sp.).

Wildlife Observations

Wildlife observations, both direct and indirect, were made throughout the course of the site investigation. A list of species observed is provided in the following table:

Table 1: Wildlife species observed on the project site in Seminole County, Florida.

Taxon	Common Name	Scientific Name	Protected*
Birds			
	Ground dove	*Columbina passerine*	No
	Great horned owl	*Bubo virginianus*	No
	Black vulture	*Coragyps atratus*	No
Reptiles			
	Southern black racer	*Coluber constrictor priapus*	No
	Brown anole	*Anolis sagrei*	No
Mammals			
	Eastern grey squirrel	*Sciurus carolinensis*	No

Protected Species

A 100% gopher tortoise (*Gopherus polyphemus*) survey was conducted on April 5, 2022, in accordance with the techniques outlined in the publication, *Ecology and Habitat Protection Needs of Gopher Tortoise (*Gopherus polyphemus*) Populations Found on Lands Slated for Development in Florida*. No gopher tortoise burrows were identified. Gopher tortoise surveys are valid for a period of 90 days. An updated 100% gopher tortoise burrow survey will be required.

The FWC's Eagle Nest Locator website and Audubon Florida EagleWatch Public Nest App were both queried for data regarding documented southern bald eagle nests in the project vicinity. The southern bald eagle (*Haliaeetus leucocephalus*) is protected under the Bald and Golden Eagle Protection Act. Development guidelines are required for any proposed project with 330 feet for urban areas and 660 feet for non-urban areas. A southern bald eagle nest (SE 096) is located in the northeast portion of the property. At time of field visit the nest had been occupied/overtaken by a breeding pair of great horned owls. Please see the attached photos of the nest and the breeding pair of great horned owls next to the abandoned eagle nest. Data from the Audubon Florida EagleWatch Public Nest App document this nest as active for the 2021 nesting season. No data for the 2022 nesting season has been posted to date, therefore AES was unable to determine if this nest was active for the 2022 nesting season and the juveniles had already fledged prior to our April 5, 2022 site visit. The nesting pair also has a documented alternate nest (SE 096a) located approximately 1,350 feet to the north. AES scoped this nest and did not identify any juveniles in the nest, and did not see adult bald eagles on or near the nest tree.

Southern Bald Eagle nests require an Incidental Take Permitting (ITP) through the U.S. Fish and Wildlife Service (FWS) for any impacts within the 330' and/or 660' protection zones for any nest that has been documented as active within 5 years. Since this nest was documented as active in the 2021 nesting season any construction within the 330' foot protection zone would require an ITP for disturbance. The nest tree could also be permitted for removal through a Take Permit for nest removal through FWS. Generally, if you apply for a 5-year or less disturbance permit, and leave a buffer consistent with the closest existing development activities found near the nest, then mitigation will not be required. If you apply of a take permit of the nest then mitigation will be required. Due to the close proximity of existing urban development to the nest, it is anticipated FWS would issue a disturbance ITP for this nest as long as construction and monitoring guidelines are adhered to. If a nest take permit is required, then mitigation could be coordinated with the Eagle In-lieu Fee Program.

Multiple other documented southern bald eagle nests are located in the vicinity (all utilizing Lake Jesup for foraging) but are greater than 660 feet away from the subject property.

No other protected flora or fauna species are expected to inhabit the subject property.

CONCLUSION

Atlantic Ecological Services, LLC conducted a site review on the Tuscawilla/434 Development Property for the purposes of determining the presence of and/or potential presence of state and federally protected wildlife and plant species.

The subject property consisted of uplands. A 100% gopher tortoise survey was completed within the project area on April 5, 2022. No potentially occupied gopher tortoise burrows were identified during the survey. An updated 100% gopher tortoise burrow survey will be required prior to construction of the property.

A documented southern bald eagle nest (SE 096) is located on the property. The nest was documented as active in the 2021 nesting season. AES did not document nesting activity for the 2022 season. A pair of great horned owls were documented on the nest tree. Due to the urban nature of this nest, and active use within 5 years, a 330' protection zone will be required. If the protection zone cannot be adhered to then permitting through the U.S. Fish and Wildlife Service will be required before any construction activities could occur.

No other protected flora or fauna species are anticipated to be impacted by development of the subject property.

Should you have any questions or concerns please feel free to contact me at (904) 347-9133 or jody@atlanticeco.com.

Sincerely,

Jody N. Sisk
Senior Ecologist

Enclosures

Technical Literature References

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Image Source: ESRI 2020
Date: 4-6-22

0 1,500 3,000 Feet

N

Location Map
Tuskawilla/434 Development Property
Seminole County, Florida

ATLANTIC ECOLOGICAL SERVICES
WWW.ATLANTICECO.COM
904-347-9133 | jody@atlanticec
201 Basque Rd | St. Augustine, FL

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\aerial.mxd



Image Source: ESRI 2021
Date: 3-28-22

0 100 200 Feet

N

Aerial Map
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlanticec
201 Basque Rd | St. Augustine, FL

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\topo.mxd



Image Source: ESRI 2021
Date: 3-28-22

0 250 500 Feet

N

Topographic Map
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlanticec
201 Basque Rd | St. Augustine, FL

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\soil.mxd



Image Source: ESRI 2021
Date: 3-28-22

0 100 200 Feet

N

Soil Map
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlanticec
201 Basque Rd | St. Augustine, FL

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\habitat.mxd

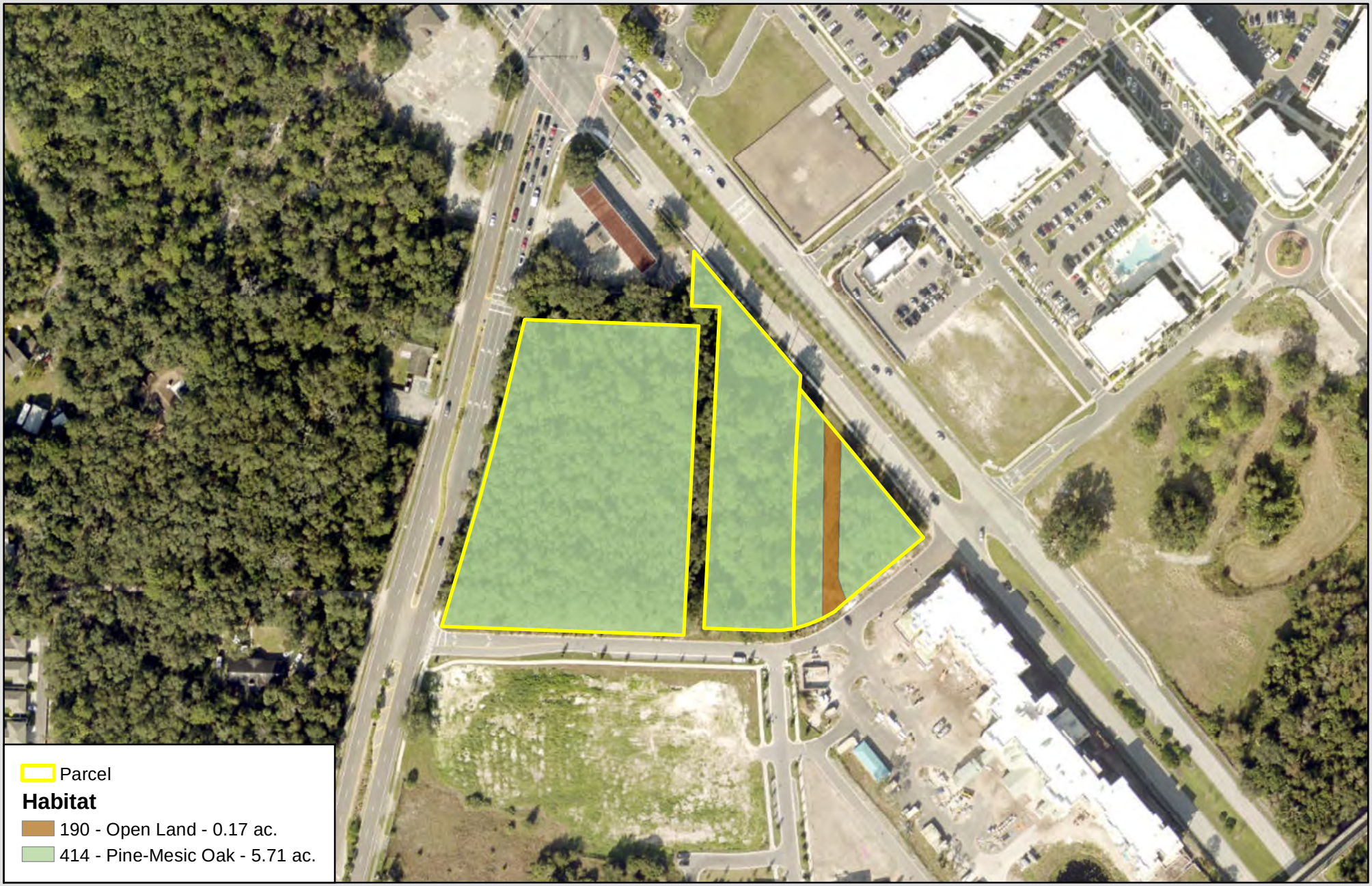


Image Source: ESRI 2021
Date: 3-28-22

0 100 200 Feet

N

Habitat Map
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlanticec
201 Basque Rd | St. Augustine, FL

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\aerial eagle nest.mxd



Image Source: ESRI 2021
Date: 4-6-22

0 100 200 Feet

N

Former Bald Eagle Nest
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlanticec
201 Basque Rd | St. Augustine, FL

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\aerial eagle nest 2.mxd

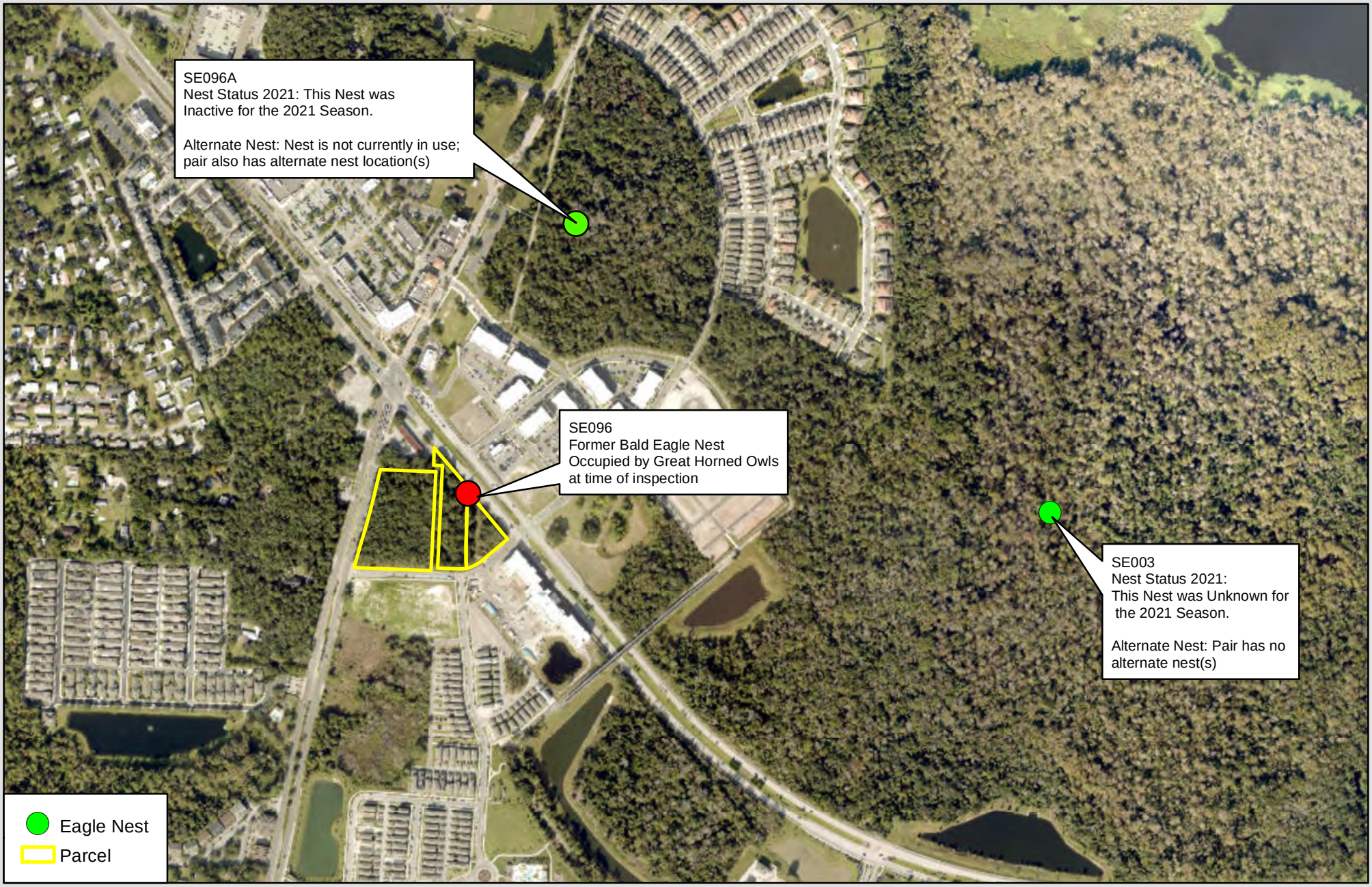


Image Source: ESRI 2021
Date: 4-6-22

0 300 600 Feet

N

Eagle Nest Map
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlanticec
201 Basque Rd | St. Augustine, FL

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\nest buffers.mxd

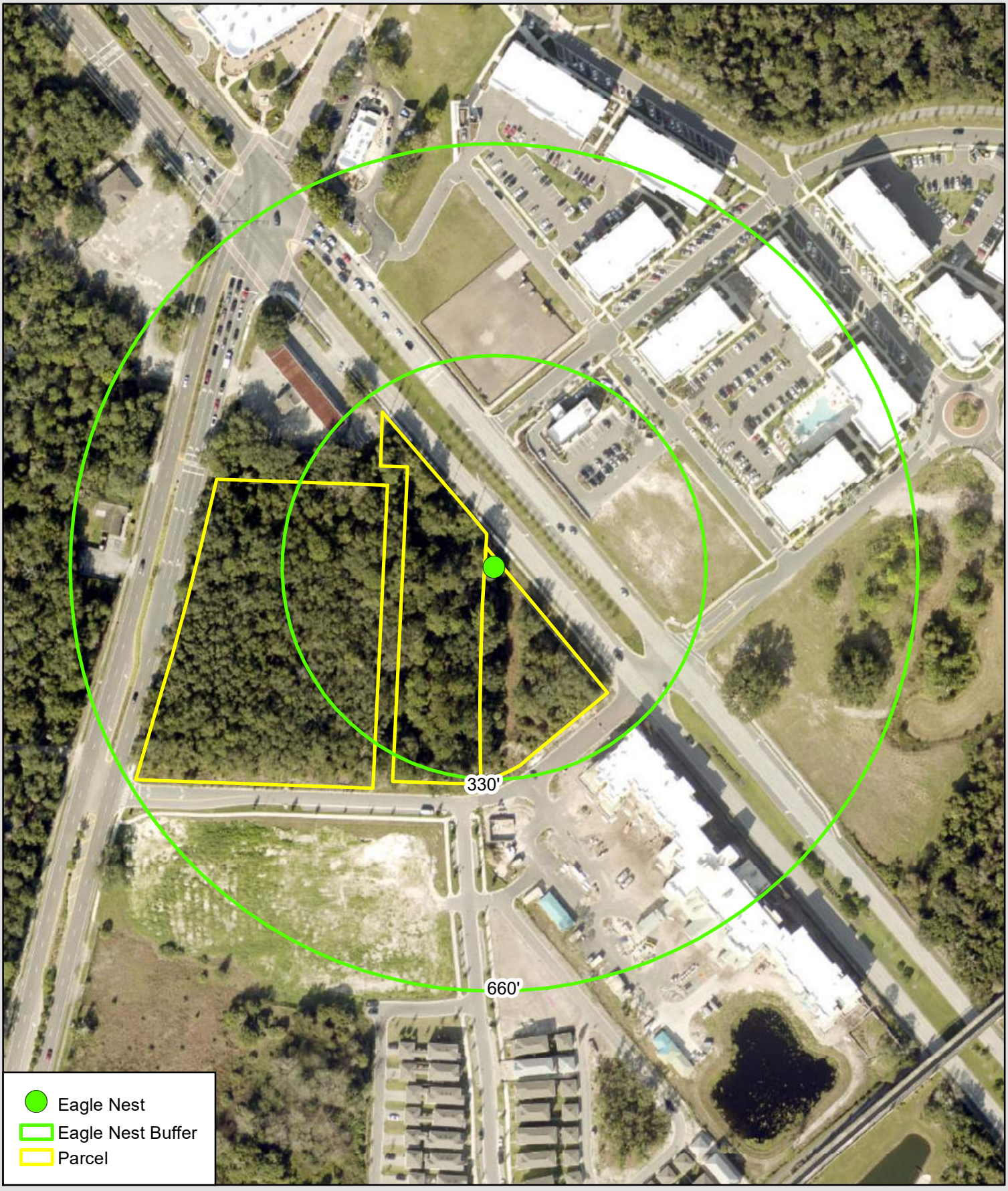


Image Source: ESRI 2021
Date: 4-6-22

0 100 200 Feet

Eagle Nest Buffer Map
Tuskawilla/434 Development Property
Seminole County, Florida

ATLANTIC ECOLOGICAL SERVICES
WWW.ATLANTICECO.CO
904-347-9133 | jody@atlanticeco.c
201 Basque Rd | St. Augustine, FL 32





Location: Eagle Nest and Great Horned Owls

Date: April 5, 2022



Location: Eagle Nest

Date: April 5, 2022



Location: Eagle Nest

Date: April 5, 2022

YOVAISH
ENGINEERING SERVICES, LLC

Consulting Engineers in the Earth Sciences, Geotechnology, Hydrogeology and Construction Materials Testing

October 12, 2023

Weinberg Engineering, LLC.
1625 Noble Rd
Ocean Springs, MS 39564

Attention: Mr. Benjamin G. Weinberg, P.E.

Subject: **Subsoil and Groundwater Level Investigation, Proposed Foundation, Pavement and Retention Areas, Ace Hardware, Tuskawilla Road and Michael Blake Boulevard, City of Winter Springs, Florida (PN 23-E2485.01)**

Dear Mr. Weinberg:

As requested, Yovaish Engineering Services, LLC. has performed a subsoil and groundwater level investigation at the above referenced site. The following report presents the results of our field and laboratory investigations as well as our evaluations of the same with respect to Geotechnical recommendations for the proposed site development.

1.0 BACKGROUND, SITE AND PROJECT DESCRIPTION

1.1 Background

As you are aware, the subsoil and groundwater level conditions within the proposed development were preliminarily investigated by Yovaish Engineering Services, LLC., with the results presented in our report entitled, "*Preliminary Subsoil and Groundwater Level Investigation, 3.422± Acre Tract, Northeast Corner of Tuskawilla Road and Michael Blake Blvd, City of Winter Springs, Florida (PN 20-E0924.07)*," dated October 1, 2020.

Since competing our October 2020 investigation, site specific topographic information has been obtained. The estimated normal seasonal high groundwater levels and geotechnical recommendations presented for this study supercede the information presented in the October 2020 report.

1.2 Site Description

The project site is reported to comprise approximately 3.42± acres and is located northwest of the intersection of Tuskawilla Road and Michael Blake Boulevard in Winter Springs, Florida. The site is located within Township 21 South, Range 31 East in Seminole County, Florida. A Vicinity Map, reproduced from the Casselberry, Florida Quadrangle Map, depicting the approximate site location and configuration has been prepared and is presented on Plate 1, attached.

Based upon review of the topographic survey prepared by Republic National (dated 08-18-20), ground elevations within the study area are relatively flat. The elevations vary from approximately+45 feet NAVD88 along the western site boundary (formed by Tuskawilla Rd) and gently slope to approximate elevation +42 feet NAVD88 along the eastern site boundary. Ground elevation contours are included on the Location Plan on Figure 1.

At the time of our field investigation, the majority of the site featured relatively dense trees with dense under-brush. Photographs of the noted site conditions (at the time of our field work) were obtained and are recorded in our project file.

1.3 Proposed Site Improvements

Based upon the site plan provided by you, we understand that the site development will include several commercial/retail type buildings with attendant roadway areas and a stormwater management system. Conceptually, we understand that the stormwater management system may include below grade exfiltration galleries. The proposed site layout is included on the Location Plan on Figure 1.

2.0 FIELD INVESTIGATION AND LABORATORY TESTING

2.1 Field Investigation

2.1.1 Auger Borings: The field investigation consisted of performing ten (10) auger borings to depths varying from approximately 10.0 to 15.0 feet. The approximate location of each boring is presented on the Location Plan on Figure 1 and are labeled RB-1 through RB-5; TB-1 through TB-3; PB-1 and PB-2.

As you are aware, the initial boring locations were selected by you. Thereafter, the boring locations were marked in the field using handheld GPS devices and measuring from existing on-site landmarks. Upon completion of the field work and with the exception of boring RB-1, the boring locations and elevations were determined by the Project Surveyor.

2.2 Laboratory Testing

2.2.1 Index Property Testing: Representative samples from each soil layer encountered at each auger boring location were sealed in air-tight containers in the field to prevent moisture loss and returned to our laboratory for examination by a Geotechnical Engineer. Representative samples were tested for their index properties to aid in soil classification. Laboratory tests performed included natural moisture content, organic content and percent passing the U.S. No. 200 Sieve. The results of the laboratory testing performed as part of our scope of services on this project are shown adjacent to the Soil Profiles on Figures 2 and 3. The Unified Soil Classification Symbol for each soil stratum as determined by visual examination and limited laboratory testing is presented in the attendant Soil Legend.

2.2.2 Permeability Testing: Laboratory permeability tests were performed on relatively undisturbed tube soil samples obtained at select boring locations. The hydraulic conductivity tests indicate that the shallow fine sands tested have vertical coefficients of permeability varying from approximately 28 to 31 feet per day. The permeability test results are shown adjacent to the corresponding Soil Profiles on Figures 2 and 3. Based upon our experience, the horizontal coefficient of permeability is usually 1.5 to 2.0 times the vertical coefficient for the fine sand encountered at this site.

3.0 SUBSOIL AND GROUNDWATER LEVEL CONDITIONS

3.1 S.C.S. Soil Delineations

The soil types within the area under study were mapped by the U.S.D.A. - Soil Conservation Service (SCS) and subsequently published in the Seminole County Soil Survey Report. The approximate horizontal extent of each soil type mapped within the study area is depicted on SCS Vicinity Map on Plate 2. A complete description of the on-site soils is provided in the Seminole County Soil Survey. A brief description of each soil type mapped is presented in Table 1, below.

Table 1. Summary of SCS Soil Types.

Soil Type	*Drainage Characteristics*	*Seasonal High Groundwater Level Depth*
Paola-St. Lucie sands, 0 to 5% slopes (#24)	excessively drained	greater than 6.7'
Tavares-Millhopper fine sands, 0 to 5% slopes (#31)	moderately well drained	3.0' - 5.0'

3.2 Soil Stratigraphy

3.2.1 Surficial Soils: The surficial soil layer encountered generally comprised grayish brown slightly silty fine sand with occasional small roots, topsoil (Stratum 1) in the upper approximate 0.5 to 1.0 foot. As an exception, dark gray organic fine sand with abundant roots was encountered at the locations of boring RB-5.

3.2.2 Subsurface Soil Stratigraphy: Underlying the surficial layer described above, the subsoil conditions encountered generally consisted of light colored free draining fine sands (Strata 2 through 4) to depths varying from approximately 4 to 10 feet, followed by darker colored slightly silty fine sand (Stratum 5) and silty to slightly clayey fine sand (Stratum 6) to the boring termination depths..

A more detailed representation of the subsoil conditions encountered is presented in the form of Soil Profiles on Figures 2 and 3, attached. For the most part, the borings are presented on an elevation basis using the surveyed boring elevations provided by the project surveyor.

3.3 Groundwater Table Conditions

3.3.1 Measured Groundwater Levels: The depth to the shallow groundwater table was measured in the open bore holes at the time the borings were performed (September 2023) and recorded again at least 24 hours later, by installing piezometers. The groundwater table was encountered at depths varying from approximately 4.5 to 6.7 feet below the existing ground surface. The measured groundwater levels are indicated adjacent to the Soil Profiles on Figures 2 and 3.

3.3.2 Normal Seasonal High Groundwater Levels: To evaluate the normal seasonal groundwater fluctuations on the site, a review was made of the following:

- USDA - SCS Soil Survey maps for the site
- the soil stratigraphy encountered during this study
- site specific topographic information (see Figure 1)
- the elevations of nearby lakes, wetlands and/or submerged marsh depicted on the USGS Quadrangle Maps
- the antecedent rainfall conditions prior to the time the groundwater levels were measured (approximately 5.6 inches below normal rainfall)

Based on our evaluation of the information outlined above, the seasonal high groundwater levels are preliminarily estimated to occur approximately 1.5 to 2.0 feet above the measured levels. In addition, the groundwater table is estimated to temporarily "perch" approximately 1.0 foot above the lower permeable soils comprising Stratum 5. The estimated apparent and "perched" seasonal high groundwater levels are included adjacent to the Soil Profiles on Figures 2 and 3. In summary, the elevation of the estimated seasonal high groundwater level is estimated to vary from approximately +38.0 to +41.0 feet NAVD 88.

4.0 EVALUATIONS AND CONCLUSIONS

4.1 General

Based on our evaluation of the encountered subsurface conditions and with the exception of the upper 2 to 3 inches of the topsoil layer containing small roots and the surficial organic layer (Stratum 1A), it is our opinion that the subsoils encountered are suitable for support of the anticipated development, using normal site preparation procedures. Normal site preparation procedures should include the usual clearing, stripping and grubbing to remove all trees, stumps, brush, undergrowth, heavy growth of grass or weeds, fences, structures, and debris (where encountered), followed by compaction from the stripped grade and compaction of any fill soils needed to achieve final grade within the building and roadway areas. More detailed recommendations for foundation related site work and foundation support are included in the following subheadings.

4.2 Site Earthwork Considerations

4.2.1 Site Preparation: The construction areas (building, pavement, etc.) should be cleared and stripped of the existing vegetation, topsoil and/or surficial organic layer (where present). Clearing and grubbing (by root raking where trees are removed) shall consist of clearing the surface of the ground of all trees, stumps, brush, undergrowth, heavy growth of grass or weeds, fences, structures, and debris, or such material which in the opinion of the Engineer is unsuitable for the foundation support of the proposed site improvements. The clearing/stripping operation should extend to at least 5.0 feet beyond the limits of the construction. The unsuitable material generated during the site preparation should be disposed of as directed by the owner.

4.2.2 Compaction Requirements: The cleared and stripped areas should be leveled, compacted and tested for a depth of 2.0 feet prior to the placement of any fill. The back fill soils should be placed in uniform lifts (maximum 12 inch loose thickness) and uniformly compacted. Compaction should continue until a minimum density equivalent to 95 percent of the soil's Maximum Modified Proctor Density Value (ASTM D-1557) has been achieved.

It is the intent of this recommendation that there be a minimum of 2.0 feet of compacted and tested soil beneath all foundation elements. We recommend that the subsoils be compacted to the density referenced above as tested to a depth of 2.0 feet below all footings and the base of floor slabs. The minimum frequency of density testing locations should be as follows:

- one test location for each 50 feet of load bearing wall
- one test location below each column footing
- one test location for every 500 square feet of slabs on grade
- 200 feet on center within the pavement areas

4.2.3 Structural Fill: Structural fill required to attain final site grades should be comprised of clean sand with no more than 10 percent passing the U.S. No. 200 Sieve. The fill should be placed in maximum 12-inch thick lifts and compacted to the density described above.

4.3 Foundation Sizing

4.3.1 Proposed Construction: Plans for the proposed structure were not available at the time of this report. As input to our evaluations and recommendation presented here, we have assumed the following:

- wall loads will range from 3 to 5 kips per linear foot
- isolated columns (if required) will be less than 40 kips.

4.3.2 Allowable Bearing Pressure: Provided that the foundation soils are prepared as outlined above, we recommend designing the spread footings and continuous wall footings for an allowable soil contact pressure of 2,000 psf or less. Foundation elements that must resist overturning may be designed with a maximum edge pressure of 3,000 psf. All foundation elements should be provided a minimum embedment depth of 18 inches, as measured from the bottom of the footing to the adjacent lowest finished grade. The lowest adjacent finished grade is defined as the lesser elevation of either the outside ground surface or the nearby top of floor slab. Furthermore, we recommend that continuous wall footings be a minimum of 18 inches in width and individual spread footings be a minimum of 24 inches in width.

4.3.3 Retaining Wall and Foundation Stem Wall Lateral Earth Pressures: Foundation stem walls and retaining walls should be designed to resist lateral pressures exerted by the retained granular soils. It should be noted that the design earth pressures are dependent upon allowable structural element rotation/deflection, soil engineering properties and the groundwater table conditions and may be summarized as follows:

- **Active Lateral Earth Pressure, (K_A):** Applicable to walls which are allowed to rotate (such as landscape retaining walls); occurs as a retaining wall moves away from its backfill; theoretical minimum pressure
- **At-Rest Lateral Earth Pressure, (K_O):** Applicable to walls which are not allowed to rotate (such as basement walls); occurs when soils are prevented from lateral strain; moderate pressure
- **Passive Lateral Earth Pressure (K_P):** Occurs when a wall or edge of footing is forced into a soil mass; theoretical maximum pressure

We recommend a value of 0.35 as the coefficient of friction (sliding resistance) between wall foundations and the underlying densified in-situ or fill soils. The recommend lateral earth pressures recommendations presented in Table 2 are based upon the following assumptions:

- the ground surface adjacent to the top and toe of the wall are relatively level (10 horizontal to 1 vertical or flatter)
- on-site fine sand and silty fine sands (or similar sands) will be used for wall backfill
- heavy construction equipment does not operate within 5 feet of walls
- a constantly functioning drainage system is installed between the wall and soil backfill
- footings or other significant surcharge loads are located outside the walls a distance at least equal to the wall height

Table 2. Summary of Estimated Earth Pressures in the Form of Equivalent Fluid Pressure

Earth Pressure	Equivalent Fluid Pressure (above groundwater table)	Equivalent Fluid Pressure (below groundwater table and excluding hydrostatic pressure)
Active (K_A)	33 pcf	21 pcf
At-Rest (K_O)	55 pcf	35 pcf
Passive (K_P)	*160 pcf	*100 pcf

Note: *The wall/foundation movement required to mobilize full passive earth pressure are significantly greater than necessary for active earth pressure. As such, the passive pressure values presented above have been reduced by approximately half.

It should be noted that factors of safety have not been included in the soil pressure values presented above. The appropriate factors of safety should be introduced in the stability analyses to be performed by your structural engineer.

4.3.4 Modulus of Subgrade Reaction: The modulus of subgrade reaction (k) for the foundation soils comprising fine sand (SP) and compacted to 95% of the Modified Proctor Value (ASTM D-1557) (as recommended herein) may be assumed to be 100 pounds per cubic inch (pci).

4.4 Preliminary Settlement Analyses

Settlement of the building foundations will occur as a result of consolidation and shear deformation of the foundation soils. Given the sandy texture of the foundation soils, the deformation settlement should be elastic in nature and occur as the sustained dead and live loads of the structure are applied. The maximum total settlement is estimated to be less than 1/2 inch and within tolerable limits of the proposed structure.

4.5 Roadways

Based on our evaluation of the subsoils encountered and with the exception of the upper 2 to 3 inches of the topsoil layer containing small roots and surficial organic layer (Stratum 1A), the encountered shallow soils are suitable to provide support for a flexible or semi-flexible pavement section using normal site preparation procedures.

4.5.1 Pavement Section Recommendations: Based upon our experience with similar developments, our recommendations for a typical roadway section that may be used for the interior roadways are as follows:

- 12-inches of stabilized subgrade, minimum LBR equal to 40, and compacted to a minimum density equivalent to 98 percent of the soil's Modified Proctor Density Value as determined by AASHTO T-180 test method.

- 6-inches of crushed concrete or limerock from a FDOT approved material provider, meeting the minimum LBR and gradation requirements of Section 911, and compacted to a density of not less than 98 percent of the material's Modified Proctor Density Value as determined by AASHTO T-180 test method. It should be noted that limerock base should not be utilized below pavement areas, where below grade infiltration galleries are planned.

- 1-1/2 inches of Florida DOT asphaltic concrete mix of Type SP-9.5 placed and compacted in accordance with Florida Department of Transportation specifications.

4.5.2 Pavement Base Groundwater Separation: As input to designing the pavement grades, we recommend that a minimum separation of 18 inches be provided between the bottom of the roadway base course and the estimated seasonal high groundwater elevation. The estimated seasonal high groundwater tables presented adjacent to the Soil Profiles should be helpful in the design of the site and pavement grades.

Where this separation is not provided between the naturally occurring normal seasonal high groundwater levels, it is our opinion that underdrains may be installed to protect the pavement from groundwater related damage. Once the proposed roadway and site grades are available, we plan to further evaluate the proposed roadways with respect to underdrain requirements.

4.6 Pond Area(s)

4.6.1 Borrow Suitability: We envision that the materials to be excavated from the proposed pond will be used to attain final grades within the planned development. With the exception of the upper 2 to 3 inches of the topsoil layer containing small roots (Stratum 1) and surficial organic layer (Stratum 1A), the fine sands and slightly silty to silty fine sands encountered (Strata 2 through 5) are considered suitable for use as structural fill.

The silty to slightly clayey fine sands (Stratum 6) are considered marginally suitable for use as structural fill and may be improved by mixing with clean on-site fine sands. The required proportion of fine sand material to clayey fine sand may be determined at the time of construction by performing test fills. As preliminary input to planning of the required earthwork operations, a 50/50 blend by volume may be assumed. When utilized within the sodded landscape areas and in order to allow proper drainage, the blended materials should be capped with a minimum 1.5 feet of fine sands (maximum 7 percent passing the No. 200 sieve).

4.6.2 Pond Exfiltration: Based on our evaluation of the encountered subsoil conditions and depending upon the final pond grades, it is our preliminary opinion that natural exfiltration for the retention areas will be moderate to low, depending upon final grades.

It should be noted that the silty fine sands (Stratum 5) can adversely affect the pond exfiltration performance. Depending upon the final pond grades, the hydraulically restrictive soils may occur near or be exposed at the pond bottoms. In order to improve the exfiltration performance of the ponds, the low permeable soils may require over-excavation.

For dry bottom ponds, we typically recommend that the pond bottom be a minimum of 3.0 feet above the estimated seasonal high groundwater levels. If adequate recovery from lateral seepage in the upper fine sands can be demonstrated, this value may be reduced to 18 to 24 inches (depending upon the required retention depth). Alternatively and if an outfall is available, it is our opinion that the required separation may be reduced by providing an underdrain system. The invert of the underdrains system should be designed such that the groundwater table is not lowered below the average wet season groundwater level.

Once the pond locations and configurations are finalized, we would be pleased to perform further geotechnical evaluations required as input to the pond design and permitting by your Civil Engineer. Yovaish Engineering Services, LLC. is not responsible for the conclusions, opinions and/or recommendations of others derived from this report.

4.7 Additional Geotechnical Evaluations

As you are aware, the design of the site and review and approval of the site development plans by the regulatory agencies is on going. As such and as may be required, we will perform additional evaluations that will be required as input to the project team.

5.0 CLOSURE

We trust that the information and recommendations provided herein satisfies your immediate needs. If you have any questions regarding the contents of this report, or if we can be of any further assistance, please do not hesitate to contact the undersigned.

Sincerely,

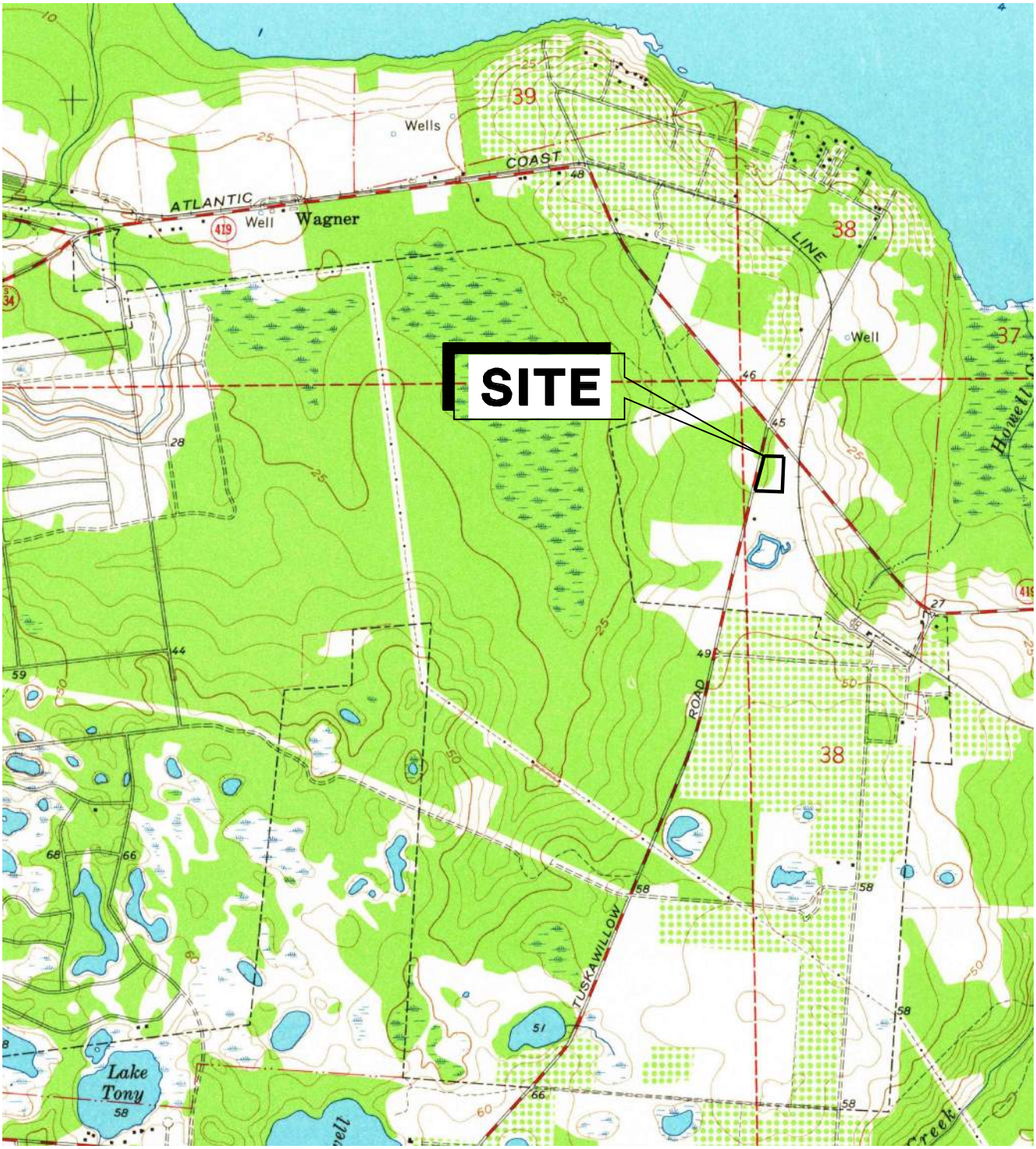
YOVAISH ENGINEERING SERVICES, LLC.
Certificate of Authorization No. 30214

10-17-2023

Douglas J. Yovaish, P.E.
Principal
Florida Registration No. 52247

DOUGLAS JOHN YOVAISH * LICENSE No 52247 * STATE OF FLORIDA * PROFESSIONAL ENGINEER

Attachments: Plate 1 - Vicinity Map
Plate 2 - SCS Soil Survey Map
Figure 1 - Location Plan
Figures 2 and 3 - Soil Profiles



CASSELBERRY, FLA
QUADRANGLE MAP

SECTION 1
TOWNSHIP 21 SOUTH
RANGE 31 EAST

VICINITY MAP

0 500 1000 2000

Scale in Feet

SUBSOIL & GROUNDWATER LEVEL INVESTIGATION

ACE HARDWARE - MICHAEL BLAKE BLVD & TUSKAWILLA RD

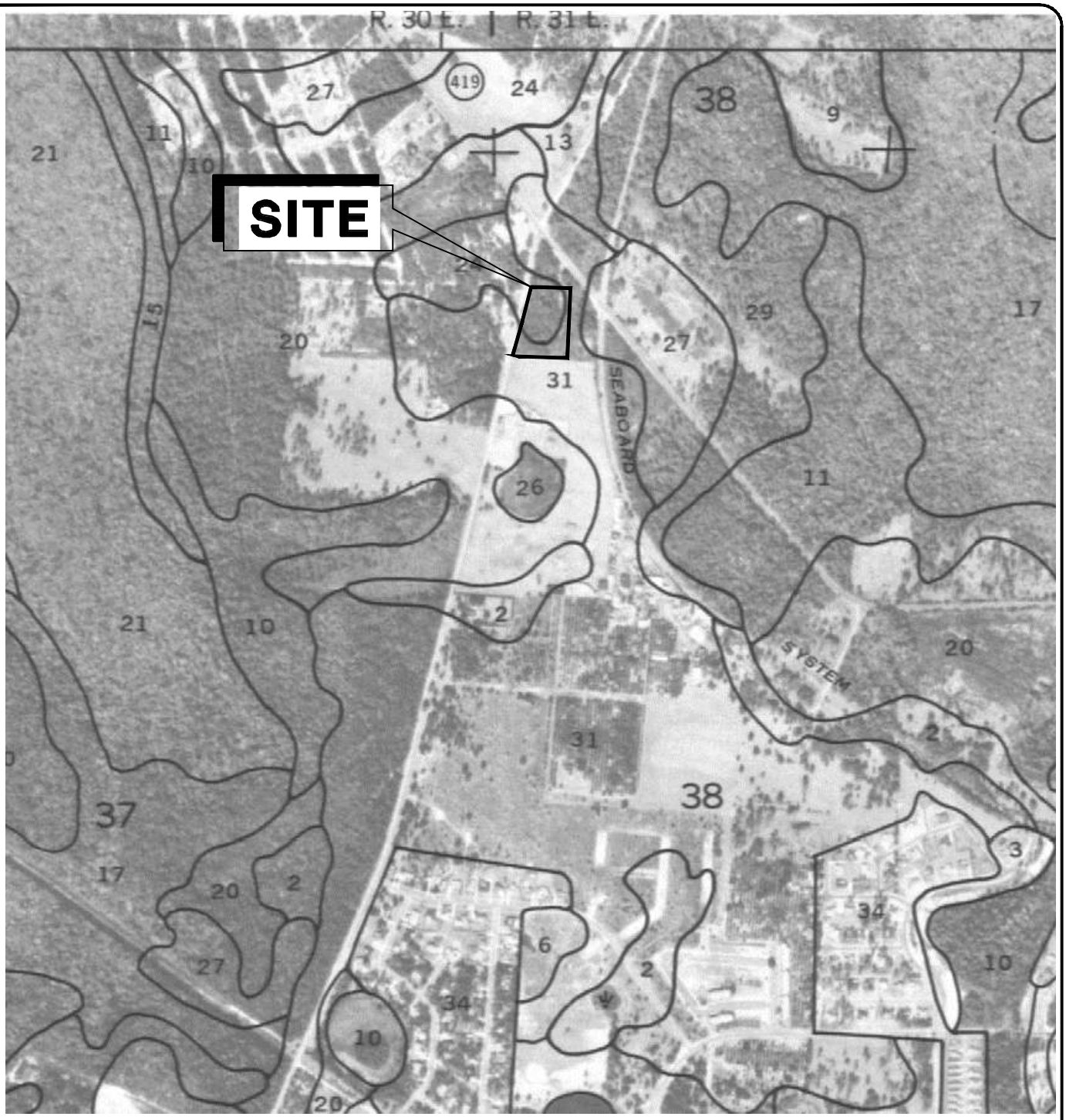
CITY OF WINTER SPRINGS, FLORIDA

DRAWN : RNR	SCALE : NOTED	JOB NO. : 23-E2485.01
APPROVED : DJY	DATE : 9/28/2023	PLATE : 1

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Consulting Engineers in the Earth Sciences, Geotechnology, Hydrogeology and Construction Materials Testing

VICINITY



SCS VICINITY MAP

0 250 500 1000

Scale in Feet

LEGEND

24	PAOLA–ST. LUCIE SANDS, 0 TO 5% SLOPES
31	TAVARES–MILLHOPPER FINE SANDS, 0 TO 5% SLOPES

SUBSOIL & GROUNDWATER LEVEL INVESTIGATION

ACE HARDWARE - MICHAEL BLAKE BLVD & TUSKAWILLA RD

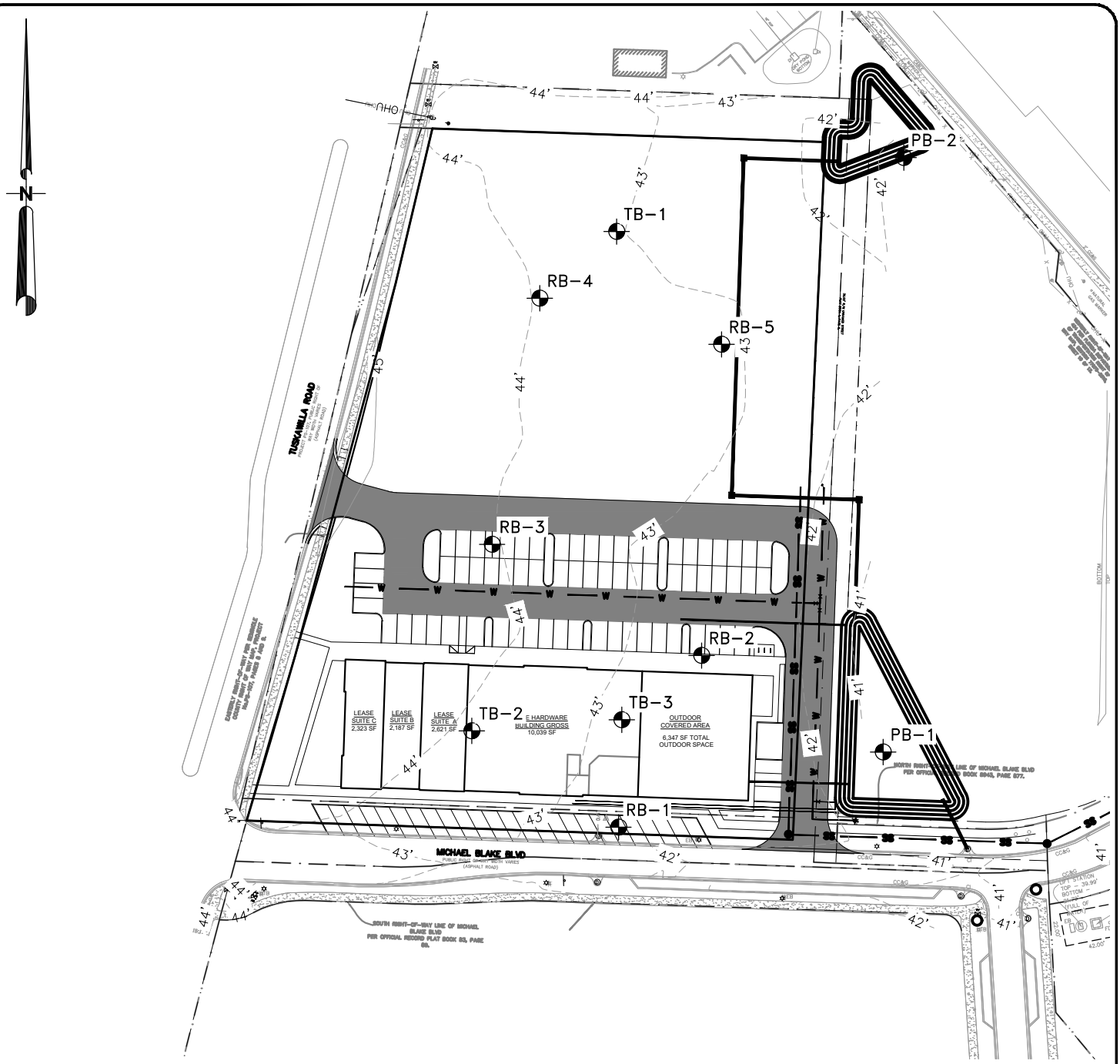
CITY OF WINTER SPRINGS, FLORIDA

DRAWN :	SCALE :	JOB NO. :
RNR	NOTED	23–E2485.01
APPROVED :	DATE :	PLATE :
DJY	9/28/2023	2

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SCS VICINITY



LOCATION PLAN

0 25 50 100

Scale in Feet

LEGEND

⊕ AUGER BORING LOCATION (THIS INVESTIGATION)

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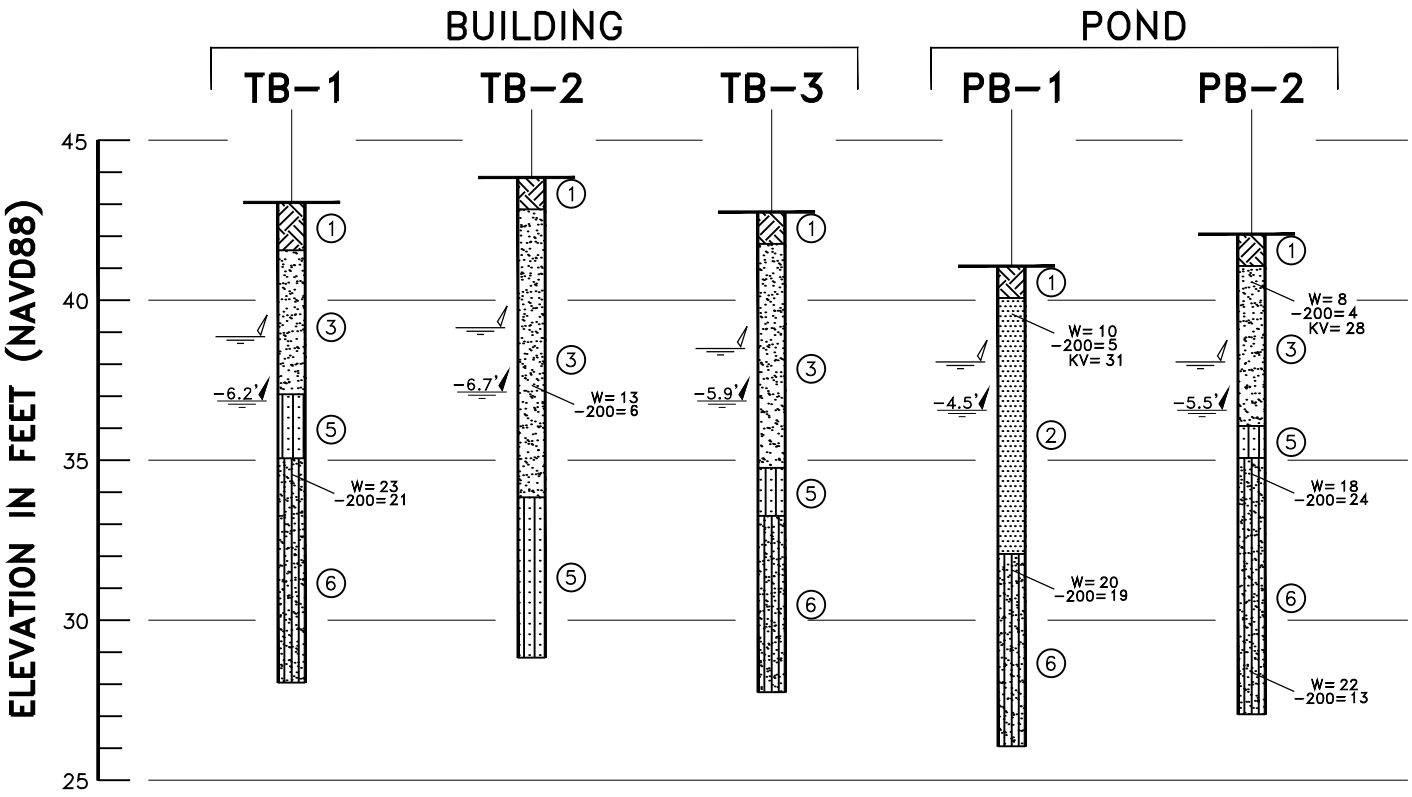
SUBSOIL & GROUNDWATER LEVEL INVESTIGATION

ACE HARDWARE - MICHAEL BLAKE BLVD & TUSKAWILLA RD

CITY OF WINTER SPRINGS, FLORIDA

DRAWN : RNR	SCALE : NOTED	JOB NO. : 23-E2485.01
APPROVED : DJY	DATE : 9/28/2023	FIGURE : 1

LOC PLAN



SOIL PROFILES

LEGEND

- ① GRAYISH BROWN SLIGHTLY SILTY FINE SAND WITH OCCASIONAL SMALL ROOTS AND TRACE ORGANICS (TOPSOIL)
- ①A DARK GRAY ORGANIC FINE SAND WITH ABUNDANT ROOTS (PT)
- ② GRAYISH BROWN FINE SAND (SP)
- ③ LIGHT BROWN FINE SAND (SP)
- ④ GRAY FINE SAND (SP)
- ④A VERY LIGHT GRAY TO WHITE FINE SAND (SP)
- ⑤ DARK GRAY BROWN TO DARK REDDISH BROWN SLIGHTLY SILTY FINE SAND (SP–SM)
- ⑥ LIGHT GRAYISH BROWN TO GRAY BROWN SILTY TO SLIGHTLY CLAYEY FINE SAND (SM)(SM–SC)
- (SP) UNIFIED SOIL CLASSIFICATION GROUP SYMBOL
- -4.2' DEPTH TO GROUNDWATER LEVEL (MEASURED 9/2023)
- ESTIMATED NORMAL SEASONAL HIGH GROUNDWATER LEVEL
- W NATURAL MOISTURE CONTENT IN PERCENT
- -200 PERCENT FINES PASSING U.S. NO. 200 SIEVE
- OC ORGANIC CONTENT IN PERCENT DRY WEIGHT
- KV COEFFICIENT OF VERTICAL PERMEABILITY (FEET PER DAY)

SUBSOIL & GROUNDWATER LEVEL INVESTIGATION

ACE HARDWARE - MICHAEL BLAKE BLVD & TUSKAWILLA RD

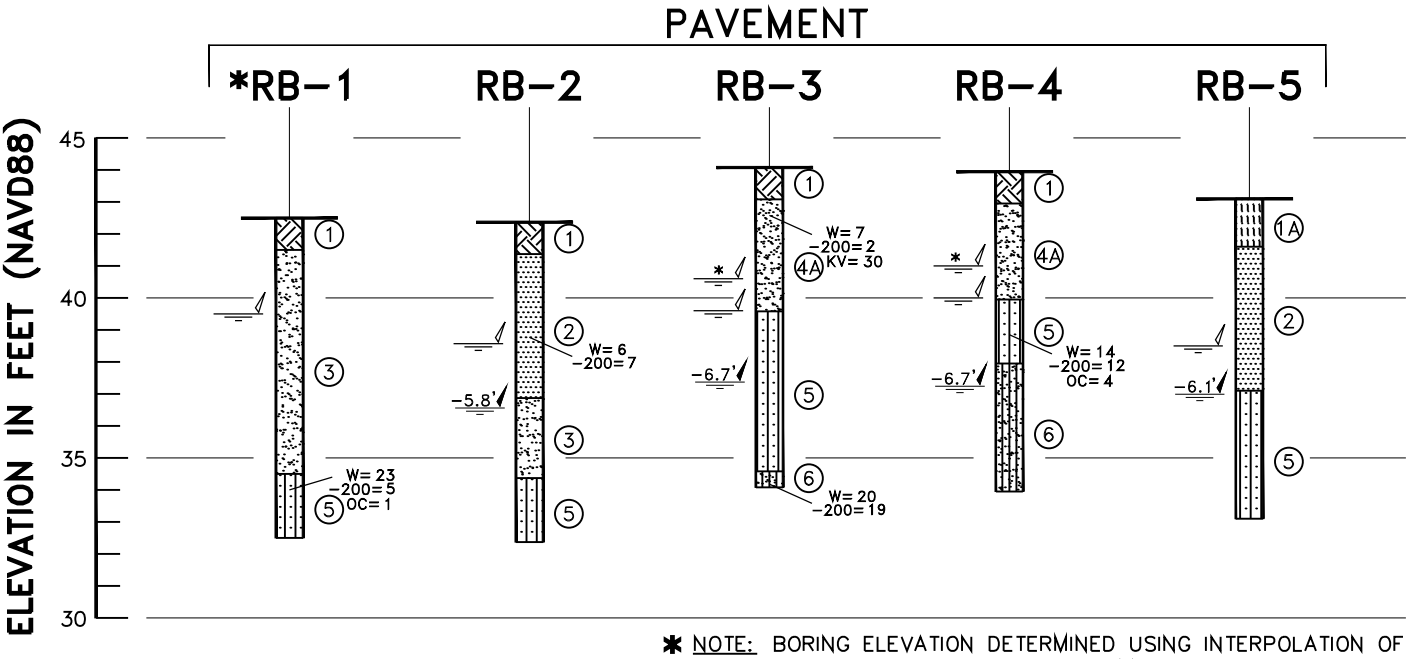
CITY OF WINTER SPRINGS, FLORIDA

DRAWN : RNR	SCALE : NOTED	JOB NO. : 23–E2485.01
APPROVED : DJY	DATE : 9/28/2023	FIGURE : 2

YOVAISH ENGINEERING SERVICES, LLC.

Consulting Engineers in the Earth Sciences, Geotechnology, Hydrogeology and Construction Materials Testing

SOIL PROFILES



✱ NOTE: BORING ELEVATION DETERMINED USING INTERPOLATION OF AVAILABLE TOPOGRAPHIC INFORMATION (NOT SURVEYED)

SOIL PROFILES

LEGEND

- ① GRAYISH BROWN SLIGHTLY SILTY FINE SAND WITH OCCASIONAL SMALL ROOTS AND TRACE ORGANICS (TOPSOIL)
- ①A DARK GRAY ORGANIC FINE SAND WITH ABUNDANT ROOTS (PT)
- ② GRAYISH BROWN FINE SAND (SP)
- ③ LIGHT BROWN FINE SAND (SP)
- ④ GRAY FINE SAND (SP)
- ④A VERY LIGHT GRAY TO WHITE FINE SAND (SP)
- ⑤ DARK GRAY BROWN TO DARK REDDISH BROWN SLIGHTLY SILTY FINE SAND (SP-SM)
- ⑥ LIGHT GRAYISH BROWN TO GRAY BROWN SILTY TO SLIGHTLY CLAYEY FINE SAND (SM)(SM-SC)
- (SP) UNIFIED SOIL CLASSIFICATION GROUP SYMBOL
- -4.2' DEPTH TO GROUNDWATER LEVEL (MEASURED 9/2023)
- ESTIMATED NORMAL SEASONAL HIGH GROUNDWATER LEVEL
- ✱ ESTIMATED "TEMPORARY PERCHED" HIGH GROUNDWATER LEVEL
- W NATURAL MOISTURE CONTENT IN PERCENT
- -200 PERCENT FINES PASSING U.S. NO. 200 SIEVE
- OC ORGANIC CONTENT IN PERCENT DRY WEIGHT
- KV COEFFICIENT OF VERTICAL PERMEABILITY (FEET PER DAY)

SUBSOIL & GROUNDWATER LEVEL INVESTIGATION

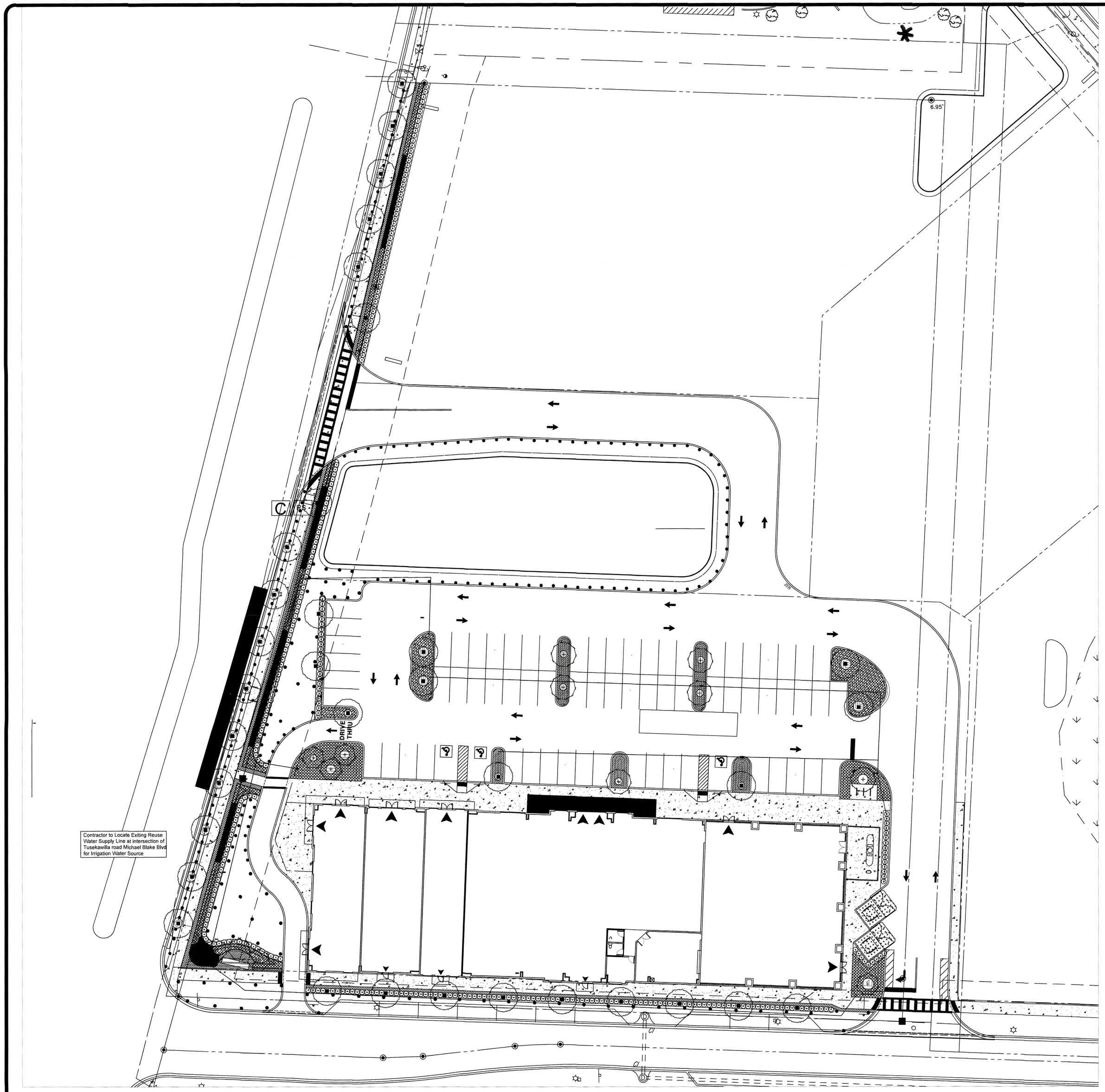
ACE HARDWARE - MICHAEL BLAKE BLVD & TUSKAWILLA RD

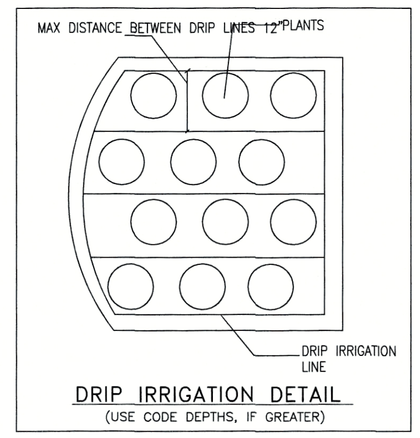
CITY OF WINTER SPRINGS, FLORIDA

DRAWN : RNR	SCALE : NOTED	JOB NO. : 23-E2485.01
APPROVED : DJY	DATE : 9/28/2023	FIGURE : 3

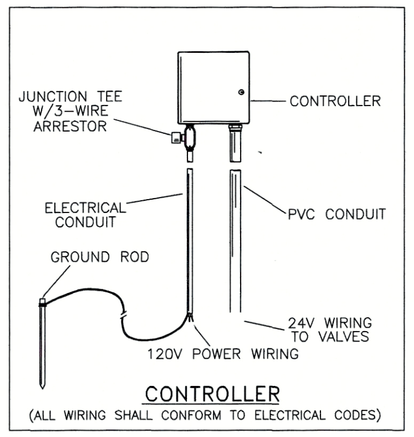
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Consulting Engineers in the Earth Sciences, Geotechnology, Hydrogeology and Construction Materials Testing

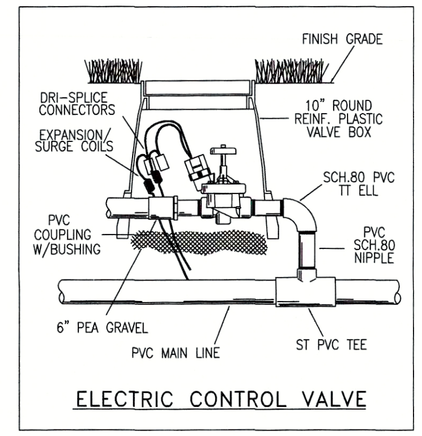




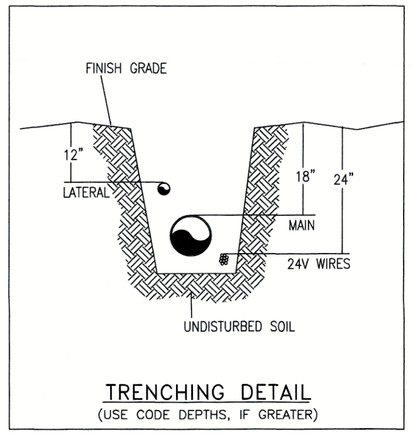
DRIP IRRIGATION DETAIL
(USE CODE DEPTHS, IF GREATER)



CONTROLLER
(ALL WIRING SHALL CONFORM TO ELECTRICAL CODES)



ELECTRIC CONTROL VALVE



TRENCHING DETAIL
(USE CODE DEPTHS, IF GREATER)

RAIN BIRD DRIP TUBE .5 GPH - BROWN IN COLOR W/ PURPLE STRIP - RECLAIM WATER

RAIN BIRD SPRAY HEAD W/ PURPLE CAP - RECLAIM WATER

RAIN BIRD DRIP VALVE WITH Y STRAINER - SIZE PER PLAN - PURPLE IN COLOR.

IRRIGATION MAIN LINE SCH 40 PVC - PURPLE IN COLOR FOR RECLAIM WATER.

C RS — RAIN BIRD 8 ZONE IRRIGATION CLOCK WITH MINI CLICK RAIN

DOBSON'S WOODS & WATER, INC.
Landscape, Maintenance, Pest Control, & Irrigation Contractors
Registered Landscape Architects # LC26000283
Certified General Contractors # CGC1515628
851 Maguire Rd.
Ocoee, Fl 34761
Phone: 407-841-0030
FAx: 407-843-7546
WWW.dobsonsww.com

LARRY DOBSON, L.A.
State Of Florida
Reg.# LA938

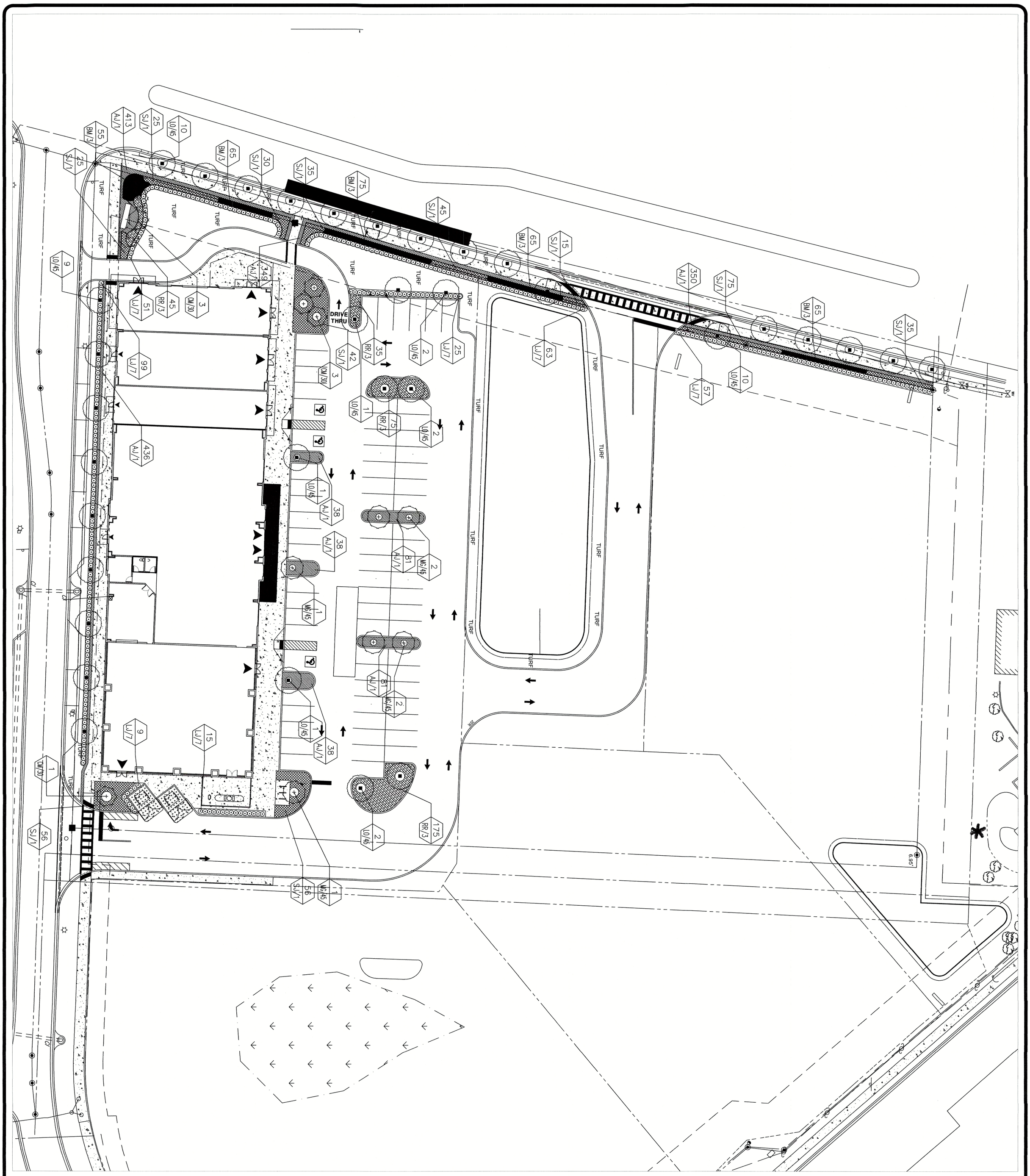
1-6-25

REVISIONS	BY
REV A - CC 11/28/23	SLD
REV B - CC 09/05/24	SLD
REV C - 01/24/2025	SLD
REV D - SC 02/3/2025	SLD
REV E - CC 3/3/25	SLD

Winter Springs Ace Hardware
IRRIGATION PLAN and DETAILS

DRAWN BY	Sheldon Dean
CHECKED	Larry K. Dobson
DATE	June 8, 2023
SCALE	1"=20'
JOB NO.	WSA-001
SHEET	I.01
1 OF 2 SHEETS	

C:\Sdean\Side Work\DWW\Winter Springs Ace Hardware_Utilities Site Plan - Standard\220336 WINTER SPRINGS FL-TOPO-TREES-TABLE - Standard (1)\Winter Springs Ace Landscape3-REV F.dwg



Plant Legend

Symbol	Qty	Name	Spec
		TREES	
MG/45	6	Souther Magnolia	45 Gallon, 8'ht x 4' sprd x 2" cal - Per Plan
LO/45	27	Live Oak	45 Gallon, 8'ht x 4' sprd x 2" cal - Per Plan
CM/30	7	Crepe Myrtle - Pink	30 Gallon, 6'ht x 3' sprd x Multi Trunk 2" cal - Per Plan
		SHRUBS and GROUND COVER	
LJ/7	268	Sweet Viburnum	7 Gallon, 30" ht x 24" sprd - 30" O.C
BM/3	260	Box Wood	3 Gallon, 18" ht x 8" sprd - 18" O.C
RR/3	330	Red Ruffel Azela	3 Gallon, 18" ht x 8" sprd - 24" O.C
AJ/1	1474	Asiatic Jasmine	1 Gallon, 3 Runners per Pot, 12" Min Lenght - 18" O.C
SJ/1	329	Shore Juniper	1 Gallon, 8" Sprd x 4" ht - 24" O.C
TURF		St. Augustine Sod	Per Plan Solid Sod

DOBSON'S WOODS & WATER, INC.
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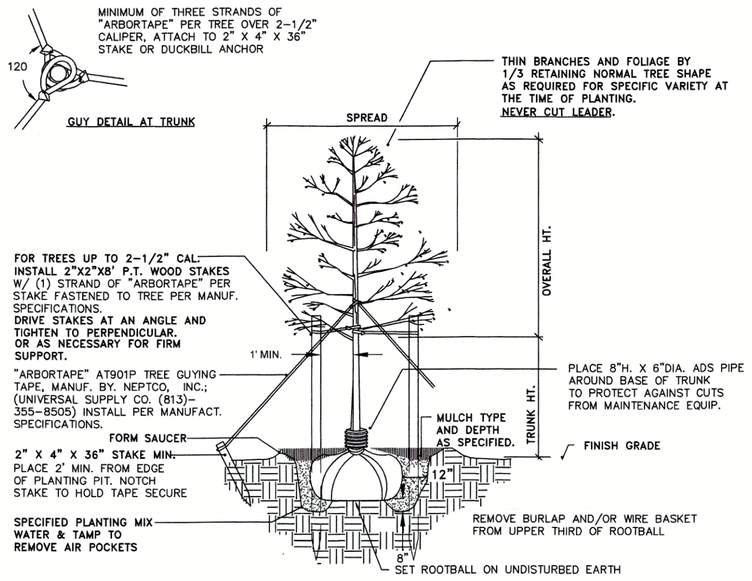
LARRY DOBSON, L.A.
State Of Florida
Reg.# LA638
4-8-25

Winter Springs Ace Hardware
LANDSCAPE PLAN

REVISIONS	BY
REV A - CC 11/28/23	SLD
REV D - SC 02/3/2025	SLD
REV E - CC 3/3/25	SLD

DRAWN BY: Sheldon Dean
CHECKED: Larry K. Dobson
DATE: June 8, 2023
SCALE: 1"=20'
JOB NO.: WSA-001
SHEET: L.01
1 OF 2 SHEETS

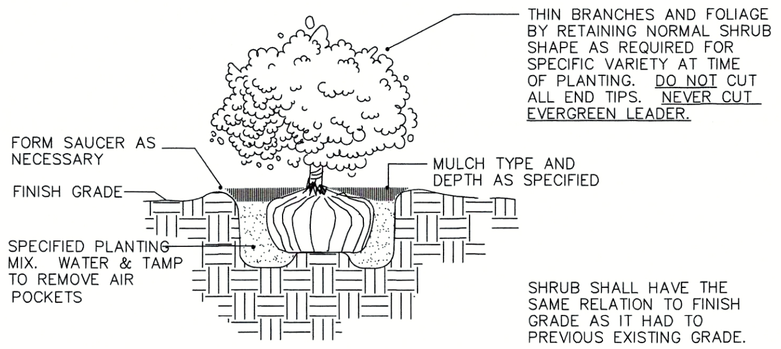
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TREE PLANTING, STAKING AND PRUNING

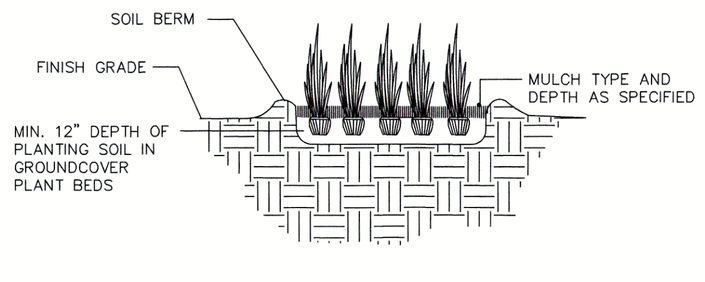
Plant Legend

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		TREES	
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LJ/7	325	Sweet Viburnum	7 Gallon, 30" ht x 24" sprd - 30" O.C
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TURF		St. Augustine Sod	Per Plan Solid Sod



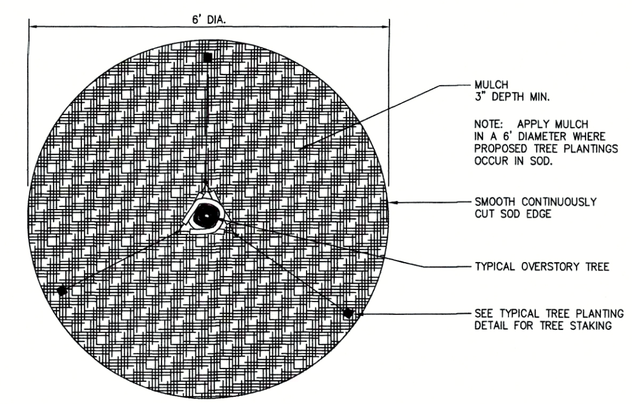
SHRUB PLANTING

N.T.S.



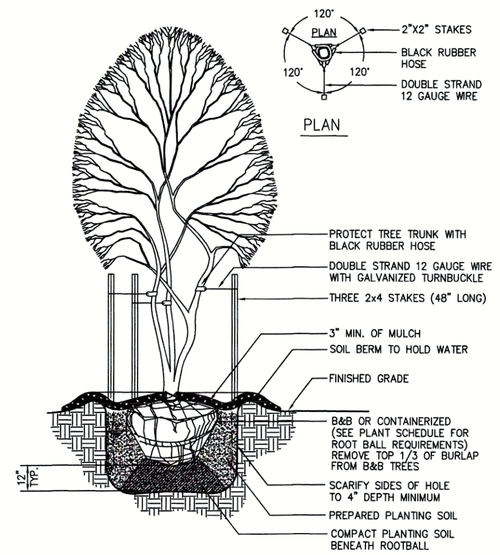
GROUND COVER PLANTING

N.T.S.



TREE MULCH IN SOD AREA

N.T.S.



MULTI TRUNK TREE PLANTING, STAKING AND PRUNING

LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO.1 OR BETTER PER "GRADES AND STANDARDS FOR NURSERY PLANTS, PART I & II", FLORIDA DEPARTMENT OF AGRICULTURE.

2. INSTALLATION OF LANDSCAPE MUST BE COORDINATED WITH OTHER SUBCONTRACTORS. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES PRIOR TO EXCAVATION WORK.

3. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IF ANY CONFLICTS ARISE BETWEEN THE PROPOSED DESIGN AND EXISTING CONDITIONS ON-SITE.

4. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO AWARD OF CONTRACT OF ANY ON-SITE CONDITIONS THAT WOULD HINDER THE NORMAL, HEALTHY GROWTH OF PLANT SPECIES PROPOSED ON THESE PLANS.

5. THE LANDSCAPE ARCHITECT MAY BE CONTACTED FOR ASSISTANCE IN LAYOUT OF PLANT MATERIAL, IF NEEDED. ALL QUESTIONS REGARDING PLANT PLACEMENT MUST BE RESOLVED PRIOR TO COMMENCEMENT OF INSTALLATION.

6. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT & ORANGE COUNTY. CONTRACTOR SHALL SUBMIT TO THE LANDSCAPE ARCHITECT PROOF OF NON-AVAILABILITY AND A PROPOSAL FOR THE USE OF EQUIVALENT MATERIAL.

7. PLANT MATERIAL QUANTITIES SHOWN ON THESE PLANS ARE SUPPLIED AS AN AID TO THE CONTRACTOR FOR BIDDING PURPOSES. FINAL QUANTITY TAKEOFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

8. PLANT SPECIFICATIONS OF HEIGHT, SPREAD AND CONTAINER SIZE SHOWN ON THE PLANS ARE MINIMUM ACCEPTABLE SIZES. ALL INSTALLED MATERIAL SHALL MEET OR EXCEED THE GIVEN SPECS.

9. ALL TREES SHALL BE INSTALLED SO THE TOP ROOT AT THE TRUNK IS VISIBLE AND 2" ABOVE FINISH GRADE.

10. REQUIRED TREES AND BUFFERS MUST BE INSTALLED IN ACCORDANCE WITH THE COUNTY LAND DEVELOPMENT CODE.

11. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING THE SITE TO WITHIN +/- 0.10 FT. OF GRADES SHOWN ON THESE PLANS. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FINISH GRADES IN ALL LANDSCAPE AREAS.

12. PLANTING BEDS SHALL BE FINISHED WITH A 3" LAYER OF PINE BARK MULCH.

13. THE CONTRACTOR IS RESPONSIBLE FOR APPROPRIATE WATERING AND MAINTENANCE OF ALL PLANT MATERIAL DURING THE INSTALLATION PHASE.

14. FREESTANDING TREES IN AREAS PROPOSED TO BE SODDED SHALL BE SURROUNDED WITH A 3 FT. RADIUS MULCHED BED.

15. THE CONTRACTOR SHALL WARRANTY ALL WORKMANSHIP AND MATERIALS. TREES SHALL BE WARRANTEED FOR ONE YEAR, SHRUBS AND GROUNDCOVER SHALL BE WARRANTEED FOR SIX MONTHS.

16. PROVIDE 100% HEAD TO HEAD COVERAGE ON ALL NEW PLANT MATERIAL. WATER SOURCE WILL BE RECLAIMED.

17. ALL EXISTING INVASIVE EXOTIC PLANTS, AS LISTED ON THE FLORIDA EXOTIC PEST PLANT COUNCIL INVASIVE PLANT SPECIES LIST, SHALL BE REMOVED.

DOBSON'S WOODS & WATER, INC.
Landscape, Maintenance, Pest Control, & Irrigation Contractors
Registered Landscape Architects # LC26000283
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851 Maguire Rd.
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Phone: 407-841-0030
FAx: 407-843-7546
WWW.dobsonsww.com

REVISIONS	BY
REV A - CC 11/28/23	SLD
REV B - CC 09/05/24	SLD
REV D - SC 02/3/2025	SLD
REV E - CC 3/3/25	SLD

Winter Springs Ace Hardware
LANDSCAPE DETAILS

LARRY DOBSON, L.A.
State Of Florida
Reg.# LA938

4-8-25

DRAWN BY: Sheldon Dean
CHECKED: Larry K. Dobson
DATE: June 8, 2023
SCALE: NA
JOB NO.: WSA-001
SHEET: L.02
1 OF 2 SHEETS

C:\Sdean\Side Work\DWW\Winter Springs Ace Hardware_Utilities Site Plan - Standard\220336 WINTER SPRINGS FL-TOPO-TREES-TABLE - Standard (1)\Winter Springs Ace Landscape3-REV F.dwg

NATIVE GEOSCIENCE

Phase I Environmental Site Assessment

Sutton Crossings Property
Tuskawilla Road and Michael Blake Boulevard
Winter Springs, Seminole County, Florida
Native Geoscience Project No.: R0789.1

Prepared for:
EQX-HRP Winter Springs, LLC

Prepared by:
Native Geoscience, Inc.
Orlando, Florida

October 18, 2022

NATIVE GEOSCIENCE

October 18, 2022

Mr. Ryan Stahl
EQX-HRP Winter Springs, LLC
630 S. Maitland Avenue, Suite 100
Maitland, Florida 32751

Re: Phase I Environmental Site Assessment Report
Sutton Crossings Property
Winter Springs, Seminole County, Florida
Native Geoscience Project No.: R0789.1

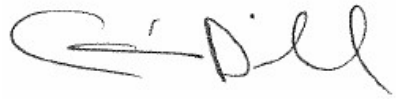
Dear Mr. Stahl:

Native Geoscience, Inc. (NGI) has completed a Phase I Environmental Site Assessment (ESA) for the above-referenced subject property. The subject property is located south of the intersection of State Road 434 and Tuskawilla Road and north of Michael Blake Boulevard in Winter Springs, Seminole County, Florida. The scope of services was conducted in general accordance with NGI Proposal No. P1794.1 dated September 16, 2022 and authorized by you.

The Phase I ESA was conducted in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E1527-13. The objective of the Phase I ESA was to evaluate the subject property for indications of recognized environmental conditions and to assist in satisfying All Appropriate Inquiries (AAI) standards and practices. The following report provides the scope, methods and conclusions of our assessment.

We appreciate the opportunity to be of service to you on this project and look forward to a continued relationship. Should you have any questions or concerns regarding this report, please feel free to call us at (407) 342-1443.

Sincerely,
Native Geoscience, Inc.



John C. Diehl, Jr.
Principal Geologist

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1.0 Executive Summary

Native Geoscience, Inc. (NGI) has completed a Phase I Environmental Site Assessment (ESA) for EQX-HRP Winter Springs, LLC on the subject property located south of the intersection of State Road 434 and Tuskawilla Road, and north of Michael Blake Boulevard in Winter Springs, Seminole County, Florida. The Phase I ESA was conducted in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E1527-13. The objective of the Phase I ESA was to evaluate the subject property for indications of recognized environmental conditions and to assist in satisfying All Appropriate Inquiries (AAI) standards and practices.

The subject property consists of three legal parcels totaling approximately 6.24 acres that are identified by the Seminole County Property Appraiser (SCPA) as Parcel Identification Numbers (PINs) 01-21-30-501-0000-0010 (parcel 1), 26-20-30-5AR-0A00-008D (parcel 2) and 26-20-30-5AR-0A00-008H (parcel 3). Parcel 1 is owned by Patti A. Schoen and is currently undeveloped and heavily wooded. Parcels 2 and 3 are owned by Schrimsher Land Fund and are also heavily wooded. We understand that the proposed roads and rights of way (ROW) separating the parcels are also included within the subject property.

Based on review of the Casselberry, Florida Quadrangle Map prepared by the U.S Geological Survey (USGS), the subject property has an elevation of approximately 45 feet above mean sea level (AMSL). The ground surface appears to slope downward to the east, toward Howell Creek which discharges into Lake Jessup to the north.

Based on our historical review, the subject property appeared to exist as undeveloped land with a railroad bed for the Seaboard Coast Line trending in a north-south direction in the eastern portion from prior to 1940 until present. Tuskawilla Road was apparent as a dirt road from prior to 1940 until circa 1957 when it appeared paved. Development of the surrounding area appeared to begin in the 1980's. The railroad line had appeared inactive since at least 1999.

The subject property was not identified in the regulatory database report.

The subject property is located in an area dominated by commercial and retail development. During the site visit, NGI observed the following land use on properties adjoining the subject property.

Adjoining Properties	
North Adjoining Property (NAP)	Exxon Mobil Gas Station and Carwash (1205 State Road 434)
South Adjoining Property (SAP)	[across Michael Blake Boulevard] followed by undeveloped land and The Savoy Gracious Retirement Living (80 Michael Blake Boulevard)
East Adjoining Property (EAP)	[Across State Road 434] Wendy's Restaurant (1218 E State Road 434) Starbucks (1220 E State Road 434) and undeveloped wooded areas.
West Adjoining Property (WAP)	[Across Tuskawilla Road] Lake Jesup Animal Hospital (190 Tuskawilla Road), Wooded Land and Stormwater pond for a commercial plaza.

The north adjoining property (Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786) was identified in the regulatory database report and is further discussed below.

Findings and Conclusions

NGI has completed a Phase I ESA in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E1527-13 at the subject property located south of the intersection of State Road 434 and Tuskawilla Road, and north of Michael Blake Boulevard in Winter Springs, Seminole County, Florida. Based solely on the records review, site visit and interviews conducted for this assessment, NGI has not identified Controlled Recognized Environmental Conditions or Historical Recognized Environmental Conditions for the subject property.

NGI identified the following Recognized Environmental Conditions for the subject property.

- The north adjoining property (**Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786**) was identified in the regulatory database report as a Leaking Underground Storage Tank (LUST), Underground Storage Tank (UST), Cleanup Site, and other associated listings. The facility address is 1205 E. State Road 434. According to available documentation, a Discharge Reporting Form (DRF) was filed on May 3, 1993, indicating an unknown amount of free product was found in a monitoring well at the site. A Site Assessment Report (SAR) was submitted July 30, 2013, by Shaw Environmental, Inc. No OVA responses were detected above 0 ppm and no laboratory soil samples contained concentrations above Soil Cleanup Target Levels (SCTLs). Groundwater concentrations above Groundwater Cleanup Target Levels (GCTLs) was not identified with the exception of benzene (4.8 ug/L) in MW-5. Lastly, Shaw measured the groundwater flow direction at the facility to be east to southeast on April 25 and July 15, 2013. This is generally cross-gradient relative to the subject property; however, it could flow through the northeast corner.

  A Supplemental Site Assessment Report was conducted by Montrose Environmental dated March 24, 2020. During the assessment, Montrose conducted 3 soil borings and collected 2 soil samples from each boring. In addition, Montrose installed two additional monitoring wells and sampled a total of 7 wells (including the two additional wells). According to the report, no soil or groundwater contamination was identified on the site and previously impacted MW-5 exhibited two consecutive clean rounds of groundwater sampling. Therefore, Montrose proposed that the site qualified for No Further Action and is awaiting response from the Florida Department of Environmental Protection (FDEP).

  Based on the documents reviewed, it appears that the north adjoining property is nearing a Site Rehabilitation Completion Order (SRCO) from the FDEP. However, due to the close proximity of the UST area and previously impacted monitoring well MW-5 to the subject property boundary (on the order of 30 to 50 feet), it is likely that petroleum-impacted groundwater has migrated onto the subject property from this facility. Therefore, this represents a Recognized Environmental Condition. It should be noted that the north adjoining facility is in a State-funded cleanup and assessment program (Petroleum Liability and Restoration Insurance Program – PLRIP). Therefore, petroleum-impacts to the subject property associated with the 1993 discharge would likely be the responsibility of the State.

- Historical aerial photographs and topographic maps indicate that a railroad track was present on the subject property in the past. Railroad tracks are frequently sources of contamination due to the presence of railroad ties generally treated with creosote as well as the long-term application

of hazardous materials (pesticides and herbicides) within the right of way during typical maintenance operations. These materials are known to accumulate in the soil over time. Furthermore, during an interview with the owner Mr. Michael Schrimsher, he stated that he was aware of soil contamination on the subject property. According to Mr. Schrimsher, "soil under the former CSX railroad was contaminated by creosote on wooden railroad ties and herbicide sprayed along railroad tracks." Therefore, it is our opinion that the former railroad track area represents a Recognized Environmental Condition.

NGI identified the following Business Environmental Risk for the subject property.

- **Town Center S.E.E.D.** and **Former Central Florida Drum Facility** were identified as Brownfields in the vicinity of the subject property. Brownfields are areas of economic blight, often due to known or perceived contamination or environmental issues. The presence of a Brownfield does not indicate the existence of contamination on any certain property, and the other databases searched provide sufficient data to evaluate the subject property and/or adjacent properties for site-specific concerns.

2.0 Introduction

In order to manage environmental risk, it is important for firms involved in the purchasing, leasing, and/or financing of properties to obtain a professional opinion regarding the potential for significant levels of contamination. Such contamination may occur in surface water bodies, soil, and/or groundwater, or within structures on a subject property. Activities carried out for this assessment are directed at providing EQX-HRP Winter Springs, LLC with a professional evaluation of the potential for environmental liabilities on the specific subject property using the methodology described in ASTM E1527-13.

2.1 Objective

NGI has conducted a Phase I ESA in general conformance with ASTM E1527-13. The objective of this Phase I ESA is to identify, to the extent feasible pursuant to the process prescribed by the ASTM standard, recognized environmental conditions (RECs) in connection with the property.

The Phase I ESA has four components:

1. Records Review,
2. Site Reconnaissance,
3. Interviews, and
4. Report preparation.

RECs are defined by ASTM as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under the conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not RECs.

The ASTM standard also discusses two variations of RECs – a Controlled Recognized Environmental Condition (CREC) and a Historical Recognized Environmental Condition (HREC). These types of RECs are further defined below.

A CREC is defined as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

An HREC is defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting

the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Lastly, the ASTM standard defines a Business Environmental Risk as a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.

2.2 Limiting Conditions and Data Gaps

The findings and conclusions presented in this report are based on procedures described in ASTM Practice E1527-13, inquiries with public agencies, available literature cited in this report, conditions noted at the time of our Phase I ESA, and our interpretation of the information obtained as part of this Phase I ESA. Our findings and conclusions are limited to the specific project and properties described in this report and by the accuracy and completeness of information provided by others.

An environmental site assessment cannot wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property within reasonable limits of time and cost.

In performing its services, NGI used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

No data gaps were identified during the Phase I ESA process, with the exception of the following:

- Historical resources were not readily available for 5-year-or-less intervals.

In our opinion, the identified data gap did not affect the environmental professional's ability to render opinions regarding conditions indicative of a release or threatened release.

2.3 Non-Scope Considerations

This assessment did not include non-scope items such as Asbestos-Containing Building Materials, Biological Agents, Cultural and Historic Resources, Ecological Resources, Endangered Species, Health and Safety, Indoor Air Quality unrelated to releases of hazardous substances or petroleum products into the environment, Industrial Hygiene, Lead-Based Paint, Lead in Drinking Water, Mold, Radon, and Regulatory Compliance.

2.4 Reliance

This report is for the exclusive use of EQX-HRP Winter Springs, LLC. No other warranty, expressed or implied, is made. NGI is not responsible for any claims, damages, or liability associated with any other third party's interpretation or reuse of this report without the express written authorization of NGI.

3.0 Site Description

3.1 Site Location, Description and Current Use

The subject property consists of three legal parcels totaling approximately 6.24 acres that are identified by the Seminole County Property Appraiser (SCPA) as Parcel Identification Numbers (PINs) 01-21-30-501-0000-0010 (parcel 1), 26-20-30-5AR-0A00-008D (parcel 2) and 26-20-30-5AR-0A00-008H (parcel 3). Parcel 1 is owned by Patti A. Schoen and is currently undeveloped and heavily wooded. Parcels 2 and 3 are owned by Schrimsher Land Fund and are also heavily wooded. We understand that the proposed roads and rights of way (ROW) separating the parcels are also included within the subject property.

The following figures are included for reference: Figure 1 (Site Location Plan), Figure 2 (Site Plan), and Figure 3 (Topographic Map).

3.1.1 Geology

The property is located in Seminole County within the Casselberry-Oviedo-Geneva-Chuluota Hills subdistrict of the Central Lake physiographic district. This area is characterized by variable relief with elevations ranging from 5 to 75 feet above mean sea level. These variations in elevation may be attributed to groundwater solution of carbonate lithology and subsequent subsidence due to karst development. The topography of the area is dominated by numerous, small, closed depressions some of which contain swamps or shallow ponds. The higher elevations can be attributed to ancient marine terraces, beach ridges and dunes. Within the Central Lake district, the uplifted limestones of the Floridan aquifer lie unconformably below surficial sands. This region, consisting of prairies, swamps, and lakes, is the principal recharge area of the Floridan aquifer.

The water table aquifer exists unconfined within surficial clastic sediments consisting of unconsolidated sands and semi-consolidated clayey sands. Water wells tapped into the water table aquifer are primarily used for domestic purposes. The intermediate aquifer is represented in the formations of the Hawthorn Group. This aquifer generally supplies water for irrigation wells.

The principal aquifer is the Floridan which begins at the top of the Ocala Group and is the source for all major municipal, irrigation, and domestic wells. It has a potentiometric surface of 30 to 40 feet above mean sea level in the area of the property. The aquifer is also connected to the surface waters through sinkhole lakes. These lakes provide a direct passage for surface water recharge of the Floridan aquifer.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Paolo-St. Lucie sands, Tavares-Millhopper complex and Pomelo fine sands. These soils range from moderately well to excessively drained with depth to groundwater generally ranging from 24 inches to more than 80 inches below natural grade.

3.1.2 Topography and Estimated Groundwater Flow Direction

Based on review of the Casselberry, Florida Quadrangle Map prepared by the U.S Geological Survey (USGS), the subject property has an elevation of approximately 45 feet above mean sea level (AMSL). The

ground surface appears to slope downward to the east, toward Howell Creek which discharges into Lake Jessup to the north. A copy of a recent topographic map is included in Figure 3.

We estimate the groundwater flow direction to be similar to the topographic slope of the site and surrounding area. Therefore, groundwater is likely flowing to the east, toward Howell Creek.

3.1.3 Flood Zone

Based on review of the National Flood Hazard Map (Community Panel Number 12117C 0160F, dated September 28, 2007) prepared by the Federal Emergency Response Agency (FEMA), the subject property is identified as Zone X (an area of minimal flood risk). A copy of the FEMA National Flood Hazard Map reviewed for this project is included in Appendix ii.

3.1.4 Wetlands

Based on review of the National Wetland Inventory map, it appears that wetlands are not present on the subject property. However, a wetland survey should be conducted by an experienced wetland ecologist in order to determine the actual presence and extent of wetlands on the subject property.

3.2 Subject Property Vicinity and Adjoining Properties

The subject property is located in an area dominated by commercial and retail development. During the site visit, NGI observed the following land use on properties adjoining the subject property.

Adjoining Properties	
North Adjoining Property (NAP)	Exxon Mobil Gas Station and Carwash (1205 State Road 434)
South Adjoining Property (SAP)	[across Michael Blake Boulevard] followed by undeveloped land and The Savoy Gracious Retirement Living (80 Michael Blake Boulevard)
East Adjoining Property (EAP)	[Across State Road 434] Wendy's Restaurant (1218 E State Road 434) Starbucks (1220 E State Road 434) and undeveloped wooded areas.
West Adjoining Property (WAP)	[Across Tuskawilla Road] Lake Jesup Animal Hospital (190 Tuskawilla Road), Wooded Land and Stormwater pond for a commercial plaza.

The north adjoining property (Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786) was identified in the regulatory database report and is further discussed in Section 5.0.

4.0 Historical Review

The objective of consulting historical sources is to develop a history of the previous uses of the subject property and adjoining properties in order to identify those uses that are likely to have led to recognized environmental conditions in connection with the property.

Based on our historical review, the subject property appeared to exist as undeveloped land with a railroad bed for the Seaboard Coast Line trending in a north-south direction in the eastern portion from prior to 1940 until present. Tuskawilla Road was apparent as a dirt road from prior to 1940 until circa 1957 when it appeared paved. Development of the surrounding area appeared to begin in the 1980's. The railroad line had appeared inactive since at least 1999.

4.1 Aerial Photographs

NGI obtained available aerial photographs of the subject property and surrounding areas from Environmental Data Resources (EDR) dated September 21, 2022 (included in Appendix ii). The following observations were noted to be visible on the subject property and adjoining properties during the aerial photograph review:

Date	Scale	Quality	Observations
1940	1"=500'	Moderate	**Subject Property:** Undeveloped native pastureland. A possible railroad is located on the east portion of the site. **NAP:** Undeveloped land followed by State Road 434. **SAP:** Undeveloped native pastureland with sporadic trees throughout. **EAP:** State Road 434 followed by undeveloped native pastureland. **WAP:** Tuskawilla Road (unpaved) followed by undeveloped native pastureland.
1948	1"=500'	Moderate	**Subject Property:** No significant changes. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Increased tree canopy.
1952	1"=500'	Moderate	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1957	1"=500'	Moderate	**Subject Property:** Increased tree canopy. **NAP:** No significant changes visible. **SAP:** Pastureland cleared, and structures are visible along Tuskawilla Road. **EAP:** No significant changes visible. **WAP:** Tuskawilla Road appears paved.

1969	1"=500'	Poor	**Subject Property:** No significant changes visible. **NAP:** Increased tree canopy. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1972	1"=500'	Poor	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1977	1"=500'	Poor	**Subject Property:** Increased tree canopy, covering majority of the site. **NAP:** Increased tree canopy, covering majority of the property. **SAP:** Additional structures appear along Tuskawilla Road. **EAP:** No significant changes visible. **WAP:** Increased tree canopy, covering majority of the property.
1980	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Residential structures appear beyond Tuskawilla Road.
1986	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Additional residential structures visible beyond Tuskawilla Road.
1993	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** Gas station visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1994	1"=500'	Moderate	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1999	1"=500'	Poor	**Subject Property:** No significant changes visible. **NAP:** State Road 434 widened. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.

2007	1"=500'	Moderate	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Newly constructed building located across Tuskawilla Road.
2010	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
2013	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
2017	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** Property cleared and under construction across State Road 434. **WAP:** No significant changes visible.

No observations of environmental concern were made during our aerial photograph review with the exception of the gas station located on the north adjoining property.

4.2 Fire Insurance Maps

NGI reviewed the collection of Sanborn Fire insurance maps from EDR dated September 20, 2022. Sanborn map coverage was not available for the subject property and its vicinity.

A copy of the EDR's "Certified Sanborn® Map Report" is included in Appendix ii.

4.3 City Directories

NGI reviewed historical city directories obtained from EDR dated September 22, 2022, for past names and businesses that were listed for the subject property and adjoining properties. City Directories were reviewed for various years from 1940 through 2017. Since the subject property is not addressed, it was not listed in the city directories reviewed.

Below are the listings for the adjoining properties. Adjoining properties were not listed in City Directories prior to 1992.

Adjoining Property Addresses	
Year	**Listing**
1992	**NAP:** No Listings **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith (190 Tuskawilla Road)
1995	**NAP:** No Listings **SAP:** No Listings **EAP:** No Listings **WAP:** No Listings
2000	**NAP:** Mobile Orlando Jawad Incorporated (1205 E State Road 434) **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith; Lake Jesup Animal Hospital (190 Tuskawilla Road)
2005	**NAP:** Exxon Mobile Oil Corp (1205 E State Road 434) **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith DVM; Lake Jesup Animal Hospital (190 Tuskawilla Road)
2010	**NAP:** No Listings **SAP:** No Listings **EAP:** No Listings **WAP:** Lake Jesup Animal Hospital (190 Tuskawilla Road)
2014	**NAP:** Winter Springs Mobil (1205 E State Road 434) **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith DVM VET; Lake Jesup Animal Hospital (190 Tuskawilla Road)
2017	**NAP:** 7 Eleven; Mobil (1205 E State Road 434) **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith DVM; Lake Jesup Animal Hospital (190 Tuskawilla Road)

No listings of environmental concern were identified during our city directory search with the exception of the gas station located on the north adjoining property (1205 E. State Road 434). This facility is further discussed in Section 5.0.

4.4 Historical Topographic Maps

NGI reviewed historical topographic maps obtained from EDR dated September 20, 2022 (included in Appendix ii). The following observations were noted to be depicted on the subject property and adjoining properties during the topographic map review:

Date	Observations
1962	**Subject Property:** Undeveloped pastureland and Atlantic Coast Railroad Line depicted. **NAP:** Undeveloped pastureland followed by State Road 434. **SAP:** Undeveloped pastureland, a structure, and Atlantic Coast Railroad Line depicted. **EAP:** Undeveloped pastureland depicted. **WAP:** Tuskawilla Road followed by undeveloped land depicted.
1970	**Subject Property:** No significant changes visible. Name of railroad appears as Seaboard Coast Line. **NAP:** No significant changes visible. **SAP:** More structures depicted. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1972	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1980	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Residential roads and structures depicted across Tuskawilla Road.
1994	**Subject Property:** No significant changes visible. **NAP:** Likely gas station depicted. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Additional structures depicted.
2012	**Subject Property:** No structures, railroads, or individual building footprints are depicted. **NAP:** No structures, railroads, or individual building footprints are depicted. **SAP:** No structures, railroads, or individual building footprints are depicted. **EAP:** No structures or individual building footprints are depicted. **WAP:** No structures or individual building footprints are depicted.
2015	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
2018	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.

No observations of environmental concern were made during our topographic map review with the exception of the gas station located on the north adjoining property.

5.0 Records Review

5.1 Regulatory Report

NGI obtained regulatory database information pertaining to the subject property and surrounding area from Environmental Data Resources, Inc. (EDR) dated September 20, 2022. The EDR report is a compilation of records of facilities that are included on current federal and state environmental regulatory databases. The databases were searched based on the specified minimum search distances from the Site as established by ASTM Practice E1527-13. A copy of the EDR report is attached in Appendix iii.

We reviewed the EDR report to identify records that indicate known or potential recognized environmental conditions on the subject property and/or surrounding area and to evaluate the likelihood for those recognized environmental conditions to impact the subject property based on the information obtained in this Phase I ESA. Further discussion of specific listings is provided below.

5.1.1 Subject Property Listings

The subject property is not listed in the EDR regulatory report.

5.1.2 Adjoining Property Listings

The north adjoining property (**Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786**) was identified in the regulatory database report as a Leaking Underground Storage Tank (LUST), Underground Storage Tank (UST), Cleanup Site, and other associated listings. The facility address is 1205 E. State Road 434. According to available documentation, a Discharge Reporting Form (DRF) was filed on May 3, 1993, indicating an unknown amount of free product was found in a monitoring well at the site. A Site Assessment Report (SAR) was submitted July 30, 2013, by Shaw Environmental, Inc. No OVA responses were detected above 0 ppm and no laboratory soil samples contained concentrations above Soil Cleanup Target Levels (SCTLs). Groundwater concentrations above Groundwater Cleanup Target Levels (GCTLs) were not identified with the exception of benzene (4.8 ug/L) in MW-5. Lastly, Shaw measured the groundwater flow direction at the facility to be east to southeast on April 25 and July 15, 2013. This is generally cross to up-gradient relative to the subject property.

A Supplemental Site Assessment Report was conducted by Montrose Environmental (Montrose) dated March 24, 2020. During the assessment, Montrose conducted 3 soil borings and collected 2 soil samples from each boring. In addition, Montrose installed two additional monitoring wells and sampled a total of 7 wells (including the two additional wells). According to the report, no soil or groundwater contamination was identified on the site and previously impacted MW-5 exhibited two consecutive clean rounds of groundwater sampling. Therefore, Montrose proposed that the site qualified for No Further Action and is awaiting response from the Florida Department of Environmental Protection (FDEP).

Based on the documents reviewed, it appears that the north adjoining property is nearing a Site Rehabilitation Completion Order (SRCO) from the FDEP. However, due to the close proximity of the UST area and previously impacted monitoring well MW-5 to the subject property boundary (on the order of 30 to 50 feet), it is likely that petroleum-impacted groundwater has migrated onto the subject property

from this facility. Therefore, this represents a Recognized Environmental Condition. It should be noted that the north adjoining facility is in a State-funded cleanup and assessment program (Petroleum Liability and Restoration Insurance Program – PLRIP). Therefore, petroleum-impacts to the subject property associated with the 1993 discharge would likely be the responsibility of the State.

Portions of the above-referenced site assessment reports are included in Appendix ii.

5.1.3 Surrounding Area

We reviewed the EDR report for facilities located beyond adjoining properties that may indicate a release or likely release of hazardous substances and/or petroleum products that may impact the subject property.

Handy Way Food Store #3333, located at 170 Tuskawilla Road, approximately 375 feet northwest of the subject property is listed as a LUST and UST facility in the regulatory report. According to available documents, the facility originally utilized three 10,000-gallon steel USTs installed in May 1982. The tanks reportedly contained leaded gasoline, unleaded gasoline, and gasohol. The three USTs were moved and updated in 1990 and all tanks were converted to unleaded gasoline at that time. Widening of State Road 434 and Tuskawilla Road began in 1994 and portions of the Handy Way property in the northeast and southeast were acquired for the rights of way. In 1997, the USTs were moved to the southwest side of the property and reduced to two tanks containing unleaded gasoline. Prior to the 1990 tank update, a Discharge Notification Form and Early Detection Incentive (EDI) Program Notification Application was submitted indicating that odor or visible signs of contamination were present. However, the cause of the leak, the type of pollutant discharged, and the estimated number of gallons lost were unknown. The FDEP provided formal notification that the facility was eligible for state funding under the EDI Program on March 21, 1988. Since then, a number of assessments and source removal projects have been performed, including a Contamination Assessment Report prepared by Rust Environmental & Infrastructure Inc. dated July 12, 1996. The report documented petroleum contamination in soil and groundwater as well as the groundwater flow direction to vary from northerly to easterly.

Recently, a Remedial Action Interim Report was prepared by AECOM dated August 24, 2012. According to the report, no contaminated soil was found, and one out of eight monitoring wells contained an exceedance of Naphthalene above the FDEP Groundwater Cleanup Target Level. The facility then entered a Natural Attenuation Monitoring (NAM) Program. Quarterly groundwater sampling was conducted in October 2012 and January 2013. According to the NAM Quarterly Reports prepared by AECOM, none of the contaminants were found to exceed the GCTLs and the facility was recommended for No Further Action. The FDEP agreed with the findings and issued a Site Rehabilitation Completion Order (SRCO) on October 2, 2013.

Based on the cleanup status of the facility, the distance from the subject property, and the northerly to easterly groundwater flow direction (cross-gradient or away from the subject property), it is our opinion that this facility does not represent a Recognized Environmental Condition. A copy of the last NAM Quarterly Report and the SCRO are included in Appendix ii.

Town Center S.E.E.D. and **Former Central Florida Drum Facility** were identified as Brownfields in the vicinity of the subject property. Brownfields are areas of economic blight, often due to known or perceived

contamination or environmental issues. The presence of a Brownfield does not indicate the existence of contamination on any certain property, and the other databases searched provide sufficient data to evaluate the subject property and/or adjacent properties for site-specific concerns.

Based on factors that include regulatory status, distance from the Site, and/or location relative to the regional groundwater flow direction, as referenced in Section 3.1.2, no other facilities are identified in the EDR report that warrant further consideration as potential recognized environmental conditions.

5.1.4 Unmapped Sites

The EDR report identified one unmapped site due to poor or inadequate address information (Upright Recycling/Bruce G Beck). Further research indicates that the site is more than 2 miles from the subject property and beyond the ASTM search radius.

5.2 Additional Federal, State, and Local Environmental Records

5.2.1 Local Fire Department

NGI requested files from the Seminole County Fire Department relating to possible past releases of petroleum products or hazardous materials on the subject property. At the time this report was finalized, NGI had not received a response.

5.2.2 Local Health Agency

NGI reviewed available online sources and was unable to identify documentation for water wells or septic tanks on the subject property through the Seminole County Health Department.

5.2.3 Local Property Appraiser

According to records reviewed, the subject property consists of three legal parcels totaling approximately 6.24 acres that are identified by the Seminole County Property Appraiser (SCPA) as Parcel Identification Numbers (PINs) 01-21-30-501-0000-0010 (parcel 1), 26-20-30-5AR-0A00-008D (parcel 2) and 26-20-30-5AR-0A00-008H (parcel 3). Parcel 1 is owned by Patti A. Schoen and is currently undeveloped and heavily wooded. Parcels 2 and 3 are owned by Schrimsher Land Fund and are also heavily wooded. We understand that the proposed roads and rights of way (ROW) separating the parcels are also included within the subject property. Copies of the Property Record Cards are included in Appendix ii.

5.2.4 Local Building Department

NGI conducted a review of the City of Winter Springs Building Services Division online permitting system and found multiple building permits on site relating to site signs dated May 1, 1995 and May 5, 2004. It should be noted that three permits were associated with Parcel 3; however, they appear to be associated with the construction on the south adjoining property.

5.2.5 Local Planning Department

Review of the City of Winter Springs Zoning Map indicates that the subject property is zoned T-C for Town Center District.

5.2.6 State Environmental Agency

NGI was directed to FDEP's online document management system (OCULUS) for information regarding the facilities identified in the EDR regulatory database report.

5.2.7 State Oil and Gas Agency

Based on review of the Florida Geological Survey's Regional Oil & Gas Well Location Online Map, no oil or gas wells are located on or adjacent to the subject property.

6.0 Site Reconnaissance

Mr. Clinton Wilhelm conducted a site reconnaissance for NGI on October 11, 2022. At the time of the reconnaissance, the weather was sunny and warm. Photographs taken during our site visit are included in Appendix i.

6.1 General Characteristics of the Subject Property

The subject property is currently undeveloped and heavily wooded with an old railroad bed trending north-south in the eastern portion.

6.2 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on the subject property during our site reconnaissance.

6.3 Stained Soil, Pavement, or Corroded Surfaces

No stained soil, pavement, or corroded surfaces were observed on the subject property during our site reconnaissance.

6.4 Stressed Vegetation

No stressed vegetation was observed on the subject property during our site reconnaissance.

6.5 Odors

No odors indicative of the presence of petroleum products or hazardous materials were observed on the subject property during our site reconnaissance.

6.6 Hazardous Substances

No hazardous substances were observed on the subject property during our site reconnaissance.

6.7 Petroleum Products

No petroleum products were observed on the subject property during our site reconnaissance.

6.8 Storage Tanks

No storage tanks were observed on the subject property during our site reconnaissance.

6.9 Unidentified Drums and Containers

No unidentified drums and containers were observed on the subject property during our site reconnaissance.

6.10 Solid Waste Disposal

No solid waste was observed to be disposed of on-site during our site reconnaissance.

6.11 Wastewater Discharges

No wastewater discharges were observed on the subject property during our site reconnaissance.

6.12 Sewage Disposal System

No septic systems were observed on the property during our site reconnaissance.

6.13 Wells

No wells were observed on the subject property during our site reconnaissance.

6.14 Potable Water Supply

No indication of potable water supply was observed on the subject property during our site reconnaissance.

6.15 Heating and Cooling

No heating or cooling systems were observed on the subject property during our site reconnaissance.

6.16 Potential PCB-Containing Equipment

No potential PCB-containing equipment was observed on the subject property during our site reconnaissance.

7.0 User Provided Information

The purpose of this section is to describe tasks to be performed by the "User." The "User" as defined by ASTM Practice E1527-13, is "the party seeking to use ASTM Practice E1527-13 to complete an environmental site assessment of the property. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager."

As stated in 40 CFR 312 (the rule), the Brownfields Amendments provide important liability protections for Users who qualify as contiguous property owners, bona fide prospective purchasers, or innocent landowners. To meet the statutory requirements for any of these Landowner Liability Protections (LLPs), a User must meet certain threshold requirements and satisfy certain continuing obligations. To qualify as one of the three LLPs, the User must perform "all appropriate inquiries" (AAI) on or before the date on which the User acquired the Site. The rule defines AAI, which includes inquiries and activities performed by the User and an Environmental Professional (EP).

The rule allows (but does not mandate) the User performing AAI to conduct inquiries or activities that may include searches for environmental liens, assessments of any specialized knowledge on the part of the User, an assessment of commonly known or reasonably ascertainable information about the Site, and an assessment of the relationship of the purchase price to fair market value. However, if the User performing AAI conducts one or more of these inquiries and/or activities, the rule allows (but does not mandate) that the User may communicate information gathered from these inquiries and/or activities to their EP to identify a possible recognized environmental condition.

NGI provided a User Questionnaire to the Client as a means to communicate information gathered from these inquiries and/or activities to the EP. Mr. Ryan Stahl returned the completed questionnaire to NGI dated September 16, 2022, on behalf of EQX-HRP Winter Springs, LLC. User-supplied information is discussed in the following sections. A copy of the completed User Questionnaire is provided in Appendix ii.

7.1 Environmental Liens

An environmental lien is a charge, security, or encumbrance, upon title to the subject property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of environmental issues at the property.

The User was not aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law.

7.2 Activity and Use Limitations

Activity and Use Limitations (AULs) are legal or physical restrictions or limitations on the use of, or access to, a property to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and/or surface water on the property or to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. AULs, which may include institutional and/or

engineering controls, are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil, groundwater, and/or surface water on the property.

The User was aware of an AUL relating to city use restrictions. At this time no further information was provided.

7.3 Specialized Environmental Knowledge

Specialized environmental knowledge includes any information and/or experience related to the subject property or adjoining properties including, but not limited to, any obvious indicators that point to the presence or likely presence of environmental issues at the subject property.

The User has specialized knowledge of nearby properties associated with their development of the Winter Springs Marketplace located northwest of the subject property.

7.4 Valuation Reduction for Environmental Issues

Valuation reduction for environmental issues includes the relationship of the purchase price to the fair market value of the subject property.

According to the User, the purchase price being paid for this property reasonably reflects the fair market value of the property.

7.5 Commonly Known or Reasonably Ascertainable Information

Commonly known or reasonable ascertainable information includes information about the subject property that generally is known to the public within the community where the property is located and can be easily sought and found from individuals familiar with the property or from easily attainable public sources of information.

The User was not aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases.

7.6 Degree of Obviousness

The User must consider the degree of obviousness of the presence or likely presence of releases or threatened releases at the subject property and the ability to detect releases or threatened releases by appropriate investigation.

The User was not aware of any obvious indicators that point to the presence or likely presence of contamination at the subject property.

7.7 Previous Reports

NGI was not provided with previous reports for this assessment.

8.0 Interviews

8.1 Owner Interview

An interview questionnaire was completed by Ms. Patti Ann Schoen (the subject property owner) on September 17, 2020. On October 17, 2022, NGI received an email response from Ms. Kristin Banks with EQX-HRP Winter Springs, LLC stating that the Schoens confirmed the answers to the 2020 questionnaire were still accurate. Ms. Schoen stated that she has been involved with the property since December 7, 1971 as the owner. She stated that the property was gifted to her when she was 20 years old and has no prior knowledge of the property. She stated that she was not aware of any wells or septic systems on the property. She stated that she was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products. Lastly, Ms. Schoen stated that she was not aware of any current or past above or below ground storage tanks containing hazardous material or petroleum products on the property nor was she aware of any soil or groundwater contamination on the subject property.

An interview questionnaire was completed by Mr. Michael A. Schrimsher on behalf of Schrimsher Land Fund (the subject property owner) on October 12, 2022. Mr. Schrimsher stated that he has been involved with the property since 1985-1986 as the property manager. According to Mr. Schrimsher, the subject property has been occupied by vacant wooded land except for the former railroad track. He stated that he was not aware of any wells or septic systems on the property. He stated that he was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products. Mr. Schrimsher stated that he was not aware of any current or past above or below ground storage tanks containing hazardous material or petroleum products on the property. However, he was aware of soil contamination on the subject property. According to Mr. Schrimsher, “soil under the former CSX railroad was contaminated by creosote on wooden railroad ties and herbicide sprayed along railroad tracks.” Lastly, Mr. Schrimsher stated that he was not aware of cattle dipping vats on the subject property, but he was aware that there were cattle operations on the nearby Plante property.

Copies of the Owner Questionnaires and confirmation email are provided in Appendix ii.

8.2 Interviews with Others

No other interviews were conducted for this assessment.

9.0 Findings and Conclusions

NGI has completed a Phase I ESA in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E1527-13 at the subject property located south of the intersection of State Road 434 and Tuskawilla Road, and north of Michael Blake Boulevard in Winter Springs, Seminole County, Florida. Based solely on the records review, site visit and interviews conducted for this assessment, NGI has not identified Controlled Recognized Environmental Conditions or Historical Recognized Environmental Conditions for the subject property.

NGI identified the following Recognized Environmental Conditions for the subject property.

- The north adjoining property (**Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786**) was identified in the regulatory database report as a Leaking Underground Storage Tank (LUST), Underground Storage Tank (UST), Cleanup Site, and other associated listings. The facility address is 1205 E. State Road 434. According to available documentation, a Discharge Reporting Form (DRF) was filed on May 3, 1993, indicating an unknown amount of free product was found in a monitoring well at the site. A Site Assessment Report (SAR) was submitted July 30, 2013, by Shaw Environmental, Inc. No OVA responses were detected above 0 ppm and no laboratory soil samples contained concentrations above Soil Cleanup Target Levels (SCTLs). Groundwater concentrations above Groundwater Cleanup Target Levels (GCTLs) was not identified with the exception of benzene (4.8 ug/L) in MW-5. Lastly, Shaw measured the groundwater flow direction at the facility to be east to southeast on April 25 and July 15, 2013. This is generally cross-gradient relative to the subject property; however, it could flow through the northeast corner.

  A Supplemental Site Assessment Report was conducted by Montrose Environmental dated March 24, 2020. During the assessment, Montrose conducted 3 soil borings and collected 2 soil samples from each boring. In addition, Montrose installed two additional monitoring wells and sampled a total of 7 wells (including the two additional wells). According to the report, no soil or groundwater contamination was identified on the site and previously impacted MW-5 exhibited two consecutive clean rounds of groundwater sampling. Therefore, Montrose proposed that the site qualified for No Further Action and is awaiting response from the Florida Department of Environmental Protection (FDEP).

  Based on the documents reviewed, it appears that the north adjoining property is nearing a Site Rehabilitation Completion Order (SRCO) from the FDEP. However, due to the close proximity of the UST area and previously impacted monitoring well MW-5 to the subject property boundary (on the order of 30 to 50 feet), it is likely that petroleum-impacted groundwater has migrated onto the subject property from this facility. Therefore, this represents a Recognized Environmental Condition. It should be noted that the north adjoining facility is in a State-funded cleanup and assessment program (Petroleum Liability and Restoration Insurance Program – PLRIP). Therefore, petroleum-impacts to the subject property associated with the 1993 discharge would likely be the responsibility of the State.

- Historical aerial photographs and topographic maps indicate that a railroad track was present on the subject property in the past. Railroad tracks are frequently sources of contamination due to the presence of railroad ties generally treated with creosote as well as the long-term application

of hazardous materials (pesticides and herbicides) within the right of way during typical maintenance operations. These materials are known to accumulate in the soil over time. Furthermore, during an interview with the owner Mr. Michael Schrimsher, he stated that he was aware of soil contamination on the subject property. According to Mr. Schrimsher, "soil under the former CSX railroad was contaminated by creosote on wooden railroad ties and herbicide sprayed along railroad tracks." Therefore, it is our opinion that the former railroad track area represents a Recognized Environmental Condition.

NGI identified the following Business Environmental Risk for the subject property.

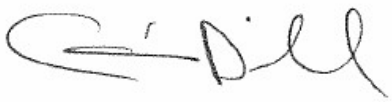
- **Town Center S.E.E.D.** and **Former Central Florida Drum Facility** were identified as Brownfields in the vicinity of the subject property. Brownfields are areas of economic blight, often due to known or perceived contamination or environmental issues. The presence of a Brownfield does not indicate the existence of contamination on any certain property, and the other databases searched provide sufficient data to evaluate the subject property and/or adjacent properties for site-specific concerns.

10.0 Environmental Professional Statement

The consultant(s) listed below declare that, to the best of their professional knowledge and belief, meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312 and have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. The all appropriate inquiries have been performed in conformance with the standards and practices set forth in 40 CFR Part 312.

We appreciate the opportunity to be of service to you on this project and look forward to a continued relationship. Should you have any questions or concerns regarding this report, please feel free to call us at (407) 342-1443.

Sincerely,
Native Geoscience, Inc.



John C. Diehl, Jr.
Principal Geologist

11.0 References

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Certified Sanborn® Map Report, September 20, 2022.

EDR, EDR Historical Topographic Map Report with QuadMatch™, September 20, 2022.

EDR, The EDR Aerial Photo Decade Package, September 21, 2022.

EDR, The EDR-City Directory Image Report, September 22, 2022.

EDR, The EDR Radius Map™ Report with GeoCheck®, September 20, 2022.

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, October 2022.

Florida Department of Environmental Protection, Map Direct Application (Groundwater Delineation Map). Available on-line at: https://ca.dep.state.fl.us/mapdirect/?focus=grndwtr_dl.

OCULUS Electronic Document Management System, FDEP Regulatory Files Review for Storage Tanks, Hazardous Waste, Solid Waste and Waste Cleanup Program Areas. Available on-line at: https://depedms.dep.state.fl.us/Oculus/servlet/login.

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, October 2022.

United States Geological Survey Topographic Map, 7.5-minute series Casselberry (NE), Florida, accessed via internet, October 2022.

Figures

Site Location Map



N
W E
S

0 0.25 0.5 Miles

Legend:

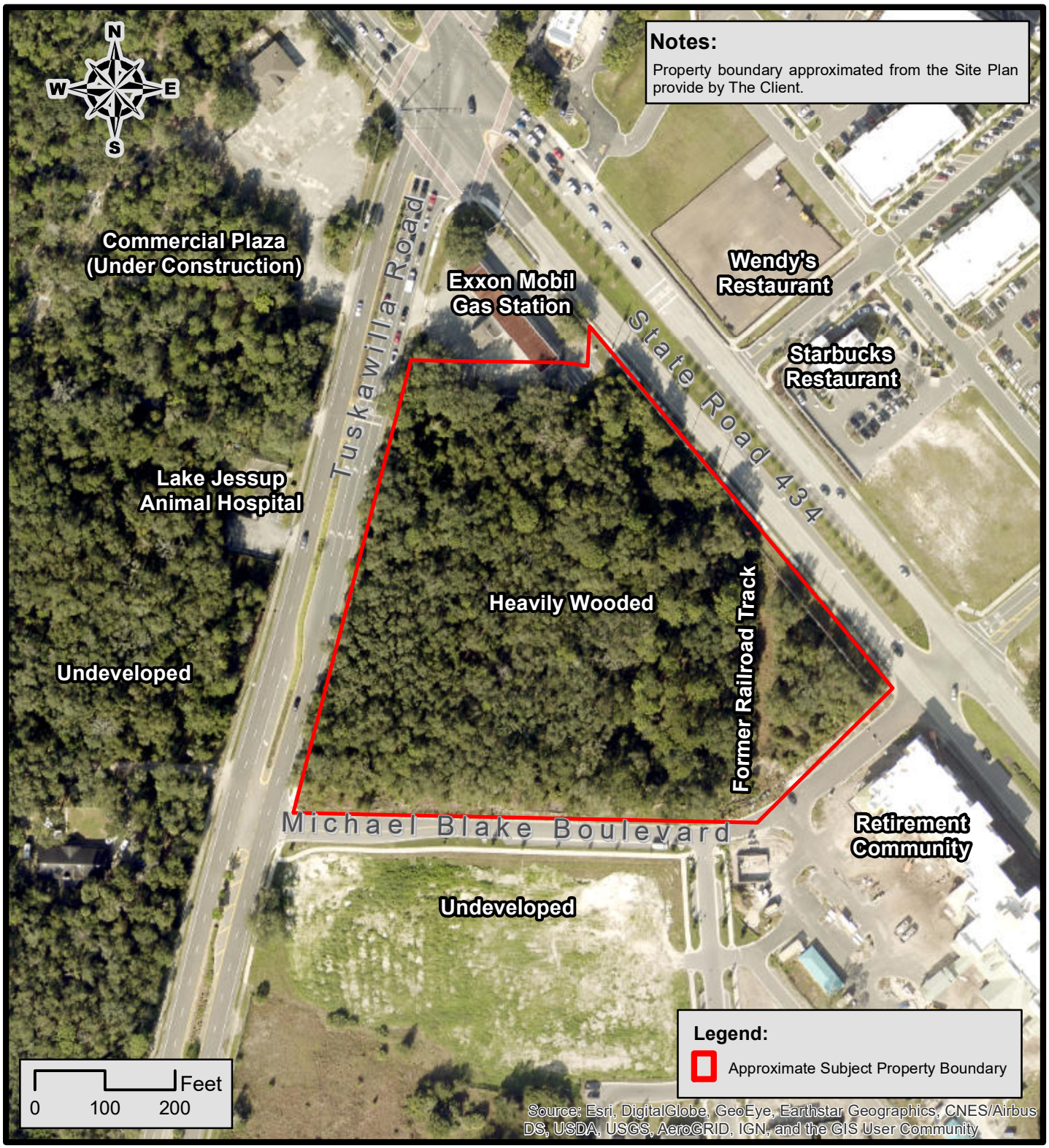
Approximate Subject Property Boundary

Notes:

Property boundary approximated from the Site Plan provided by The Client.

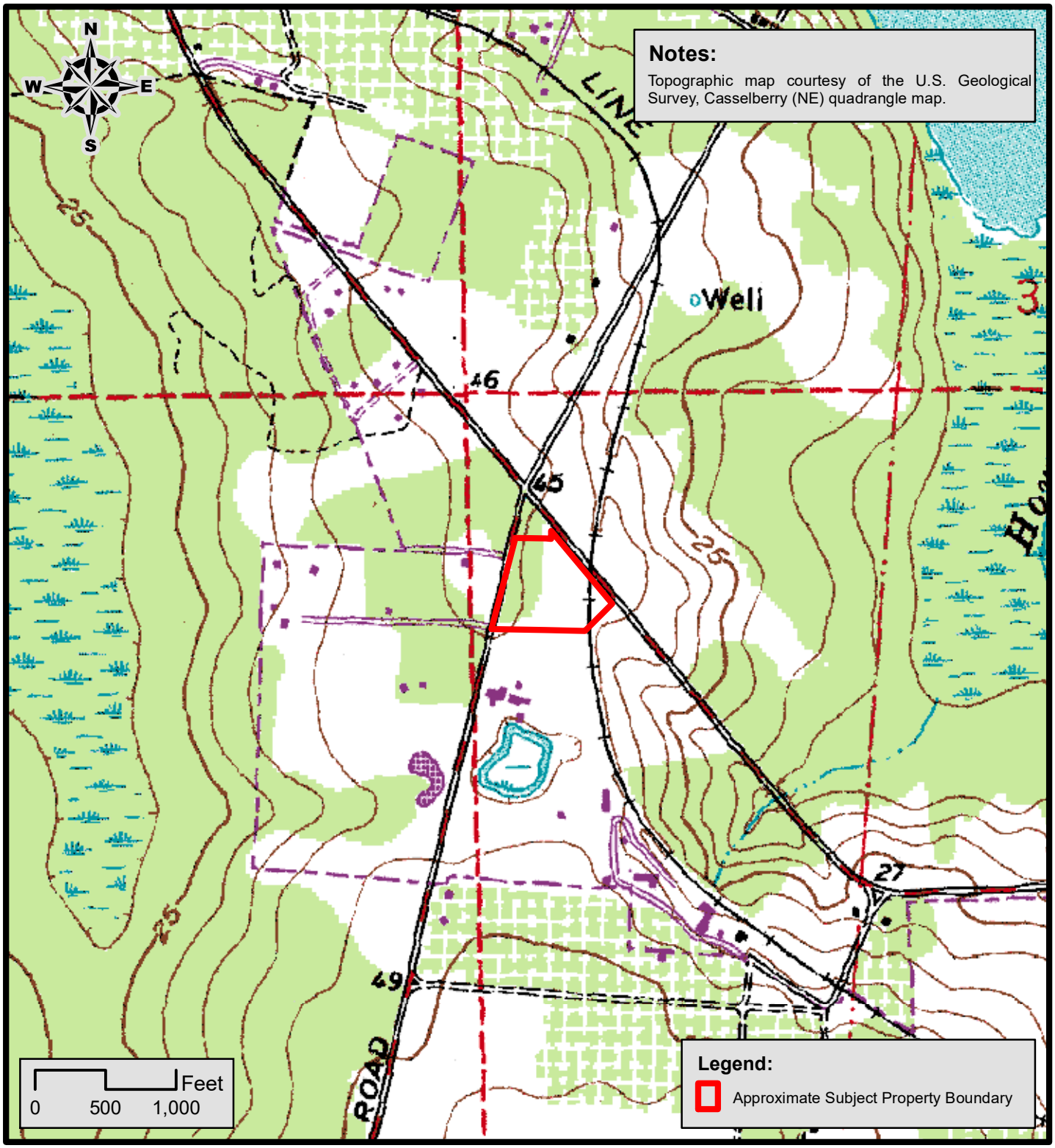
Project No: R0789.1 **Date:** 10/5/22	NATIVE GEOSCIENCE 2014 Edgewater Drive, #246 Orlando, Florida 32804 (407) 342-1443	**Phase I Environmental Site Assessment** Sutton Crossings Property Winter Springs, Seminole County, FL	**FIGURE:** 1

Site Plan



Project No: R0789.1 **Date:** 10/5/22	NATIVE GEOSCIENCE 2014 Edgewater Drive, #246 Orlando, Florida 32804 (407) 342-1443	**Phase I Environmental Site Assessment** Sutton Crossings Property Winter Springs, Seminole County, FL	**FIGURE:** 2

Topographic Map



Project No: R0789.1 **Date:** 10/5/22	NATIVE GEOSCIENCE 2014 Edgewater Drive, #246 Orlando, Florida 32804 (407) 342-1443	**Phase I Environmental Site Assessment** Sutton Crossings Property Winter Springs, Seminole County, FL	**FIGURE:** 3

Appendix i



1. Typical view of the subject property.



2. Typical view of the subject property.



3. Exxon/Mobil Gas Station located on the north adjoining property.



4. View of Michael Blake Boulevard located on the south adjoining property.



5. Typical view of the multi-family senior residential development on the south adjoining property (across Michael Blake Boulevard).



6. View of the raised easement for possible historical train tracks along the eastern portion of the subject property.



7. Tuskawilla Road followed by Lake Jesup Animal Hospital and commercial shopping plaza to the west.



8. Tuskawilla Road followed by Milky Way residential street to the west.



9. View of State Road 434 followed by Starbucks located northeast of the subject property.



10. View of State Road 434 followed by multi-family residential development located east of the subject property.

Appendix ii

Sutton Crossing

Tuskawilla Rd & FL 434

Winter Springs, FL 32708

Inquiry Number: 7123398.8

September 21, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

09/21/22

Site Name:

Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708
EDR Inquiry # 7123398.8

Client Name:

Native Geoscience, Inc.
2014 Edgewater Drive #246
Orlando, FL 32804
Contact: Clinton Wilhelm

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2017	1"=500'	Flight Year: 2017	USDA/NAIP
2013	1"=500'	Flight Year: 2013	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2007	1"=500'	Flight Year: 2007	USDA/NAIP
1999	1"=500'	Acquisition Date: January 01, 1999	USGS/DOQQ
1994	1"=500'	Acquisition Date: March 11, 1994	USGS/DOQQ
1993	1"=500'	Flight Date: February 19, 1993	USGS
1986	1"=500'	Flight Date: January 06, 1986	USGS
1980	1"=500'	Flight Date: April 16, 1980	USGS
1977	1"=500'	Flight Date: November 27, 1977	USGS
1972	1"=500'	Flight Date: February 23, 1972	USDA
1969	1"=500'	Flight Date: October 14, 1969	USGS
1957	1"=500'	Flight Date: November 02, 1957	USGS
1952	1"=500'	Flight Date: March 17, 1952	USGS
1948	1"=500'	Flight Date: November 25, 1948	USDA
1940	1"=500'	Flight Date: January 01, 1940	USGS

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INQUIRY #: 7123398.8
YEAR: 2017
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EDR


INQUIRY #: 7123398.8
YEAR: 2013
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EDR
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EDR


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YEAR: 2007
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EDR


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EDR



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YEAR: 1972

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EDR



INQUIRY #: 7123398.8

YEAR: 1969

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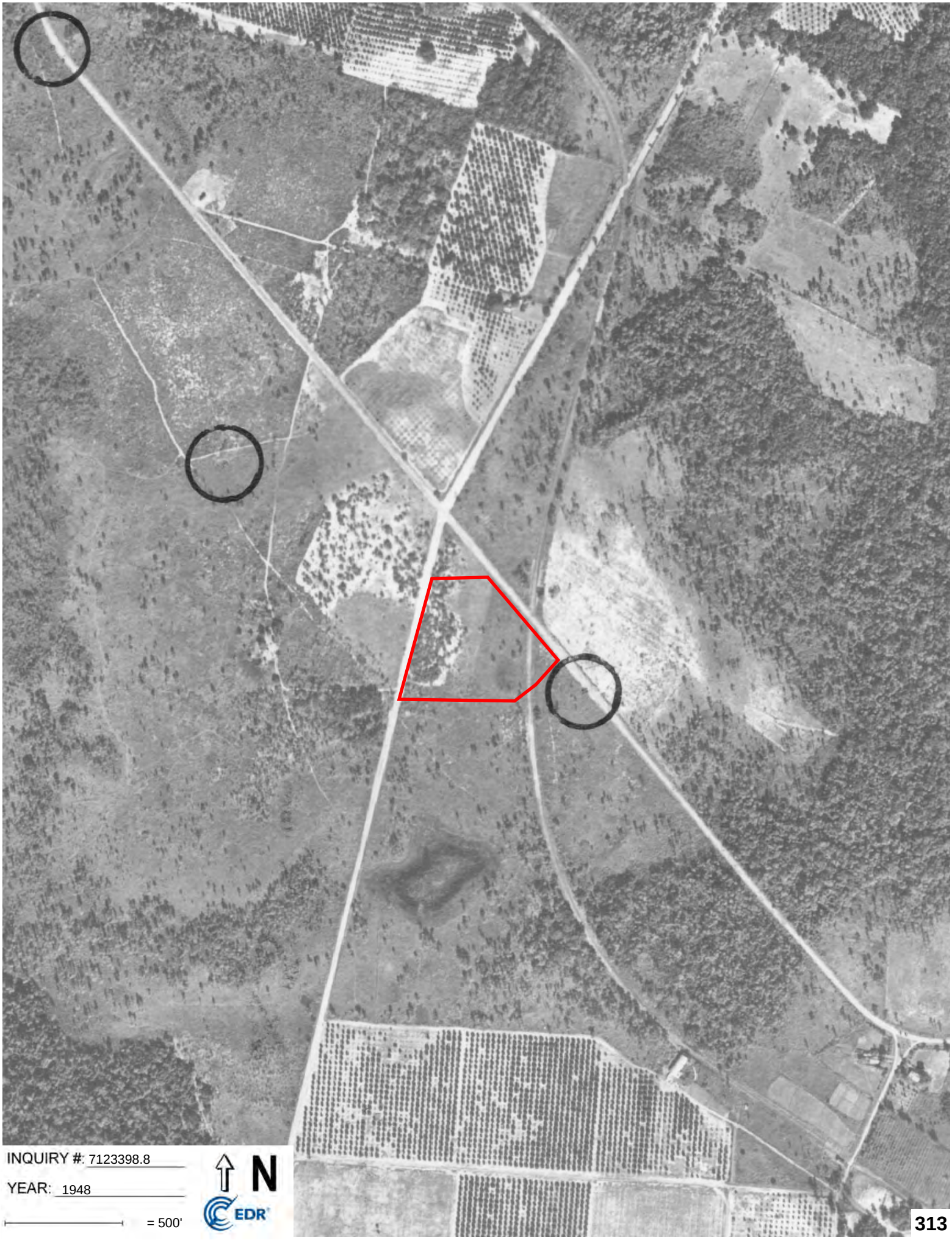
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EDR

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EDR


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EDR


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= 500'
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EDR


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YEAR: 1940
= 500'
N
EDR

Sutton Crossing

Tuskawilla Rd & FL 434

Winter Springs, FL 32708

Inquiry Number: 7123398.3

September 20, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

09/20/22

Site Name:	Client Name:
Sutton Crossing	Native Geoscience, Inc.
Tuskawilla Rd & FL 434	2014 Edgewater Drive #246
Winter Springs, FL 32708	Orlando, FL 32804
EDR Inquiry # 7123398.3	Contact: Clinton Wilhelm

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Certified Sanborn Results:

Certification # BBD2-4F18-8D3A

PO # R0789.1

Project R0789.1

UNMAPPED PROPERTY

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Sanborn® Library search results

Certification #: BBD2-4F18-8D3A

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708

Inquiry Number: 7123398.5
September 22, 2022

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☑	EDR Digital Archive
2014	☑	☑	EDR Digital Archive
2010	☑	☑	EDR Digital Archive
2005	☑	☑	EDR Digital Archive
2000	☑	☑	EDR Digital Archive
1995	☑	☑	EDR Digital Archive
1992	☑	☑	EDR Digital Archive
1986	☐	☐	Polk's City Directory
1981	☐	☐	Polk's City Directory
1978	☐	☐	Polk's City Directory
1974	☐	☐	Polk's City Directory
1968	☐	☐	Polk's City Directory
1964	☐	☐	Polk's City Directory
1960	☐	☐	Polk's City Directory
1955	☐	☐	Polk's City Directory
1950	☐	☐	Polk's City Directory
1945	☐	☐	Polk's City Directory
1940	☐	☐	Polk's City Directory

EXECUTIVE SUMMARY

Year	Target Street	Cross Street	Source

FINDINGS

TARGET PROPERTY STREET

Tuskawilla Rd & FL 434
Winter Springs, FL 32708

Year	*CD Image*	*Source*	
TUSCAWILLA RD			
1992	pg A38	EDR Digital Archive	
TUSKAWILLA RD			
2017	pg A6	EDR Digital Archive	
2014	pg A11	EDR Digital Archive	
2010	pg A17	EDR Digital Archive	
2005	pg A21	EDR Digital Archive	
2000	pg A25	EDR Digital Archive	
1995	pg A31	EDR Digital Archive	
1986	-	Polk's City Directory	Target and Adjoining not listed in Source
1981	-	Polk's City Directory	Target and Adjoining not listed in Source
1978	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1968	-	Polk's City Directory	Street not listed in Source
1964	-	Polk's City Directory	Street not listed in Source
1960	-	Polk's City Directory	Street not listed in Source
1955	-	Polk's City Directory	Street not listed in Source
1950	-	Polk's City Directory	Street not listed in Source
1945	-	Polk's City Directory	Street not listed in Source
1940	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
E STATE RD 434			
2010	pg. A12	EDR Digital Archive	
1992	pg. A32	EDR Digital Archive	
E STATE ROAD 434			
2017	pg. A2	EDR Digital Archive	
2014	pg. A7	EDR Digital Archive	
2010	pg. A13	EDR Digital Archive	
2005	pg. A18	EDR Digital Archive	
2000	pg. A22	EDR Digital Archive	
1986	-	Polk's City Directory	Target and Adjoining not listed in Source
1981	-	Polk's City Directory	Target and Adjoining not listed in Source
1978	-	Polk's City Directory	Target and Adjoining not listed in Source
1974	-	Polk's City Directory	Target and Adjoining not listed in Source
1968	-	Polk's City Directory	Target and Adjoining not listed in Source
1964	-	Polk's City Directory	Target and Adjoining not listed in Source
1960	-	Polk's City Directory	Target and Adjoining not listed in Source
1955	-	Polk's City Directory	Target and Adjoining not listed in Source
1950	-	Polk's City Directory	Target and Adjoining not listed in Source
1945	-	Polk's City Directory	Target and Adjoining not listed in Source
1940	-	Polk's City Directory	Target and Adjoining not listed in Source
MICHAEL BLAKE BLVD			
2017	pg. A4	EDR Digital Archive	
2014	pg. A9	EDR Digital Archive	
2010	-	EDR Digital Archive	Target and Adjoining not listed in Source
2005	-	EDR Digital Archive	Target and Adjoining not listed in Source
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source

FINDINGS

Year	CD Image	Source	
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1986	-	Polk's City Directory	Street not listed in Source
1981	-	Polk's City Directory	Street not listed in Source
1978	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1968	-	Polk's City Directory	Street not listed in Source
1964	-	Polk's City Directory	Street not listed in Source
1960	-	Polk's City Directory	Street not listed in Source
1955	-	Polk's City Directory	Street not listed in Source
1950	-	Polk's City Directory	Street not listed in Source
1945	-	Polk's City Directory	Street not listed in Source
1940	-	Polk's City Directory	Street not listed in Source

MILKY WAY

2017	pg. A5	EDR Digital Archive	
2014	pg. A10	EDR Digital Archive	
2010	pg. A16	EDR Digital Archive	
2005	pg. A20	EDR Digital Archive	
2000	pg. A24	EDR Digital Archive	
1995	pg. A26	EDR Digital Archive	
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1986	-	Polk's City Directory	Street not listed in Source
1981	-	Polk's City Directory	Street not listed in Source
1978	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1968	-	Polk's City Directory	Street not listed in Source
1964	-	Polk's City Directory	Street not listed in Source
1960	-	Polk's City Directory	Street not listed in Source
1955	-	Polk's City Directory	Street not listed in Source
1950	-	Polk's City Directory	Street not listed in Source
1945	-	Polk's City Directory	Street not listed in Source
1940	-	Polk's City Directory	Street not listed in Source

FINDINGS

Year	*CD Image*	*Source*

STATE ROAD 434 E

1995	pg. A27	EDR Digital Archive

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2017

110	1 2 3 EASY KEY LOCK REPAIR
	BANK OF AMERICA FINANCIAL CENTER
126	IRBLICH SCHOOLS
	RIVERA, ELAINE
200	CARE LOCKSMITH
	VICTORIOS II WINTER SPRINGS
268	CENTRAL FLORIDA BLOOD BANK
	ONEBLOOD
280	ALL CARPET SERVICES
	RIDERS ADVANTAGE
295	BRUSTERS REAL ICE CREAM
296	GERALD STRINGHAM & ASSOCIATES
	KEN MITCHELL & ASSOCIATES
351	AMANDA R JACOBSON ATTY
	ANDREW CHMELIR ATTY
	DEBRA L FERWERDA ATTY
	JACOBSON MCCLEAN CHMELIR & FERWERDA
	RANDY MCCLEAN ATTORNEY
370	RANGOLI SWEETS
380	ADVANCE AUTO PARTS
404	JOHNSON HALE INC DBA KID CITY USAWI
	KID CITY USA ENTERPRISES INC
408	NIEVES, ANGEL F
410	GUTIERREZ, EDGAR
414	MARTINEZ, CARLOS
418	GORSKI, WILLIAM W
422	NEWMAN, DEBORAH L
426	AFFORDABLE LEGAL CLINIC INC
	RAINBOW TRAVEL SERVICES INC
500	AMY STANBERRY ACUPUNCTURE
504	SOTO, EDWIN
506	SOPER PEREZ & ASSOC
521	MILLERS SCHOOL SUPPLIES
541	PAPA TONYS RESTAURANT
640	KINDER KAMPUS INC
650	LESKOWYAK, KAREN S
670	DESIGNER DENTAL STUDIO INC
	NATIONWIDE TERMITE & PEST CONTROL
680	ALLSTATE
	FCI STRUCTURAL ENGINEERS INC
701	STFEN INC
710	A BUDGET TREE SERVICE
	A BUDGET TREE SERVICE INC
780	CREATIVE INSPIRATION JOURNEY SCHOOL
	KEE WEE ENTERTAINMENT DISTRICT
820	SEMINOLE COUNTY PUBLIC SCHOOL
822	SEMINOLE COUNTY PUBLIC SCHOOL
825	ALL ABOUT PLUMBING
839	PHO, UYEN M
	WINTER SPRINGS BEAUTY SALON

E STATE ROAD 434 2017 (Cont'd)

845	THOMAS, FREDDIE
855	ANYTIME FITNESS
	RED CYPRESS BREWERY LLC
	SENOR TEQUILA
	TERRA HOMES
	UNIQUE SPRING NAILS
859	SALAMANDERS SPORTS GRILL
861	DUNKIN DONUTS
870	FULGHUM, GREGORY F
1000	CITY OF WINTER SPRINGS
1065	UNITED STATES GOVERNMENT
	WE BUY ORLANDO
1100	CHOICES IN LEARNING INC
1116	BUDGET TRUCK RENTAL
	CRUISE AMERICA
	CUSTOM RENTAL SERVICE
1122	DR DELHART COURTNEY
	MACDONALD FAMILY EYE CARE
1126	CITY OF WINTER SPRINGS
1134	EDWARD JONES FINANCIAL ADVISOR MI
1142	DR ROBERT BURKS DENTAL
	ROBERT R BURKS DDS PA
1160	PUBLIX
	REDBOX
1188	IHAIR
	IHAIR LLC
1196	SURGICAL SOLUTIONS
	WINTER SPRINGS DENTISTRY
1200	MCDONALDS
1205	7ELEVEN
	MOBIL
1491	1 AFTER DRINKING LOCKSMITH RESCUE
	ADVENTURE CYCLING
	CHINAWOK
	CLAXTON CLEANERS
	GONZALEZ, MARCELINO
	METRO CHURCH OF CHRIST
1501	DUNKIN DONUTS
1511	ALPHA EMC
	CLOSED CAPTION LATINA
	DATANAUTIX INC
	GEOSYNTEC CONSULTANTS
	PINNACLE PROPERTY MANAGEMENT
	SOUTHERN MARKETING ASSOCIATES
	UCF INCUBATORSEMINOLE COUNTY
	UVS JUNCTION

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MICHAEL BLAKE BLVD 2017

300	PERSONS, BRADLEY J
304	TALLURI, RAMABUJJAYYA
308	WECK, MIKE H
312	RAMOS, ANA
316	WRIGHT, SYLVIA
320	LONG, FRANCISCO J
324	WHITE, MICHAEL A
328	ROSEN, MARIE E
332	HINDSON, KELLY A
336	MORALES, RAFAEL
344	LUTH, JOSEPH
352	MOY, TIMOTHY E
356	VAUGHAN, THOMAS L
360	SARNA, CHRISTIAN J
368	LEGGE, DANA C
372	RUSH, HEATH D
384	CLOUTIER, DANIEL J
388	ARAGHY, HOMAIRA P
392	PARTON, ANGELA R
396	MCCABE, SEAN T
400	SCHROEFFEL, LESLIE A
404	RHOADS, MURPHY M
420	PECORARO, JOHN J
424	BAY, CRYSTAL A
428	HESS, LAURA B

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 2017

1258 MASON, JAMES F
1270 DIAZ, HECTOR A

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSKAWILLA RD 2017

100	SOILEAU, BRUCE J
105	BECKETT, RICHARD
109	ALJABER-MORENO, ANZAF
110	TUSKAWILLA ANIMAL HOSPITAL
113	MILLER, GEORGE A
121	MACCHIA, KATHY
125	OLSON, JIM A
130	ACTION CHURCH
	WINTER SPRINGS HIGH SCHOOL
137	BELTRAN, CORY N
141	AVERY, STEVEN M
145	LI, ZHIMIN
149	TAYLOR, CHRISTOPHER J
150	KINGSBURY, C
154	BENITEZ, MARITZA
	BUHOLTZ PROFESSIONAL ENGINEERING
	CHRISTOPHER, COLLEEN A
	ECKEL & ASSOCIATES INC
	EVANS, JAMES K
	PHILLIPS, AUSTIN
	RUPLEY, DAVID
	SINELNIKOVA, INNA
	STATE OF FLORIDA
	STONE, GREGORY K
	STUFFLET, SEAN
	THOMPSON, CELESTE O
156	BENNETT INSURANCE
	BIRCHELL INSURANCE
	RIPPLE ASSOCIATES
	WINTER SPRINGS TOWN CENTER
158	COVENANT AVIATION SECURITY
	PILACEK THOMAS J & ASSOCIATES
	SIAGON BOULVARD
160	AFLAC
	HUEY MAGOOS CHICKEN TENDERS
	THE ZOO HEALTH CLUB
	TIJUANA FLATS
170	1 ALPHA LOCK & KEY
	PINCH A PENNY POOL PATIO SPA
	PINCHAPENNY
190	EDWARD W GRIFFITH DVM
	LAKE JESUP ANIMAL HOSPITAL
300	LOFROOS, ROBERT W
550	SEMINOLE COUNTY PUBLIC SCHOOL
575	ST STEPHEN CATHOLIC CHURCH
600	SEMINOLE COUNTY PUBLIC SCHOOL

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2014

110	1 2 3 EASY KEY LOCK REPAIR
	BANK OF AMERICA
200	VICTORIOS II WINTER SPRINGS
268	CENTRAL FLORIDA BLOOD BANK
	CENTRAL FLORIDA BLOOD BANK A DIVISIO
280	ALL CARPET SERVICES
290	DRIVER LICENSE OFFICE
	STATE OF FLORIDA
295	BRUSTERS REAL ICE CREAM
296	GERALD STRINGHAM & ASSOCIATES
351	CHMELIR ANDREW ATTY
	FERWERDA DEBRA L ATTY
	JACOBSON AMANDA R ATTY
	JACOBSON MCCLEAN CHMELIR & FERWERDA
	MCCLEAN RANDY ATTY
404	JOHNSON HALE INC DBA KID CITY USAWI
406	CLOKE, JUSTIN
408	NIEVES, ANGEL A
410	GUTIERREZ, EDGAR
414	MARTINEZ, CARLOS
418	RODRIGUEZ, WILLIAM N
422	DUNCAN, ARTHUR O
426	AFFORDABLE LEGAL CLINIC
428	MENZEL, JOHN C
500	STANBERRY AMY ACUPUNCTURE PHYS
504	PINARD, TYNISHA
506	SOPER PEREZ & ASSOC
521	MATTIES DELECTABLE DESSERTS
	MILLERS SCHOOL SUPPLIES
541	PAPA TONYS RESTAURANT
551	QUICK KING FOOD STORE
640	KINDER KAMPUS INC
650	LESKOWYAK, KAREN S
670	DESIGNER DENTAL STUDIO INC
	NATIONWIDE TERMITE & PEST CONTROL
680	ALLSTATE
	FCI STRUCTURAL ENGINEERS INC
701	SEMINOLE COUNTY PUBLIC SCHOOL
710	A BUDGET TREE SERVICE
	A BUDGET TREE SERVICE INC
817	FIRST BAPTIST CHURCH
820	SEMINOLE COUNTY PUBLIC SCHOOL
	SEMINOLE COUNTY PUBLIC SCHOOLS
822	SEMINOLE COUNTY PUBLIC SCHOOL
825	OCCUPANT UNKNOWN,
835	WILLIAMSON, CHESTER M
839	PHO, UYEN M
	WINTER SPRINGS BEAUTY SALON
845	OCCUPANT UNKNOWN,
849	DELL, MARTHA

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2014 (Cont'd)

850	SEMINOLE COUNTY PUBLIC SCHOOL
851	TRUSTCO BANK
855	ANYTIME FITNESS
	SECURE TITLE
	SENOR TEQUILA
	STORYBOOK MOMENTS LEARNING ACADEMY
	TERRA HOMES
	UNIQUE SPRING NAILS AND
859	SALAMDERS SPORTS GRILL
870	FULGHUM, GREGORY F
900	OCCUPANT UNKNOWN,
916	ALPHA TECHNOLOGY USA CORP
1065	UNITED STATES GOVERNMENT
	WINTER SPRINGS POST OFFICE
1100	CHOICES IN LEARNING INC
1116	BUDGET TRUCK RENTAL WINTER SPRINGS
	CRUISE AMERICA
	CUSTOM RENTAL SERVICES
1122	ALL IN ONE DENISTRY 1
	MACDONALD FAMILY EYE CARE
1126	CITY OF WINTER SPRINGS
1134	EDWARD JONES FINANCIAL ADVISOR VA
1138	CENTURY 21
1142	BURKS ROBERT R DDS PA
1160	PUBLIX
1161	COLSON, C
1163	JOHNSON, NATHAN
1184	PCS METRO
1188	IHAIR LLC
1196	WINTER SPRINGS DENTISTRY
1200	MCDONALDS
1205	WINTER SPRINGS MOBIL
1491	ADVENTURE CYCLING
	CHINAWOK
	CLAXTON CLEANERS
	FASHION NAILS
	METRO CHURCH OF CHRIST
1495	BB&T
1501	BLIMPIE SALAD & SANDWICHES
	GODFATHERS PIZZA
1511	CENTERLINE HOMES
	DATANAUTIX INC
	NR ELECTRONICS LLC
	PINNACLE PROPERTY MANAGEMENT
	UCF INCUBATORSEMINOLE COUNTY
	UVS JUNCTION

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MICHAEL BLAKE BLVD 2014

300	PERSONS, BRADLEY J
304	TALLURI, RAM
308	WECK, MIKE H
316	HUNT, JENNIFER G
320	LONG, FRANCISCO J
336	MCCANN, MICHAEL R
344	LUTH, JOSEPH
352	MOY, TIMOTHY E
356	VAUGHAN, THOMAS L
360	MAGNUSSEN, KEVIN L
364	PALATKA, ELEANOR
368	LEGGE, DANA C
372	RUSH, HEATH D
380	SINCLAIR, HEATHER C
384	MARCUS, JOSHUA M
388	TATUM, PAUL V
392	PARTON, ANGELA R
396	OCCUPANT UNKNOWN,
400	SCHROEFFEL, LESLIE A
404	COX, CHRISTINE M
408	YUEN, BRENDA M

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 2014

1258 OCCUPANT UNKNOWN,
1270 DIAZ, HECTOR A
1296 CEDENO, JOSE G

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSKAWILLA RD 2014

100	SOILEAU, BRUCE J
105	BECKETT, RICHARD
109	CORREDOR, JOSE J
112	TAYLER, MALIA
113	TAYLER, MALIA
117	HANCOCK, WESLEY G
121	BAKER, ROBERT W
125	OLSON, JIM A
129	OCCUPANT UNKNOWN,
130	WINTER SPRINGS HIGH SCHOOL
133	PELLEGRINO, MICHAEL J
137	HANLEY, SALLY A
141	AVERY, STEVEN M
145	COLEMAN, ROBERT C
149	RAULERSON, APRIL E
150	KINGSBURY, C
154	CHAFFIN, CHRIS M
	HOENEMAN, RAYMOND W
	KINTNER, CHRISTOPHER S
	LIGHT, TODD A
	MUDLOCK, AMANDA M
	NETTLES, ANGEL D
	OSULLIVAN, TRACY A
	SPREEN, GEORGE
	STONE, GREGORY K
	THOMPSON, CELESTE O
156	BIRCHELL INSURANCE
	BOX OFFICE HAIR PRODUCTIONS
	DANIEL LONG AFLAC REGIONA
	RIPPLE ASSOCIATES
158	BANK OF AMERICA
	BANK OF AMERICA MORTGAGE
	COVENANT AVIATION SECURITY
	HERBA FAMILY CHIROPRACTIC
	MURPHYS PREMIUM PET FOOD MARKET
	SOUTH YORK
160	THE ZOO HEALTH CLUB
	TIJUANA FLATS
170	1 ALPHA LOCK & KEY
	PINCHAPENNY
190	GRIFFITH EDWARD W DVM VET
	LAKE JESUP ANIMAL HOSPITAL
290	LOFROOS, WILLIAM N
300	LOFROOS, ROBERT W
395	LIFE COMMUNITY CHURCH
415	INDIAN TRAILS MIDDLE SCHOOL
425	KEETH ELEMENTARY SCHOOL
550	SEMINOLE COUNTY PUBLIC SCHOOL
575	ST STEPHENS CATHOLIC CHURCH
600	SEMINOLE COUNTY PUBLIC SCHOOL

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE RD 434 2010

550 PAPA TONY ITALIAN RESTAURANT
2000 DMD RESIDENTIAL PROPERTIES

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2010

105	GDP DESIGN & CONSTRUCTION
110	BANK OF AMERICA
113	O MEI WSHU USA
200	VICTORIOS II WINTER SPRINGS
260	DINER SUN SHINE
268	FLORIDAS BLOOD CTR
290	AGGARWAL PENSION TRUST FUND
	HIGHWAY DEPT SAFETY
	MOTOR VEHICLE DEPTDRIVER LCNS
295	BRUSTERS REAL ICE CREAM
296	KEN MITCHELL & ASSOC
300	QUALITY MANUFACTURING SVC INC
310	DOLLAR GENERAL
320	LEONIES HOME STYLE COOKING
330	NATICES UNISEX SALON
351	JACOBSON MC CLEAN CHMELIR
	U S SVC
360	PUBLIC STORAGE
380	ADVANCE AUTO PARTS
406	CLARK, SAMUEL K
408	MORALES, JULIO
410	HARVEY, AUDREY T
412	FEKANY, MOUSSA
414	RIVERA, JOSE A
416	TELEPHONE MARKETING PROMOTIONS
418	BRAYMAN, MEGAN A
422	DUNCAN, ARTHUR O
424	ARTHUR DUNCAN ACCOUNTING SVC
426	AFFORDABLE LEGAL CLINIC INC
	BINFORD, THOMAS A
	RAINBOW TRAVEL SVC INC
428	MENZEL, JOHN C
500	STANBERRY AMY ACUPUNCTURE PHYS
506	SOPER PEREZ & ASSOC
521	SADKANE SCHOOL FOR DANCE & AKD
551	QUICK KING FOOD STORE
640	KINDER KAMPUS INC
650	LESKOWYAK, KAREN S
670	TROPICAL ILLUSION
680	FCI STRUCTUAL ENGRS
710	A BUDGET TREE SVC INC
	ORLANDO RV RENTALS
817	FIRST BAPTIST CHRWINTER SPG
820	SEMINOLE COUNTY PUBLIC SCHOOLS
822	SCHOOLS PUBLIC SEMINOLE COUNTY
825	HANNA, THOMAS C
835	WILLIAMSON, CHESTER M
839	NGUYEN, VINH V
	WINTER SPRINGS BEAUTY SALON
845	DELL, WILLIAM E

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2010 (Cont'd)

851	TRUSTCO BANK
855	AT&T STORE
	CURVES
	E TOUR & TRAVEL
	INSURANCE RECOVERY INTL INC
	SECURE TITLE
	SPRING NAIL & SPA
	UNITY SPIRITUAL LIFE CTR
	YEN YEN RESTAURANT
	YOUR HEALTH FOOD STORE
866	REGIONS BANK
870	FULGHUM, GREGORY F
900	OCCUPANT UNKNOWN,
1000	WINTER SPRINGS CITY SPORTS
	WINTER SPRINGS CITYCENTRAL
1065	US POST OFFICE
1116	CRUISE AMERICA RV
1122	COURTNEY DELHART L DDS
	DELHART, L
	MAC DONALD FAMILY EYE CARE
1126	WINTER SPRINGS BLDG INSPECTION
	WINTER SPRINGS CITY CLERK
	WINTER SPRINGS CITY COMMISSION
	WINTER SPRINGS CITY HALL
	WINTER SPRINGS CITY MANAGER
	WINTER SPRINGS CODE ENFRCMNT
	WINTER SPRINGS COMMUNITY DEV
	WINTER SPRINGS COMPUTER SVC
	WINTER SPRINGS FINANCE DEPT
	WINTER SPRINGS GARBAGE PICKUP
	WINTER SPRINGS GENERAL SVC
	WINTER SPRINGS PARKS & REC
	WINTER SPRINGS POLICE DEPT
1134	EDWARD JONES
1135	ALLEN DYER DOPPELT MILBRATH
1138	CENTURY 21
1142	BURKS ROBERT R DDS
1160	PUBLIX SUPER MARKET
1161	COLSON, C
1163	JOHNSON, NATHAN
1184	H&R BLOCK
1188	RACHEL NICOLES SALON INC
1196	WINTER SPRINGS DENTISTRY
1200	MC DONALDS
1491	ADVENTURE CYCLING
	CHINA WOK
	CONGRESSIONAL HOMES
	FASHION NAILS
	MERRY GO HOUND
	METRO CHURCH OF CHRIST

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2010 (Cont'd)

1491	MOTHER KIMS CLEANERS
1501	BLIMPIE SUBS & SALADS
	GODFATHERS PIZZA
	HESS EXPRESS
1511	CENTERLINE HOMES
	CLEARTALK TELECOM
	CYNTHIA BRENNAN RYAN ESQ
	MOSAIC WEALTH MANAGEMENT GROUP
	N R ELECTRONICS LLC
	PINNACLE PROPERTY MANAGEMENT
	UCF INCUBATOR
	VISTAWILLA OFFICE CTR

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 2010

1258 OCCUPANT UNKNOWN,
1270 DIAZ, HECTOR D
1296 MUNOZ, DANIEL O

Target Street	Cross Street	Source
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TUSKAWILLA RD 2010

100	SOILEAU, AIMEE E
130	WINTER SPRINGS HIGH SCHOOL
150	KINGSBURY, LAVERNE W
154	DAVIS, KYLE
156	BEEFOBRADYS
	BIJOUX JEWELERSORLANDO
	BIRCHELL INSURANCE
	BOX OFFICE HAIR PRODUCTIONS
	CYPRESS SEMICONDUCTOR
	PRIUM
158	COUNTRYWIDE BANK
	COVENANT AVIATION SECURITY LLC
	HERBA FAMILY CHIROPRACTIC
	HOLLYWOOD BISTRO
	JDC CONSTRUCTION MGMTFL
	MURPHEYS PREMIUM PET FOOD MKT
160	BARNIES COFFEE & TEA CO WINTER
	GIANCARLOS
	TIJUANA FLATS
170	PINCH A PENNY
190	LAKE JESUP ANIMAL HOSPITAL
290	LOFROOS, WILLIAM W
300	LOFROOS, ROBERT W
315	HIFLAVOR MEATS INC
395	LORD OF LIFE CHURCH OF GOD
415	INDIAN TRAILS MIDDLE SCHOOL
575	ST STEPHENS CATHOLIC CHURCH
600	KEETH ELEMENTARY SCHOOL

Target Street	Cross Street	Source
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E STATE ROAD 434 2005

200	VICTORIOS II
264	DAYTONA MALL LLC
268	CENTRAL FLORIDA BLOOD BANK
276	MISSING CHILDREN CENTER INC
280	KRC EXOTIC BIRDS
290	DOLLAR DEALS
296	SWEET CELEBRATIONS
320	DELI ICIOUS
330	NATICES UNISEX SALON
350	SIR WALTERS PUB
351	ADAMS TRANSPORTATION INC
	FLORIDA OFFICE SERVICES
	JACOBSON MCCLEAN CHMELIR & FERWERDA
370	RANGOLI SWEETS OF FLORIDA INC
404	BRANNON, BROOKE A
406	CLARK, SAMUEL K
408	NIEVES, ANGEL A
410	HARVEY, AUDREY T
412	SMART, KIMBERLY C
414	MCKAY, R
416	TELEPHONE MARKETING PROMOTIONS INC
418	TROUNG, KHUONG N
420	NTS
422	DUNCAN, ARTHUR O
424	ARTHUR DUNCAN ACCOUNTING BOOKKEEPING
426	BINFORD, THOMAS A
	RAINBOW TRAVEL SERVICES INC
428	OCCUPANT UNKNOWN,
504	JACOBSON, BETH
506	CARNERO, OSCAR
541	TONY PAPA ITALIAN RESTAURANT
551	CUMBERLAND FARMS
640	KINDER KAMPUS INC
650	LESKOWYAK, KAREN S
680	EARTH ANGEL
780	ECKERD PHARMACY
810	MECO FLOORING INC
	MECONNAHEY, NANCY
817	FIRST BAPTIST CHURCH OF WINTER SPRIN
820	SCHOOL BOARDSEMINOLE CNTY
822	SEMINAR COUNTY PUBLIC SCHOOL TRANSPO
825	HANNA, NOREEN W
835	ROBERTS, ELEANOR B
839	WINTER SPRINGS BEAUTY SALON
	WINTER, SPRINGS
845	BATTEN, IRA
	CUSTOM CARPENTRY & ROOFING
	CUSTOM CARPENTRY & ROOFING INC
849	OCCUPANT UNKNOWN,
851	ALL RIGHT STUFF INC

Target Street	Cross Street	Source
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E STATE ROAD 434 2005 (Cont'd)

855	JOHN MCCANN & ASSOC
	JOHN MCCANN & ASSOCS
865	DEZEEUW, MIKE
870	FULGHUM, GREGORY F
900	OCCUPANT UNKNOWN,
1000	FLORIDA STATE OF
1116	JAM 2 TAYLOR RENTAL
1122	DELHART L COURTNEY DDS
	MACDONALD FAMILY EYECARE
1126	CITY OF WINTER SPRINGS HUMAN RESOURC
1132	TRANSFORMATION TANNING & SKIN
1134	KUMON MATH & READING CENTER OF WINTE
1139	OCCUPANT UNKNOWN,
1142	BURKS ROBERT R DDS PA
1144	LESLIES SWIMMING POOL SUPPLIES
1151	GRUBBS EMERGENCY SERVICES LLC
1155	FRESENTIUS MEDICAL CENTER
1156	LESLIES POOLMART # 459
1160	PUBLIX SUPER MARKETS
1161	COUTERMARCH, SCOTT
1163	JOHNSON, NATHAN
1165	OCCUPANT UNKNOWN,
1175	ROBERTS, JENNY R
1181	OCCUPANT UNKNOWN,
1182	MARC BRASHEAR STATE FARM
	STATE FARM BANK / BRASHEAR MARC A
1188	NAILS BY LINDA
	RACHAEL NICOLES SALON
1192	SHAPEXPRESS
1196	JOHN H T NGUYEN DMD PA
1200	MCDONALDS RESTAURANTS OF FLORIDA
1205	EXXONMOBIL OIL CORP
	MOBIL OIL CORP
1491	FASHION NAILS
	KASH N KARRY
	LIJING CHINESE RESTAURANT
	MOTHER KIMS CLEANERS
	PET RESCUE & SUPPLY INC
	SEMINOLE TRAIL ANIMAL HOSPITAL
	WILLIAMS, PAUL
1501	AMERADA HESS
	GODFATHERS PIZZA

Target Street	Cross Street	Source
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MILKY WAY 2005

1258 POWELL, PAMELA
1270 MUNIZ, LUIS A
RAUL CACHO LAWN SERVICE
1296 MUNOZ, JOSE R

Target Street	Cross Street	Source
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TUSKAWILLA RD 2005

100	SOILEAU, MARION J
130	SCHOOL BOARD OF SEMINOL CNT
	WINTER SPRINGS HIGH
150	KINGSBURY, LAVERNE W
158	CAPITAL GREEN LLC
160	ART AVENUE CRAFT STUDIO
	ARTS AVE CRAFT STUDIO
	BARNIES COFFEE & TEA CO
	CRISTIANOS LLC
	J RAYMOND CONSTRUCTION CORP
190	GRIFFITH EDWARD W DVM
	LAKE JESUP ANIMAL HOSPITAL
290	OCCUPANT UNKNOWN,
300	LOFROOS, ROBERT W
	ROBERT W LOFROOS
395	LORD OF LIFE FELLOWSHIP
	POP INC
415	INDIAN TRAILS MIDDLE SCHOOL
	SCHOOL BOARD OF SEMINOL CNT
575	SAINT STEPHEN CATHOLIC COMMUNITY

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2000

105	STATE FARM INSURANCE COMPANIES
140	WING HABILATATION CENTER INCORPORATED
160	MICKEY DS LOUNGE
168	ALL ELECTRONIC PARTS
200	VICTORIOS II WINTER SPRINGS
260	ART NUVEAU INCORPORATED
276	MISSING CHILDREN CENTER INCORPORATED
280	FREDS PRO FLIGHT ARCHERY
290	SEMINOLE BAKERIES
300	BADCOCK HOME FURNISHING CENTERS
330	NATICE'S UNISEX SALON
	PURDIE, GEORGE H
350	SIR WALTERS PUB
370	ROYAL SWEETS OF ORLANDO
404	CUMMINGS, NELSON
408	NIEVES, ANGEL
410	HARVEY, A T
412	SMART, EDGAR E
414	ALLEN, DOUGLAS
416	V JAYS FASHION DESIGN
418	RODRIGUEZ, WILLIAM
420	MCCRACKEN, CLEO J
422	DUNCAN, ARTHUR O
424	ARTHUR DUNCAN ACCOUNTING BOOKKEEPING & TAX SERVICE
426	AFFORDABLE LEGAL CLINIC INCORPORATED
	BINFORD, THOMAS A
	RAINBOW TRAVEL SERVICES INCORPORATED
500	FILLMAN, PHILLIP E
	MUSCLE PAIN CORRECTION
501	POWERS, A C
504	CARTER, K
506	CLARK, JAMES O
541	PAPA TONYS ITALIAN RESTAURANT
650	LESKOWYAK, K
680	CAKES ACROSS AMERICA
	SUN STATE ELECTRONICS
710	A BUDGET TREE SERVICE
	MEAGHER, JAMES J
822	SEMINOLE COUNTY PUBLIC SCHOOLS
839	WINTER SPRINGS BEAUTY SALON
845	BATTEN, IRA
870	EVANS, D W
1116	TAYLOR RENTAL
1126	WINTER SPRINGS CITY OF CITY HALL
	WINTER SPRINGS WATER & SEWER
1159	COTTON, R
1161	RICE, MARK W
1163	BOOTHE, HAROLD
1175	ROBERTS, CARL R
1205	MOBILE ORLANDO JAWAD INCORPORATED

Target Street	Cross Street	Source
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E STATE ROAD 434 2000 (Cont'd)

1271 SUBWAY SANDWICHES & SALADS
1420 KISINGER CAMPO & ASSOCIATES CORPORATION
1481 CONTRAVEST CONSTRUCTION COURTNEY PLACE
1501 HESS EXPRESS

Target Street	Cross Street	Source
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MILKY WAY 2000

1270 MUNIZ, LUIS A

Target Street	Cross Street	Source
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TUSKAWILLA RD 2000

130	SCHOOLS-PUBLIC SEMINOLE CNTY WINTER SPRINGS HIGH
190	GRIFFITH EDWARD W DVM VET
	GRIFFITH, E
	LAKE JESUP ANIMAL HOSPITAL
201	HI FLAVOR MEATS INCORPORATED
206	SOILEAU, BRUCE
290	BAILEY, HILDE E
300	LOFROOS, ROBERT W
395	LORD OF LIFE FELLOWSHIP
397	HI FLAVOR MEATS INCORPORATED
401	LOPEZ, BENITO
550	SCHOOLS-PUBLIC SEMINOLE CNTY INDN TRAILS MID SCHOO
575	ST STEPHENS CATHOLIC CHURCH
600	KEETH ELEMENTARY SCHOOL
	KEETH P T A ABSENTEE HOTLINE
	SCHOOLS-PUBLIC SEMINOLE CNTY KEETH ELEM SCHOOL
611	OCCUPANT UNKNOWN,

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-	✓	EDR Digital Archive

MILKY WAY 1995

1280 MCCOY, ANNA
1296 MUNOZ, JOSE R

Target Street	Cross Street	Source
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STATE ROAD 434 E 1995

7	BRACCO, LUCY
12	SARTORI, JAMES B
13	THOMPSON, JAMES M
20	DZIOLOWSKI, RAYMOND
25	SPOERING, D
33	DICEMBRE, MICHAEL J
35	DAVIS, K M
44	MELTON, F D
45	ADLINGTON, CHARLES F
47	OTHLING, B J
48	GALLAGHER, FRED J
73	OCCUPANT UNKNOWNN
82	WYNNE, JOHN
83	OCCUPANT UNKNOWNN
85	TAYLOR, CHARLES
90	WRUCK, WILLIAM B
93	CANTON, FRANK W
94	BOYD, G L
95	POWELL, H B
96	DIORIO, CARMINO
97	HOEY, FRANK
98	KNOWLES, HAROLD
99	HILL, E N
100	WOLF, MARY
101	TORCASO, JOHN V
106	HERRON, M J
110	LINDA ANDERSON
115	WILKERSON, V
117	NIREN, BEN
119	NEAL, THERESA E
121	SNYDER, DONALD G
122	PALOMBI, JOSEPH
123	BRANCH, I
127	SIMPSON, D H
129	BURNS, M J
130	OCCUPANT UNKNOWNN
132	KLINEHAN, DONALD
133	HANSON, J B
134	FELTON, RICHARD
136	HAGLEY, LEONARD M
137	KINNEE, ROBERT J SR
138	ANDRESAKES, GEORGE N
141	BERNE, ABRAHAM
144	PHILBRICK, Y
145	BOISDORF, JOHN
146	ATHERTON, V E
	EDER, D J
147	SPROULL, JAMES D
148	CRAWFORD, SIBERT E
150	MYERS, SHELDON L

STATE ROAD 434 E 1995 (Cont'd)

151	SMITH, RAMON W
152	KILLIAN, KENNY
	MORRILL, I
153	WARTLUFT, LEON
154	ROSSI, ANTHONY
155	ALLEN, GEORGE N
161	OCCUPANT UNKNOWNN
165	FOLEY, JAMES A
167	HUGHES, FRED G
169	WOOD, HELEN
176	MCKENZIE, J A
178	SHEPARDSON, LEROY M
179	GREENLEAF, A M
180	FORD, ROBERT
182	BEST, WILLIAM J
200	DUNN, JOE P
	OSTERHOUT, M E
201	SCHIERHOLZER, S M
207	ANDERSON, THOMAS E
211	HUTCHINSON, I A
220	FOSTER, KENNETH V
221	MULLINS, JAMES W
225	SMITH, L B
226	DUVAL, GUY E
227	SCHILL, D C
239	LOVETT, DAN S
252	PATTERSON, CHARLES JR
256	CUTRONI, JOHN F
258	HOWELL, KENNETH
263	PEARSON, ROY
264	OCCUPANT UNKNOWNN
267	ROGERS, L R
269	DILLON, WILMA A
273	FORSTER, ALBERT C
277	OCCUPANT UNKNOWNN
284	OCCUPANT UNKNOWNN
286	OCCUPANT UNKNOWNN
288	OCCUPANT UNKNOWNN
290	OCCUPANT UNKNOWNN
296	OCCUPANT UNKNOWNN
304	RAGLAND, WILLIAM H
306	WHATLEY, TOM
310	MCCALL, JAY
314	DZIOK, WALTER SR
315	LELLIS, MICHAEL R
319	DAUCHER, WILLIAM F
320	PITZER, F
327	GAHAGAN, WILLIAM
336	BRUND, JACQUE
339	HOWES, T

STATE ROAD 434 E 1995 (Cont'd)

345	OCCUPANT UNKNOWNN
348	BROPSON, FRANK
350	THOMAS, SAMUEL H
354	LUTE, ROBERT
359	SOLUSKI, FRANK G
360	DOLFI, H P
364	BROOKS, WALTER T
365	THORNBURGH, L M
367	GEE, RICHARD C
368	RICHARDSON, GEORGE I
387	DEPIZOL, T
388	OCCUPANT UNKNOWNN
391	REESE, WILLIAM J JR
403	OCCUPANT UNKNOWNN
404	CUMMINGS, ALLEN S
405	EARNSHAW, DONALD
407	HALL, HOWARD E
410	HARVEY, A T
411	SMART, EDGAR E
414	HUGHES, FRANK L
415	FRANCIS, F K
417	WAGNER, JAMES T
426	BINFORD, THOMAS A
439	PHILLIPS, JOHN G
442	LEAF, KENNETH T
443	RIGNEY, M
446	STRANG, WOODROW
447	LONDT, CHARLES F
450	OCCUPANT UNKNOWNN
459	FRANKENHEIM, NORMAN
468	KOENIG, EDNA
476	PARKS, F
479	KOBRIN, PAUL
481	GAUL, ROBERT
482	EMRICH, HARRY
	JONES, MILO J
	STANG, BERNARD P
	WRIEDE, ARTHUR G
500	KALEY, JAMES L
	KELLY, O A
	SINGER, HARRY
	TEDESCO, WILLIAM R
505	CLARK, JAMES O
510	OCCUPANT UNKNOWNN
515	LESKOWYAK, K
517	OCCUPANT UNKNOWNN
525	ALLY, STEPHEN
	ALVEO, JILMA
	ANDERSON, RHAMED
	BAKER, R

STATE ROAD 434 E 1995 (Cont'd)

525	FLUHARTY, RICHARD A
	GARRICK, C
	MARSHALL, E M
	MONTANEZ, JORGE
	SCHAEFER, ANDY
	STEVENS, BOB
549	OCCUPANT UNKNOWNN
551	ACTA, M
	ALLITON, KURT
	ALVAREZ, MARIA
	ARCE, ABRAHAM
	BENAMI, DORA
	BUSCHE, SARALEE M
	CONNELL, A J
	COUTERMARSH, KENNETH
	DELEON, L S
	GARRIDO, JOSE
	GEORGE, JANE
	GIL, EDGAR
	GONZALEZ, O
	GREEN, JOHN
	HERNANDEZ, WANDA
	KEENEY, KYLE A
	LABOSSIER, PAUL J
	LAMON, MICHAEL R
	LANGTEAU, L
	LAPLACA, VINCENT
	LIGHTON, H
	MATUTAT, TIM
	RANKIN, S
	VELEZ, LEANDRO
	WALTERS, P
	WANG, PEGGY
	WARLICK, SHAMBA
	WATTS, WAYNE
	ZAMBRANO, ANNA M
620	WINTER SPRINGS DENTAL LAB
621	MORRIS, ZANDI
661	OCCUPANT UNKNOWNN
810	NORWOOD, R
845	BELL, NELL
851	OCCUPANT UNKNOWNN
870	CARBONE, ANA
1065	US POST OFFICE
1130	BLUMBERG, JUANITA
1135	OCCUPANT UNKNOWNN
1159	OCCUPANT UNKNOWNN
1161	RICE, MARK W
1165	OCCUPANT UNKNOWNN
1175	ROBERTS, CARL R

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TUSKAWILLA RD 1995

117	FULTON, ROBERT P
290	BAILEY, HILDE E
300	JUSHE, BONNIE
550	INDIAN TRAILS MIDDLE SCHOOL
575	ST STEPHENS CATHOLIC CHURCH
600	KEETH ELEMEMTARY SCHOOL
619	MABRY, NED B
628	FRASER, WESLEY E

Target Street	Cross Street	Source
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E STATE RD 434 1992

200	DOLFI, H P
	HOWELL, KENNETH
	MORGAN, A W
	OSTERHOUT, H P
	ZANGMEISTER, B
286	BURT, PHILLIP S
320	PITZER, F
403	CUMMINGS, NELSON
410	LEEBRICK, PHIL
411	SMART, EDGAR E
426	BINFORD, THOMAS A
482	ADAMS, FRED
	ANDERSON, THOMAS E
	BROOKS, WALTER T
	COVINGTON, DUDLEY L
	DAMRON, JAMES M
	DEPIZOL, T
	DINSMORE, C M
	DUVAL, GUY E
	EMRICH, HARRY
	EVENSON, KENNETH
	FORSTER, ALBERT C
	FOSTER, KENNETH V
	FRANCIS, F K
	FRANKENHEIM, NORMAN
	GAHAGAN, WILLIAM
	GAUL, ROBERT
	GEBHARDT, ROBERT F
	GREIFFENDORF, C W
	GUGEL, MERL
	GUMBERT, EDGAR B
	HOWES, T
	HUGHES, FRANK L
	HUTCHINSON, I A
	JAYNES, MELVIN J
	JONES, MILO J
	KLEIN, NEIL W
	LAWLOR, MICHAEL B
	LEAF, KENNETH T
	LELLIS, MICHAEL R
	LONDT, CHARLES F
	LOVETT, DAN S
	MCCALL, JAY
	MOSS, NATHAN
	MULLINS, JAMES W
	MURDOCK, JOHN G
	NELSON, CARL H
	OBERG, HARRY E
	PAINTER, JOHN H
	PARKS, F

E STATE RD 434 1992 (Cont'd)

482	RAGLAND, WILLIAM H
	REESE, WILLIAM J JR
	RICHARDSON, GEORGE I
	ROGERS, L R
	SCHILL, D C
	SHADOWENS, GEORGE W
	SHELLEM, WILLIAM
	SMITH, L B
	SOLUSKI, FRANK G
	STANG, BERNARD P
	STRANG, WOODROW
	TAYLOR, MAX A
	THORNBURGH, L M
	WRIEDE, ARTHUR G
500	ADLINGTON, CHARLES F
	ALLEN, GEORGE N
	ANDRESAKES, GEORGE N
	ATHERTON, V E
	BERNE, ABRAHAM
	BEST, WILLIAM J
	BOISDORF, JOHN
	BOYD, G L
	BRACCO, LUCY
	BRANCH, I
	BREITENBRUCK, JOSEPH
	BROPSON, FRANK
	BRUND, JACQUE
	BURNS, J R
	CANTON, FRANK W
	CRAIG, DARRELL R
	CRAWFORD, SIBERT E
	CUTRONI, JOHN F
	DAUCHER, WILLIAM F
	DAVIS, K M
	DELEON, VERNON C
	DESSEZ, ROBERT A
	DICEMBRE, MICHAEL J
	DILLON, WILMA A
	DIORIO, CARMINO
	DUNN, JOE P
	DZIOK, WALTER SR
	DZIOLOWSKI, RAYMOND
	EARNSHAW, DONALD
	EDER, D J
	FELTON, RICHARD
	FOLEY, JAMES A
	FORD, ROBERT
	GALLAGHER, FRED J
	GEE, RICHARD C
	GREENLEAF, A M

Target Street	Cross Street	Source
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E STATE RD 434 1992 (Cont'd)

500
HADAWAY, BILLY J
HALL, HOWARD E
HANSON, J B
HAYDEN, THOMAS A
HAZELETT, A N
HERRON, M J
HUGHES, FRED G
KALEY, JAMES L
KELLY, O A
KILLIAN, KENNY
KINNEE, ROBERT J SR
KLINEHAN, DONALD
KNOWLES, HAROLD
KOBRIN, PAUL
KOENIG, EDNA
KRISTALYN, ROBERT C
LUTE, ROBERT
MCGINLEY, HAROLD W
MCKENZIE, J A
MELTON, F D
MORLEY, E M
MORRILL, I
MYERS, SHELDON L
NEAL, THERESA E
NIREN, BEN
OTHLING, B J
PALOMBI, JOSEPH
PATTERSON, CHARLES JR
PEARSON, ROY
PHILBRICK, Y
PHILLIPS, JOHN G
POWELL, H B
RIGNEY, M
ROSE, SUSAN H
ROSSI, ANTHONY
SARTORI, JAMES B
SAVARESE, ROY
SCHIERHOLZER, S M
SHEPARDSON, LEROY M
SIMPSON, D H
SINGER, HARRY
SMITH, RAMON W
SNYDER, DONALD G
SPOERING, WILLIAM G
SPROULL, JAMES D
TAYLOR, CHARLES
TEDESCO, WILLIAM R
THOMAS, SAMUEL H
THOMPSON, JAMES M
TORCASO, JOHN V

Target Street	Cross Street	Source
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E STATE RD 434 1992 (Cont'd)

500	WAGNER, JAMES T
	WARDER, ROBERT
	WARTLUFT, LEON
	WHATLEY, TOM
	WHITEHEAD, B J
	WHITTINGTON, H H
	WILKERSON, V
	WILLIAMS, S T
	WOLF, MARY
	WOOD, HELEN
	WRUCK, WILLIAM B
	WYNNE, JOHN
505	CLARK, JAMES O
515	LESKOWYAK, K
525	ALVEO, JILMA
	CARRILLO, GLADIS
	FLUHARTY, RICHARD A
	LEWIS, KATHRYN S
	MANIS, KENNETH E
	MARSHALL, E M
	MILLER, KEVIN R
	MILLER, LARRY M
	MORALES, CARMEN
	RIVERA, OLGA
551	ARANZA, ALBERT
	ARCE, ANDREW
	BENAMI, DORA
	BERMUDEZ, IVONNE
	BILLINGS, MICHAEL D
	BLOSS, M E
	BOGGESS, DAVE
	BOUCHER, JEAN P
	BRENNER, SKIP
	BURKE, JAY
	CHAMP, CATHRYN
	CHOKSHI, DINESH
	COLON, CARLOS
	CONNELL, A J
	CUTLER, J A
	DAPHNIS, F
	DAVID, ELAINE
	DAVIS, C K
	DAVIS, DAVE A
	DEANGELIS, M
	DEJESUS, THOMAS
	DELEDEZMA, ISABEL
	DELEON, L S
	DEWANEH, GHADEH
	DEXTRE, MYRTA
	DOBBS, TERRY

E STATE RD 434 1992 (Cont'd)

551
DUVAK, CHRIS
EDWARDS, SHAWN
FIOL, ISAURA
FRAZIER, JUSTUS F JR
GARCIA, DARIO
GARVER, THOMAS
GAY, MICHAEL
GINN, TIFFANY S
GOMEZ, AFONZO
GONZALEZ, AGUSTIN
GONZALEZ, JOSE A
GONZALEZ, O
GUTIERREZ, DIANE
HARDEMAN, DOROTHY
HENNESSEY, J
HERNANDEZ, WANDA
HISEY, BRENT
ISAZA, JORGE I
JEAN, EDMOND R
JOLLAY, HELEN O
KEENEY, KYLE A
LAJANO, JAMES
LAPLACA, VINCENT
LEWIS, JAMIE
LOPEZ, F
LOWMILLER, JILL
MARINELLI, BRIAN
MARTIN, KENNETH R
MATHERS, JOSEPH
MELENDEZ, ZAIDA
MILLER, DAVID M
MONTANEZ, JORGE
MURDAUGH, C J
OHL, STEPHEN
OROURKE, MICHAEL A
PAVAO, LOUIS
PEDONE, SAMUEL
PETIT, KARINE
POWELL, STEVEN P
RANKIN, S
REAVES, J K
REEVESJONES, CRIS
RIDGWAY, M W
RIVERA, IVAN G
ROBSON, THERESA J
RODRIGUEZ, FELIX J
RODRIGUEZ, IRIS
ROMAN, DAINA
ROSTAMLOO, NEJDEH
SAMMONS, C A

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E STATE RD 434 1992 (Cont'd)

551	SANTANA, ISABEL
	SANTOS, DOMINGO
	SCHULTZ, J
	SCOTT, DENNIS R
	SCOTT, F J
	SHELTON, JASON S
	SHUFELT, K
	SMETZER, MICHAEL
	STEVENS, SUSAN M
	THOMPSON, JOHN C
	THOMPSON, SHERRIE
	TSINTZAS, ALEX
	URRUTIA, ERICKA J
	VANANDEN, RAYMOND
	VELEZ, LEANDRO
	VENABLE, JAMES C
	WARREN, JOSEPH E
	WELSCH, JEFFREY
	WINSLETT, LEE
	ZAMBRANO, ANNA M
	ZAMBRANO, LEWIS
661	KIGGINS, J
701	PETTIT, ANNA P
810	NORWOOD, R
851	GRESHAM, DEBBIE
1161	RICE, MARK W
1175	ROBERTS, CARL R

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSCAWILLA RD 1992

190	GRIFFITH EDWARD W
201	HI-FLAVOR MEATS INC
395	FRESH START MINISTRIES INC
	LORD OF LIFE LUTH CH
397	HI FLAVOR MEATS INC
575	ST STEPHENS CATH CH
600	KEETH ELEM SCHOOL

Sutton Crossing

Tuskawilla Rd & FL 434

Winter Springs, FL 32708

Inquiry Number: 7123398.4

September 20, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

09/20/22

Site Name:

Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708
EDR Inquiry # 7123398.4

Client Name:

Native Geoscience, Inc.
2014 Edgewater Drive #246
Orlando, FL 32804
Contact: Clinton Wilhelm

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Native Geoscience, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# R0789.1
Project: R0789.1

Coordinates:

Latitude:	28.695011 28° 41' 42" North
Longitude:	-81.262068 -81° 15' 43" West
UTM Zone:	Zone 17 North
UTM X Meters:	474399.98
UTM Y Meters:	3174224.33
Elevation:	42.92' above sea level

Maps Provided:

2018
2015
2012
1994
1980
1972
1970
1962

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Casselberry
2018
7.5-minute, 24000



Oviedo
2018
7.5-minute, 24000

2015 Source Sheets



Casselberry
2015
7.5-minute, 24000



Oviedo
2015
7.5-minute, 24000

2012 Source Sheets

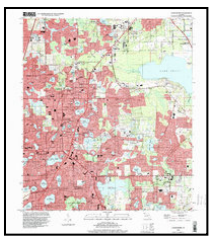


Casselberry
2012
7.5-minute, 24000



Oviedo
2012
7.5-minute, 24000

1994 Source Sheets



Casselberry
1994
7.5-minute, 24000
Aerial Photo Revised 1994

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1980 Source Sheets

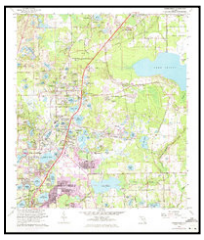


Oviedo
1980
7.5-minute, 24000
Aerial Photo Revised 1977



Casselberry
1980
7.5-minute, 24000
Aerial Photo Revised 1977

1972 Source Sheets

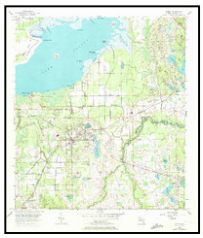


Casselberry
1972
7.5-minute, 24000
Aerial Photo Revised 1970

1970 Source Sheets



Casselberry
1970
7.5-minute, 24000
Aerial Photo Revised 1970



Oviedo
1970
7.5-minute, 24000
Aerial Photo Revised 1970

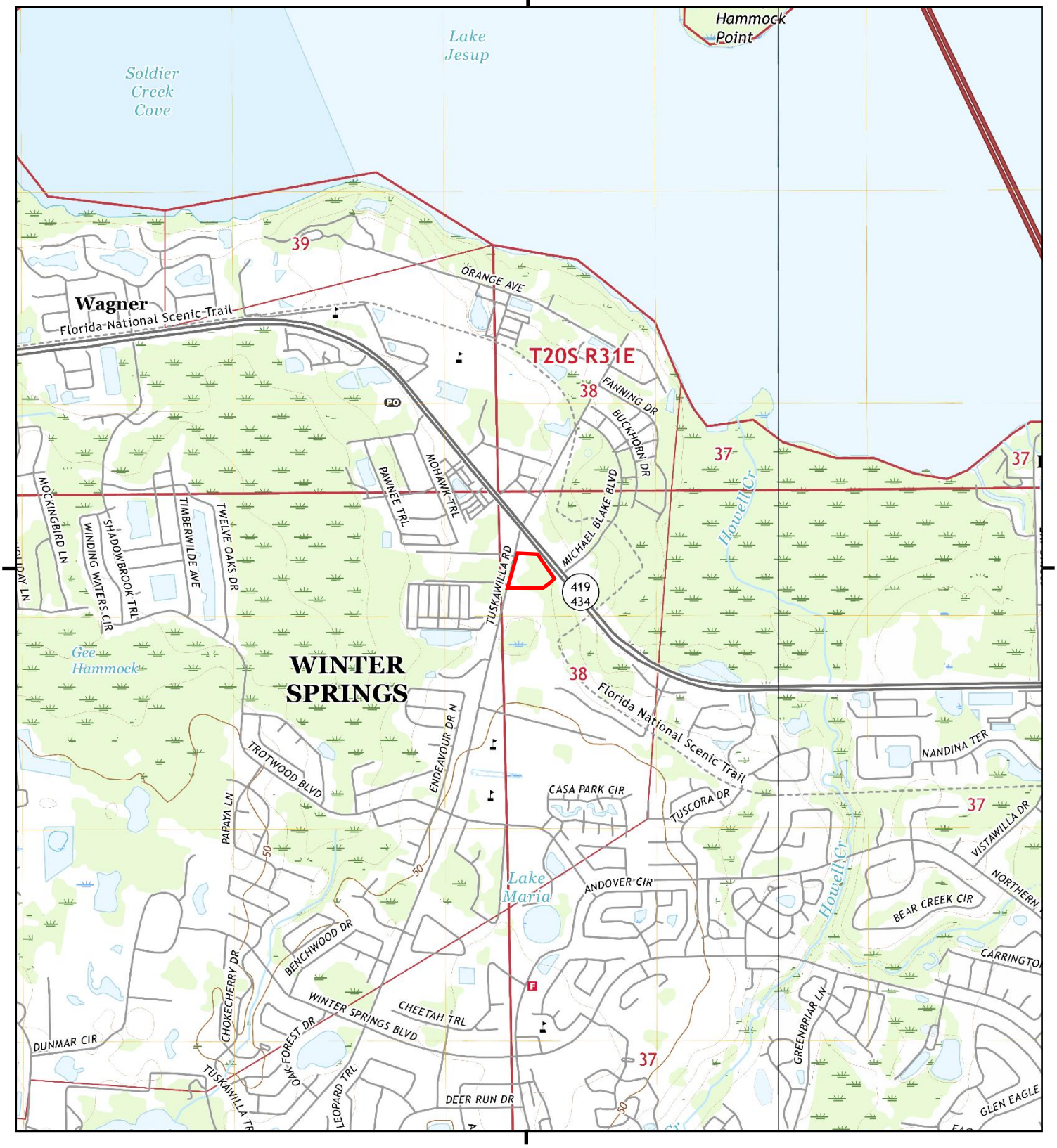
1962 Source Sheets



Casselberry
1962
7.5-minute, 24000
Aerial Photo Revised 1958

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 2018, 7.5-minute
E, Oviedo, 2018, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 2015, 7.5-minute
E, Oviedo, 2015, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

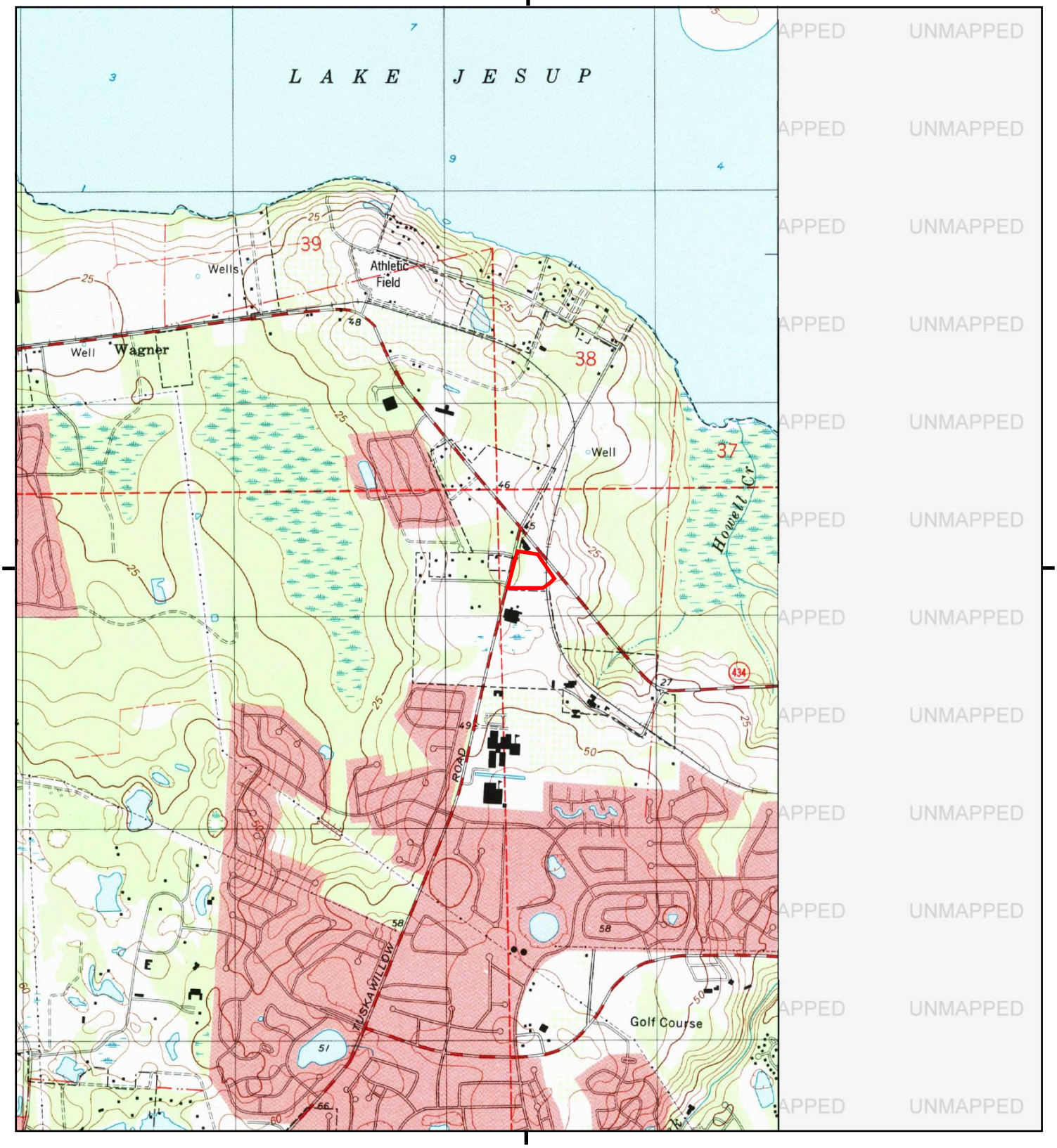
TP, Casselberry, 2012, 7.5-minute
E, Oviedo, 2012, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

1994



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1994, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N



This report includes information from the following map sheet(s).

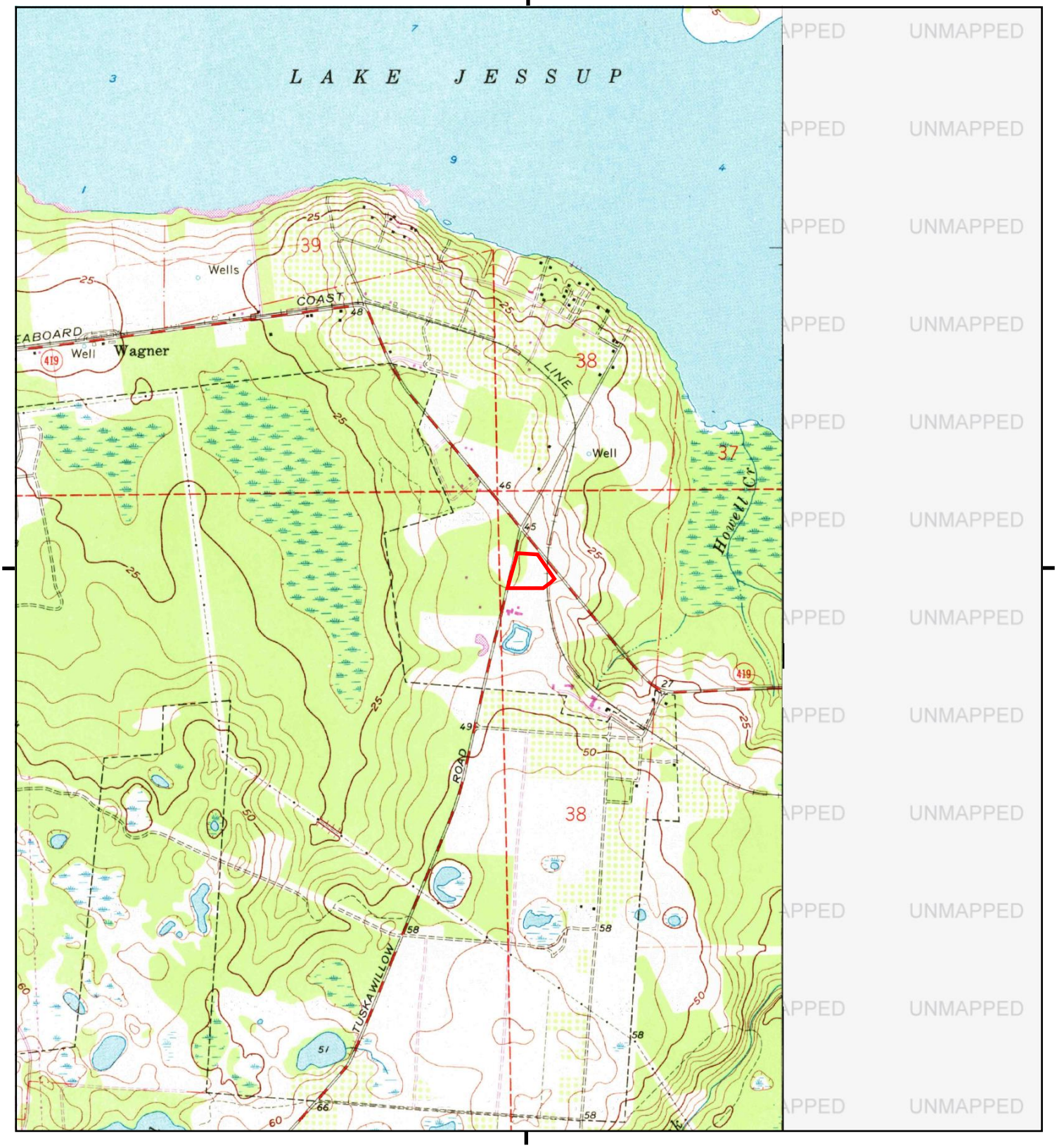
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1980, 7.5-minute
E, Oviedo, 1980, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1972, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

1970



This report includes information from the following map sheet(s).

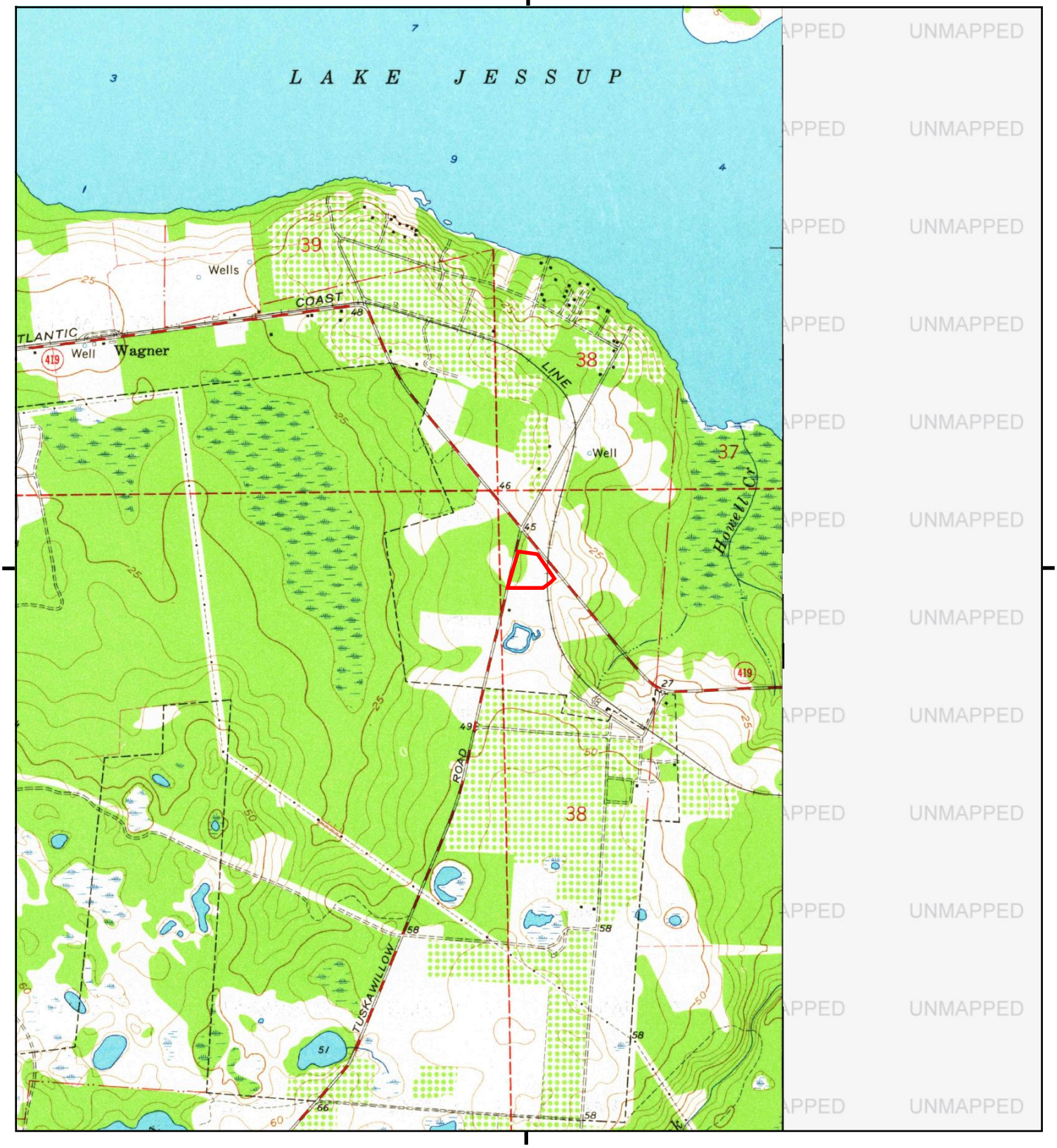
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1970, 7.5-minute
E, Oviedo, 1970, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1962, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Property Record Card

David Johnson, CFA
PROPERTY APPRAISER
SEMINOLE COUNTY, FLORIDA

Parcel 26-20-30-5AR-0A00-008D
Property Address 434 SR WINTER SPRINGS, FL 32708

Parcel Information

Parcel	26-20-30-5AR-0A00-008D
Owner(s)	SCHRIMSHER LAND FUND 1985 LTD - Tenants in Common :50 SCHRIMSHER LAND FUND VI LTD - Tenants in Common :10.45908 SCHRIMSHER LAND FUND V LTD - Tenants in Common :39.54092
Property Adrress	434 SR WINTER SPRINGS, FL 32708
Mailing	600 E COLONIAL DR STE 100 ORLANDO, FL 32803-4647
Subdivision Name	D R MITCHELLS SURVEY OF THE LEVY GRANT
Tax District	W1-WINTER SPRINGS
DOR Use Code	10-VAC GENERAL-COMMERCIAL
Exemptions	None
Agricultural Classification	No



Value Summary

	2022 Working Values	2021 Certified Values
Valuation Method	Cost/Market	Cost/Market
Number of Buildings	0	0
Depreciated Bldg Value		
Depreciated EXFT Value		
Land Value (Market)	$620,600	$394,081
Land Value Ag		
Just/Market Value	$620,600	$394,081
Portability Adj		
Save Our Homes Adj	$0	$0
Amendment 1 Adj	$360,567	$157,687
P&G Adj	$0	$0
Assessed Value	$260,033	$236,394

2021 Tax Amount without Exemptions:	$6,342.30
2021 Tax Bill Amount:	$4,723.03
2021 Tax Savings with Exemptions:	$1,619.27

** Does NOT INCLUDE Non Ad Valorem Assessments*

Legal Description

PT OF LOT 8 DESC AS BEG INT
WLY R/W ACL RR & NLY LI LOT 17
TUSKAWILLA EXT RUN NLY ALONG RR
TO SLY R/W OVIEDO RD NWLY ALONG
SLY R/W TO A PT N OF BEG S TO BEG (LESS RD)
BLK A
D R MITCHELLS SURVEY OF THE
LEVY GRANT
PB 1 PG 5

Taxes

Taxing Authority	Assessment Value	Exempt Values	Taxable Value
SJWM(Saint Johns Water Management)	$260,033	$0	$260,033
CITY WINTER SPRINGS	$260,033	$0	$260,033
FIRE FUND	$260,033	$0	$260,033
COUNTY GENERAL FUND	$260,033	$0	$260,033
Schools	$620,600	$0	$620,600

Sales

Description	Date	Book	Page	Amount	Qualified	Vac/Imp

Land

Method	Frontage	Depth	Units	Units Price	Land Value
SQUARE FEET			62060	$10.00	$620,600

Building Information

Permits

Permit #	Description	Agency	Amount	CO Date	Permit Date
26920	INSTALL OUTDOOR ADVERTISING SIGN	Winter Springs	$6,596		5/1/1995
00801	SITE PLAN REVIEW - ALSO INCLUDES LOT 8H	Winter Springs	$0		5/5/2010

Extra Features

Description	Year Built	Units	Value	New Cost

Zoning

Zoning	Zoning Description	Future Land Use	Future Land Use Description
T-C		Town Center District	

Utility Information

Fire Station	Power	Phone(Analog)	Water Provider	Sewer Provider	Garbage Pickup	Recycle	Yard Waste	Hauler
26.00	DUKE	AT&T	WINTER SPRINGS	CITY OF WINTER SPRINGS	NA	NA	NA	NA

Political Representation

Commissioner	US Congress	State House	State Senate	Voting Precinct
Dist 2 - Jay Zembower	Dist 7 - Stephanie Murphy	Dist 28 - David "Dave" Smith	Dist 9 - Jason Brodeur	49

School Information

Elementary School District	Middle School District	High School District
Layer	Indian Trails	Winter Springs

Property Record Card

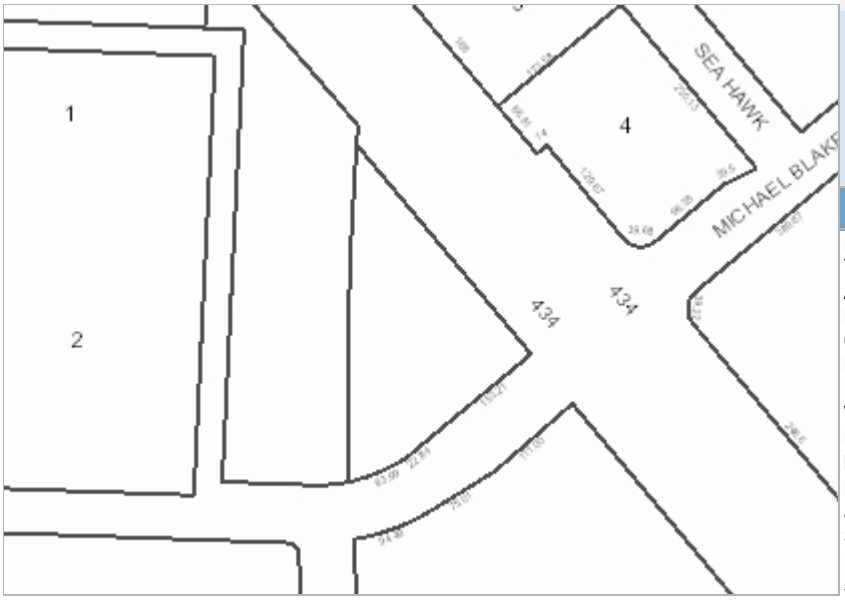
David Johnson, CFA
PROPERTY APPRAISER
SEMINOLE COUNTY, FLORIDA

Parcel 26-20-30-5AR-0A00-008H

Property Address E 434 SR WINTER SPRINGS, FL 32708

Parcel Information

Parcel	26-20-30-5AR-0A00-008H
Owner(s)	SCHRIMSHER LAND FUND VI LTD - Tenants in Common :10.4591 SCHRIMSHER LAND FUND V LTD - Tenants in Common :39.5409 SCHRIMSHER LAND FUND 1986-II LTD - Tenants in Common :50
Property Adrress	E 434 SR WINTER SPRINGS, FL 32708
Mailing	600 E COLONIAL DR STE 100 ORLANDO, FL 32803-4647
Subdivision Name	D R MITCHELLS SURVEY OF THE LEVY GRANT
Tax District	W1-WINTER SPRINGS
DOR Use Code	10-VAC GENERAL-COMMERCIAL
Exemptions	None
Agricultural Classification	No



Value Summary

	2022 Working Values	2021 Certified Values
Valuation Method	Cost/Market	Cost/Market
Number of Buildings	0	0
Depreciated Bldg Value		
Depreciated EXFT Value		
Land Value (Market)	$383,430	$243,478
Land Value Ag		
Just/Market Value	$383,430	$243,478
Portability Adj		
Save Our Homes Adj	$0	$0
Amendment 1 Adj	$236,126	$109,565
P&G Adj	$0	$0
Assessed Value	$147,304	$133,913

2021 Tax Amount without Exemptions:	$3,918.51
2021 Tax Bill Amount:	$2,793.40
2021 Tax Savings with Exemptions:	$1,125.11

** Does NOT INCLUDE Non Ad Valorem Assessments*

Legal Description

PT OF LOT 8 DESC AS FROM SE COR BLOCK C GARDENA FARMS TOWN SITES RUN N 55 DEG 28 MIN 13 SEC W 800 FT NWLY ALONG CURVE 1148.44 FT N 49 DEG 31 MIN 30 SEC E 250.50 FT TO POB RUN N 39 DEG 49 MIN 53 SEC W 659.48 FT NLY ALONG CURVE 133.83 FT TO POB RUN ELY ALONG CURVE 63.99 FT N 49 DEG 13 MIN 20 SEC E 22.84 FT N 50 DEG 22 MIN 25 SEC E TO WLY R/W SR 434 NWLY ALONG R/W TO WLY R/W OF RR SELY ALONG WLY R/W OF RR TO BEG (LESS PT NOT PLATTED) BLK A
DR MITCHELLS SURVEY OF THE
LEVY GRANT
PB 1 PG 5
&
SEC 06 TWP 21S RGE 31E
FROM SE COR BLOCK C GARDENA FARMS TOWN SITES RUN N 55 DEG 28 MIN 13 SEC W 800 FT NWLY ALONG CURVE 1148.44 FT N 49 DEG 31 MIN 30 SEC E 250.50 FT TO POB RUN N 39 DEG 49 MIN 53 SEC W 659.48 FT NLY ALONG CURVE 133.83 FT TO POB RUN ELY ALONG CURVE 63.99 FT N 49 DEG 13 MIN 20 SEC E 22.84 FT N 50 DEG 22 MIN 25 SEC E TO WLY R/W SR 434 NWLY ALONG R/W TO WLY R/W OF RR SELY ALONG WLY R/W OF RR TO BEG (LESS PT PLATTED)

Taxes

Taxing Authority	Assessment Value	Exempt Values	Taxable Value
SJWM(Saint Johns Water Management)	$147,304	$0	$147,304
CITY WINTER SPRINGS	$147,304	$0	$147,304
FIRE FUND	$147,304	$0	$147,304
COUNTY GENERAL FUND	$147,304	$0	$147,304
Schools	$383,430	$0	$383,430

Sales

Description	Date	Book	Page	Amount	Qualified	Vac/Imp
SPECIAL WARRANTY DEED	02/02/2017	08856	0546	$277,200	No	Vacant

Land

Method	Frontage	Depth	Units	Units Price	Land Value
SQUARE FEET			38343	$10.00	$383,430

Building Information

Permits

Permit #	Description	Agency	Amount	CO Date	Permit Date
00490	CONSTRUCTION OF A 145 SUITE, 4 STORY RETIREMENT RESIDENCE.PAD PER PERMIT: 80 MICHAEL BLAKE BLVD.	Winter Springs	$25,405,047		7/8/2019
02739	CONSTRUCTION OF A RETAINING WALL.	Winter Springs	$162,200		8/15/2019
03654	CONSTRUCTION OF LIFT STATION	Winter Springs	$33,000		11/14/2019

Extra Features

Description	Year Built	Units	Value	New Cost

Zoning

Zoning	Zoning Description	Future Land Use	Future Land Use Description
T-C		Town Center District	

Utility Information

Fire Station	Power	Phone(Analog)	Water Provider	Sewer Provider	Garbage Pickup	Recycle	Yard Waste	Hauler
26.00	DUKE	AT&T	WINTER SPRINGS	CITY OF WINTER SPRINGS	NA	NA	NA	NA

Political Representation

Commissioner	US Congress	State House	State Senate	Voting Precinct
Dist 2 - Jay Zembower	Dist 7 - Stephanie Murphy	Dist 28 - David "Dave" Smith	Dist 9 - Jason Brodeur	49

School Information

Elementary School District	Middle School District	High School District
Layer	Indian Trails	Winter Springs

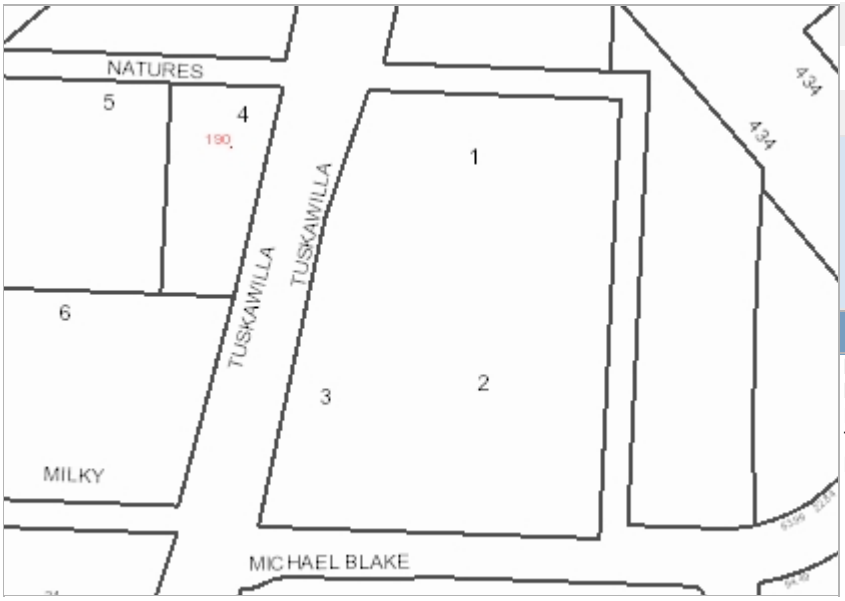
Property Record Card

David Johnson, CFA
PROPERTY APPRAISER
SEMINOLE COUNTY, FLORIDA

Parcel 01-21-30-501-0000-0010
Property Address TUSKAWILLA RD WINTER SPRINGS, FL 32708

Parcel Information

Parcel	01-21-30-501-0000-0010
Owner(s)	SCHOEN, PATTI A
Property Adrress	TUSKAWILLA RD WINTER SPRINGS, FL 32708
Mailing	PO BOX 397 SCOTT DEPOT, WV 25560-0397
Subdivision Name	TUSCAWILLA
Tax District	W1-WINTER SPRINGS
DOR Use Code	1003-VAC FEEDER RD FRONTAGE
Exemptions	None
Agricultural Classification	No



Value Summary

	2022 Working Values	2021 Certified Values
Valuation Method	Cost/Market	Cost/Market
Number of Buildings	0	0
Depreciated Bldg Value		
Depreciated EXFT Value		
Land Value (Market)	$1,200,293	$1,091,175
Land Value Ag		
Just/Market Value	$1,200,293	$1,091,175
Portability Adj		
Save Our Homes Adj	$0	$0
Amendment 1 Adj	$542,085	$492,804
P&G Adj	$0	$0
Assessed Value	$658,208	$598,371

2021 Tax Amount without Exemptions:	$17,561.26
2021 Tax Bill Amount:	$12,500.71
2021 Tax Savings with Exemptions:	$5,060.55

** Does NOT INCLUDE Non Ad Valorem Assessments*

Legal Description

LOTS 1 + 2 + THAT PART OF
LOTS 3 + 4 E OF GOLDENROD
RD & 1/2 OF VACD ST ON S
TUSKAWILLA
PB 1 PG 5

Taxes

Taxing Authority	Assessment Value	Exempt Values	Taxable Value
SJWM(Saint Johns Water Management)	$658,208	$0	$658,208
CITY WINTER SPRINGS	$658,208	$0	$658,208
FIRE FUND	$658,208	$0	$658,208
COUNTY GENERAL FUND	$658,208	$0	$658,208
Schools	$1,200,293	$0	$1,200,293

Sales

Description	Date	Book	Page	Amount	Qualified	Vac/Imp

Land

Method	Frontage	Depth	Units	Units Price	Land Value

SQUARE FEET	145490	$8.25	$1,200,293

Building Information

Permits

Permit #	Description	Agency	Amount	CO Date	Permit Date
01144	SITE SIGN - TUSKAWILLA RD & E SR 434	Winter Springs	$604		5/5/2004

Extra Features

Description	Year Built	Units	Value	New Cost

Zoning

Zoning	Zoning Description	Future Land Use	Future Land Use Description
T-C		Town Center District	

Utility Information

Fire Station	Power	Phone(Analog)	Water Provider	Sewer Provider	Garbage Pickup	Recycle	Yard Waste	Hauler
26.00	DUKE	AT&T	WINTER SPRINGS	CITY OF WINTER SPRINGS	NA	NA	NA	NA

Political Representation

Commissioner	US Congress	State House	State Senate	Voting Precinct
Dist 2 - Jay Zembower	Dist 7 - Stephanie Murphy	Dist 28 - David "Dave" Smith	Dist 9 - Jason Brodeur	49

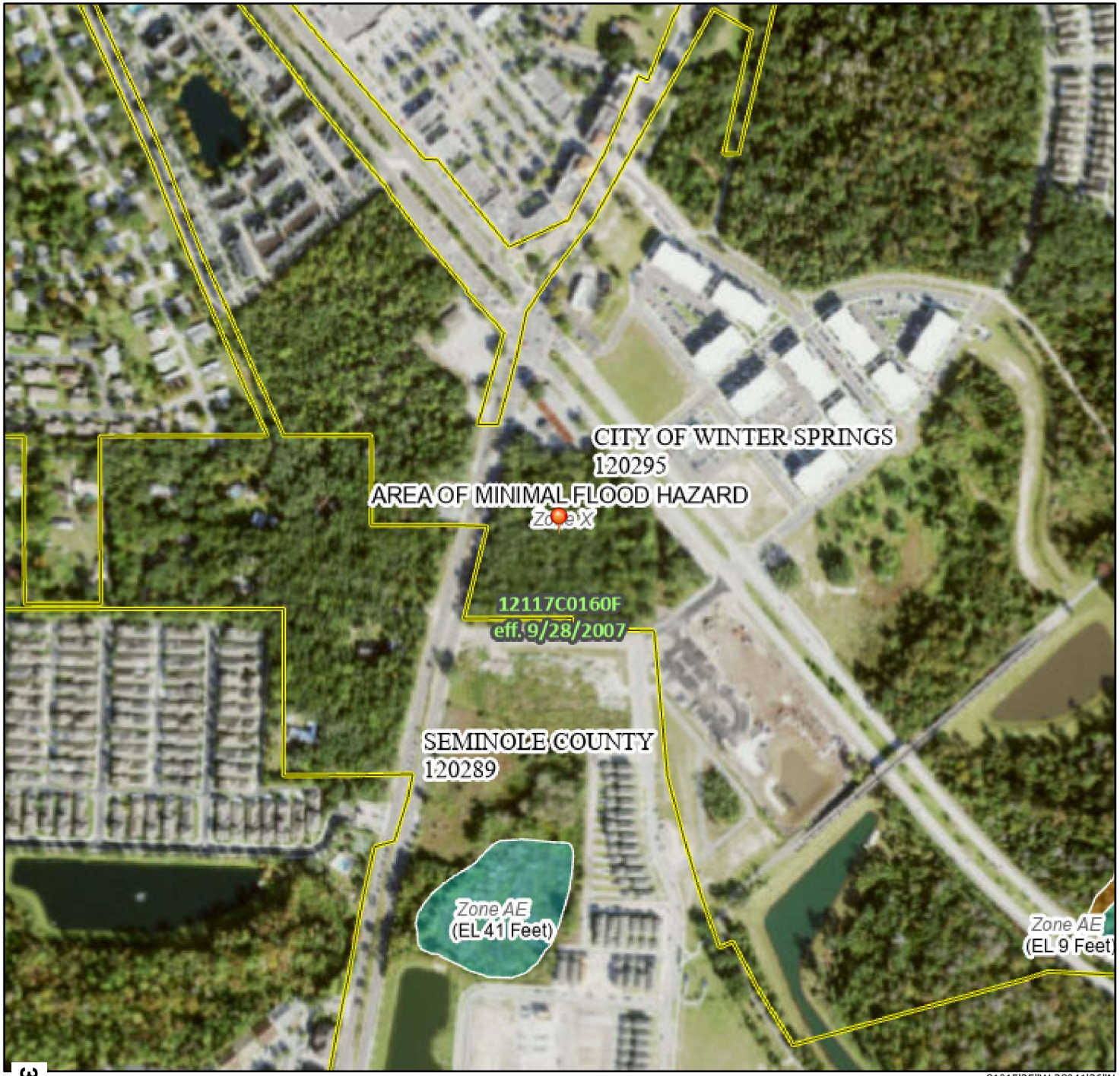
School Information

Elementary School District	Middle School District	High School District
Layer	Indian Trails	Winter Springs

National Flood Hazard Layer FIRMette

FEMA

81°16'2"W 28°41'58"N



81°15'25"W 28°41'26"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

381

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/5/2022 at 2:18 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

User Questionnaire

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

Site Name: Sutton Crossings **Site Acreage:** 4.442 ac +/- + ROW areas

Please fill out the following information about yourself and answer the questions below.

Name: Ryan P. Stahl

Organization: EQX-HRP Winter Springs, LLC

Date: _____

1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law? (circle answer below)

   YES **(NO)**

   If yes, please explain.

   _____

2. Are you aware of any activity and use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   (YES) **NO**

   If yes, please explain.

   City use restrictions

3. As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

   (YES) **NO**

   If yes, please explain.

   Developer of Winter Springs Marketplace across Tuskawilla Road from subject.

4. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

YES NO

If no, please explain.

---

5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

a. Do you know the past uses of the property?

YES NO

b. Do you know of specific chemicals that are present or once were present at the property?

YES NO

c. Do you know of spills or other chemical releases that have taken place at the property?

YES NO

d. Do you know of any environmental cleanups that have taken place at the property?

YES NO

If yes to any above, please explain.

Previously recorded REC - Adjacent gas station from 1993

---

6. As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

YES NO

If yes, please explain.

Owner Questionnaire

Site: TUSKAWILLA ROAD, SEMINOLE COUNTY

Name: PATTI ANN SCHOEN

Organization: —

Date: 9/17/20

How long have you been involved with the property?

Answer: SINCE 12/07/71

In what capacity?

Answer: OWNER

Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property?

Answer: NO

Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property?

Answer: NO

Are you aware of any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products on the property?

Answer: NO

Are you aware of any current or past above or below ground storage tanks containing hazardous materials or petroleum products on the property?

Answer: NO

Are you aware of any soil or groundwater contamination on the property?

Answer: NO

Are you aware of any wells on the property? If so, how many?

Answer: NO

Are you aware of a septic system on the property?

Answer: NO

Please describe your knowledge of the former uses of the subject property.

Answer: NO KNOWLEDGE, THIS PROPERTY WAS GIFTED TO ME WHEN I WAS 10 YEARS OLD.

Owner Questionnaire

Site: Seminole County Parcels: 26-20-30-5AR-0A00-008D and 26-20-30-5AR-0A00-008H

Name: Michael A. Schrimsher, vice president of Schrimsher, Inc.,

Organization: general partner of Schrimsher Land Fund 1986-II, V and VI, Ltd.

Date: October 12, 2022

How long have you been involved with the subject property?

Answer: since 1985-86

In what capacity?

Answer: Property management

Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property?

Answer: No.

Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property?

Answer: No.

Are you aware of any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products on the subject property?

Answer: No.

Are you aware of any current or past above or below ground storage tanks containing hazardous materials or petroleum products on the subject property?

Answer: No.

Are you aware of any soil or groundwater contamination on the subject property?

Answer: Yes. soil under the former CSX railroad was contaminated by creosote on wooden railroad ties and herbicide sprayed along railroad tracks.

Are you aware of any wells on the subject property? If so, how many?

Answer: NO.

Are you aware of any septic system(s) on the subject property?

Answer: NO.

Are you aware of any cattle dipping vats on or near the subject property?

Answer: NO, not on the subject property. I have no personal knowledge but am aware that there were cattle operations on pastures on the former Plante property.

Please describe your knowledge of the former uses of the subject property.

Answer: Besides the single railroad track the property has been vacant wooded property.

Cain Diehl

From: Kristin Banks <Kristin@equinox-development.com>
Sent: Monday, October 17, 2022 8:08 PM
To: Cain Diehl
Cc: Kirsten Davis; Ryan Stahl
Subject: RE: Phase I Proposal - Sutton Crossings, Winter Springs

Cain,

I confirmed with the Schoens the information provided from the questionnaire in 2020 is still accurate. Let me know if you need anything else.

Thank you!

KRISTIN BANKS
Development Coordinator



O 407.628.0077 **C** 404.324.2874
630 S. Maitland Ave. Suite 100, Maitland, FL 32751
Kristin@equinox-development.com
Equinox-Development.com

From: Cain Diehl <cdiehl@nativegeo.com>
Sent: Monday, October 17, 2022 9:36 AM
To: Kristin Banks <Kristin@equinox-development.com>
Cc: Kirsten Davis <kirsten@equinox-development.com>; Ryan Stahl <RStahl@equinox-development.com>
Subject: RE: Phase I Proposal - Sutton Crossings, Winter Springs

Good morning Kristin,

Any luck with Ms. Schoen? We are ready to finalize the report once we hear back. Thanks!

Cain

From: Kristin Banks <Kristin@equinox-development.com>
Sent: Thursday, October 13, 2022 9:49 AM
To: Cain Diehl <cdiehl@nativegeo.com>
Cc: Kirsten Davis <kirsten@equinox-development.com>; Ryan Stahl <RStahl@equinox-development.com>
Subject: RE: Phase I Proposal - Sutton Crossings, Winter Springs

We will follow up with her- I'll keep you posted.

Natural Attenuation Monitoring Quarterly Report

Site:
Handy Way Food Store #3333
170 Tuskawilla Road
Winter Springs, Seminole County, Florida
FDEP Facility No. 59/8516641
Work Order No.2013-59-W2072A

Prepared for:
David M. Press
Orange County Environmental Protection Division
800 Mercy Drive, Suite 4
Orlando, Florida 32808

Prepared by*:*

320 East South Street
Orlando, Florida 32801
(407) 304-4400

February 1, 2013

AECOM Project No. 60277373

Natural Attenuation Monitoring Quarterly Report

In accordance with the provisions of Florida Statutes, Chapter 471 this Natural Attenuation Monitoring Report for the former Handy Way #3333 facility located in Winter Springs, Seminole County, Florida, has been prepared under the direct supervision of a Professional Engineer registered in the State of Florida. This work was performed in accordance with generally accepted professional engineering practices pursuant to Chapter 471 of the Florida Statutes. The data, findings, recommendations, specifications or professional opinions were prepared solely for the use of the Florida Department of Environmental Protection. AECOM makes no other warranty, either expressed or implied, and is not responsible for the interpretation by others of these data.

Site:
Handy Way Food Store #3333
170 Tuskawilla Road
Winter Springs, Seminole County, Florida
FDEP Facility No. 59/8516641
Work Order No.2013-59-W2072A

Prepared for:
David Press
Orange County Environmental Protection Division
800 Mercy Drive, Suite 4
Orlando, Florida 32808

Prepared by:

AECOM

320 East South Street
Orlando, Florida 32801
(407) 304-4401

February 1, 2013

Author: Daniel S. Phillips

Title: Project Manager

Signature: 

Reviewer: Suzanne Schomer, P.E.

Title: Program Manager
Florida License No. 40433
Eng. Bus. Authorization No. 8115

Signature: 

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APPENDICES

Appendix A Laboratory Analytical Report
Appendix B FDEP Groundwater Sampling Logs

1.0 INTRODUCTION

AECOM Technical Services, Inc.(AECOM), is pleased to present the Orange County Environmental Protection Division (OCEPD) with this Natural Attenuation Monitoring Quarterly Report for the former Handy Way #3333 site, located at 170 Tuskawilla Road, Winter Springs, Florida. Work at this site is being performed under Florida Department of Environmental Protection (FDEP) Petroleum Preapproval Program Work Order #2013-59-W2072A and this report is intended to satisfy the requirements of the Event 2 and final deliverable. This report documents the recent groundwater sampling activities, consisting of the collection of groundwater samples from four existing monitor wells. **Figure 1** presents the current site layout.

2.0 GROUNDWATER SAMPLING

On January 23, 2013, AECOM personnel collected the required groundwater samples from monitor wells CW-2, MW-1, MW-4 and MW-16. The collected samples were analyzed by the selected laboratory for volatile organic aromatic compounds (VOA) by EPA Methods 8260B and for polynuclear aromatic hydrocarbons (PAH) by EPA Method 8270C. This groundwater sampling event was conducted in accordance with FDEP-SOP 001/01 guidance. Samples were placed on ice upon collection and kept on ice until they were delivered to the laboratory.

Water level measurements were recorded from the monitor wells selected for sampling, prior to purging water from any of the wells. A summary of current and historical water level data for the site is provided in **Table 1**. A groundwater contour map for January 23, 2013 is provided as **Figure 2**. The groundwater flow direction at the site was determined to be southeast at the time of sampling, which is consistent with previous determinations.

A review of the recent groundwater analytical results indicates that no contaminant of concern was detected above FDEP GCTLs in any of the four wells sampled. Trace levels of contaminants were detected in MW-4, as indicated in the table below:

Contaminant	Detected Concentration (ug/l)	FDEP GCTL (ug/l)
Benzene	0.8 I	1
Ethylbenzene	9.5	40
Naphthalene	9.8	14
1-methylnaphthalene	1.5	28
2-methylnaphthalene	1.6	28

As indicated above, none of the contaminants detected in MW-4 exceed the FDEP GCTLs. This is the second consecutive quarterly sampling event for this site that indicates no contamination above FDEP cleanup criteria. A historical summary of groundwater monitor well analytical data is provided in **Table 2**. A current groundwater contamination map illustrating recent analytical data is provided as **Figure 3**. A copy of the laboratory analytical report for the groundwater sampling event is presented in **Appendix A** and FDEP groundwater sampling logs are provided in **Appendix B**.

3.0 OBSERVATIONS/RECOMMENDATIONS

Upon review of the recent and historical groundwater analytical data, the following observations are offered:

- The current groundwater flow direction appears to be southeast, which is consistent with previous determinations.
- The recent groundwater analytical results indicate contaminant reductions such that no well/sample currently exceeds the FDEP GCTLs. This is the second consecutive quarterly sampling event where all wells sampled meet the FDEP cleanup criteria.

AECOM recommends further Natural Attenuation Monitoring (NAM) be conducted at this site for an additional two quarters, in accordance with the approved NAM Approval Letter, dated October 8, 2012. Should the third and fourth quarter groundwater sampling results indicate that there are no contaminants detected above the FDEP GCTL, then the issuance of a Site Rehabilitation Completion Order will be recommended. However, if contaminant rebound is observed and active remediation should be considered necessary in the future, AECOM will evaluate short term, episodic air sparge/soil vapor extraction events for feasibility and cost effectiveness.

4.0 CLOSURE

AECOM appreciates the opportunity to be of continued service to Orange County and the FDEP at this site. Should you have any questions or comments concerning this report, please do not hesitate to contact Dan Phillips at (407) 304-4434.

Tables

TABLE 1: GROUNDWATER ELEVATION TABLE

Facility Name:Handy Way #3333 **Facility ID#:598516641**

All Measurements = Feet
No Data = Blank

WELL NO.	MW-1			MW-2			MW-3			MW-4			MW-5D			MW-6			MW-7			MW-8		
DIAMETER (IN.)	2			2			2			2			2			2			2			2		
WELL DEPTH (FT.)	14.10			13.80			13.70			13.80			32.80			13.80			13.70			14.40		
SCREEN INT. (FT.)	4.1-14.1			3.8-13.8			3.7-13.7			3.8-13.8			27.8-32.8			3.8-13.8			3.7-13.7			1.9-14.4		
TOC ELEVATION (FT.)	49.84			49.92			49.46			49.50			50.01			50.34			49.86			49.58		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
03/28/94																								
09/15/94	46.58	3.26		46.48	3.44		46.71	2.75		46.79	2.71		46.23	3.78		46.59	3.75		46.72	3.14				
09/26/94	47.94	1.90		47.90	2.02		47.94	1.52		47.93	1.57		47.84	2.17		47.84	2.50		47.72	2.14				
11/10/94	46.56	3.28		46.47	3.45		46.70	2.76		46.75	2.75		46.61	3.40		46.50	3.84		46.79	3.07				
05/19/95	46.39	3.45		destroyed/			46.35	3.11		46.42	3.08		destroyed/			destroyed/			46.46	3.40				
06/02/95	46.04	3.80		abandoned			45.94	3.52		45.99	3.51		abandoned			abandoned			46.04	3.82		46.06	3.52	
06/21/95	46.40	3.44					46.48	2.98		46.56	2.94								46.62	3.24		46.63	2.95	
08/08/95	48.04	1.80					48.29	1.17		48.37	1.13								48.42	1.44		48.55	1.03	
12/18/95	45.74	4.10					46.01	3.45		46.03	3.47								45.97	3.89		46.27	3.31	
06/29/00	41.89	7.95					42.05	7.41		42.08	7.42								41.93	7.93		42.21	7.37	
10/26/00										42.96	6.54													
11/30/00	42.04	7.80					42.13	7.33		42.16	7.34								42.20	7.66		42.19	7.39	
01/29/01	41.23	8.61					41.28	8.18		41.31	8.19								41.37	8.49		41.34	8.24	
05/24/01	40.76	9.08					40.73	8.73		40.87	8.63								40.91	8.95		40.81	8.77	
06/04/01							41.10	8.36		41.20	8.30											41.24	8.34	
11/02/01	44.97	4.87					45.13	4.33		45.20	4.30								45.32	4.54		45.29	4.29	
02/22/02	43.58	6.26					43.81	5.65		43.74	5.76								43.80	6.06		43.82	5.76	
07/23/02	45.19	4.65					45.45	4.01		45.57	3.93								45.55	4.31		45.72	3.86	
10/04/02	45.93	3.91					46.31	3.15		46.48	3.02								46.59	3.27		46.67	2.91	
05/20/03	44.48	5.36					44.70	4.76		44.77	4.73								44.86	5.00		44.89	4.69	
08/28/03	45.94	3.90					46.25	3.21		46.39	3.11								46.46	3.40		46.60	2.98	
11/20/03	44.55	5.29					44.90	4.56		44.88	4.62								44.95	4.91		45.01	4.57	
02/27/04	44.09	5.75					44.18	5.28		44.27	5.23								44.25	5.61		44.37	5.21	
06/03/04	42.23	7.61					42.33	7.13		42.39	7.11								42.46	7.40		42.43	7.15	
12/07/04	45.63	4.21					44.86	4.60		44.94	4.56								44.98	4.88		45.07	4.51	
04/18/05	44.19	5.65					44.37	5.09		44.43	5.07								44.46	5.40		44.53	5.05	
10/14/05	45.54	4.30					45.81	3.65		45.90	3.60								45.92	3.94		46.08	3.50	
04/28/06	42.59	7.25					42.51	6.95		42.55	6.95								42.56	7.30		41.78	7.80	
11/21/06	42.59	7.25					42.65	6.81		42.70	6.80								42.76	7.10		42.78	6.80	
06/28/07	41.99	7.85					42.22	7.24		42.20	7.30								42.21	7.65		42.27	7.31	
12/05/07	41.56	8.28					41.60	7.86		41.71	7.79								41.81	8.05		41.73	7.85	
07/17/08										42.75	7.05													
11/06/08	45.24	4.60					45.54	3.92		45.94	3.86											45.78	3.80	
07/31/12	43.27	6.57					43.45	6.01		43.81	5.99											43.58	6.00	
10/24/12	44.62	5.22								45.18	4.62													
01/23/13	43.21	6.63								43.67	6.13													

TABLE 1: GROUNDWATER ELEVATION TABLE

Facility Name:Handy Way #3333 **Facility ID#:598516641** **All Measurements = Feet**
No Data = Blank

WELL NO.	MW-9			MW-10			MW-11			MW-12			MW-13			MW-14			MW-15			MW-16		
DIAMETER (IN.)	2			2			2			2			2			2			2			2		
WELL DEPTH (FT.)	14.10			14.30			14.20			8.40			14.50			14.50			14.50			14.50		
SCREEN INT. (FT.)	1.6-14.1			4.3-14.3			1.7-14.2			3.4-8.4			4 - 14			4 - 14			4 - 14			4.5- 14.5		
TOC ELEVATION (FT.)	49.87			50.07			50.74			50.98			49.78			49.65			49.77			50.40		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
03/28/94																								
09/15/94																								
09/26/94																								
11/10/94																								
05/19/95																								
06/02/95	45.14	4.73		45.91	4.16		45.83	4.91																
06/21/95	46.73	3.14		46.47	3.60		46.29	4.45																
08/08/95	48.57	1.30		48.22	1.85		48.07	2.67																
12/18/95	46.26	3.61		45.53	4.54		45.29	5.45		45.13	5.85													
06/29/00	42.04	7.83		41.91	8.16		41.83	8.91		abandoned														
10/26/00	43.08	6.79											43.17	6.61		43.16	6.49		43.13	6.64				
11/30/00	42.25	7.62		42.18	7.89		42.07	8.67					42.31	7.47		42.31	7.34		42.28	7.49				
01/29/01	41.41	8.46		41.34	8.73		41.26	9.48					41.42	8.36		41.42	8.23		41.42	8.35		41.28	9.12	
05/24/01	40.91	8.96		40.84	9.23		40.77	9.97					40.87	8.91		40.91	8.74		40.93	8.84		40.92	9.48	
06/04/01				41.10	8.97																	41.06	9.34	
11/02/01	45.42	4.45		45.22	4.85		Could not locate						45.74	4.04		45.55	4.10		45.56	4.21		45.05	5.35	
02/22/02	43.86	6.01		43.76	6.31		43.62	7.12					44.10	5.68		44.03	5.62		43.97	5.80		43.66	6.74	
07/23/02	45.71	4.16		45.46	4.61		45.26	5.48					46.67	3.11		46.30	3.35		46.01	3.76		45.29	5.11	
10/04/02	46.81	3.06		46.33	3.74		46.42	4.32					47.48	2.30		47.28	2.37		47.08	2.69		46.06	4.34	
05/20/03	44.97	4.90		44.71	5.36		44.50	6.24					45.37	4.41		45.23	4.42		45.12	4.65		44.65	5.75	
08/28/03	46.70	3.17		46.27	3.80		46.03	4.71					47.44	2.34		47.21	2.44		47.00	2.77		46.00	4.40	
11/20/03	45.06	4.81		44.82	5.25		46.53	4.21					45.55	4.23		45.40	4.25		45.28	4.49		44.65	5.75	
02/27/04	44.36	5.51		44.19	5.88		46.33	4.41					45.03	4.75		44.77	4.88		44.55	5.22		44.15	6.25	
06/03/04	42.49	7.38		42.42	7.65		Could not locate						42.53	7.25		42.54	7.11		42.53	7.24		42.35	8.05	
12/07/04	45.13	4.74		44.86	5.21		Could not locate						45.68	4.10		45.52	4.13		45.36	4.41		44.69	5.71	
04/18/05	44.58	5.29		44.37	5.70		44.20	6.54					45.00	4.78		44.88	4.77		44.75	5.02		44.26	6.14	
10/14/05	46.14	3.73		45.79	4.28		45.56	5.18					46.79	2.99		46.61	3.04		46.40	3.37		45.58	4.82	
04/28/06	42.63	7.24		42.52	7.55		42.45	8.29					42.74	7.04		42.68	6.97		42.67	7.10		42.41	7.99	
11/21/06	42.86	7.01		42.72	7.35		42.59	8.15					43.03	6.75		42.99	6.66		42.93	6.84		42.63	7.77	
06/28/07	42.32	7.55					42.59	8.71					42.57	7.21		42.50	7.15		42.42	7.35		42.08	8.32	
12/05/07	41.86	8.01		41.77	8.30		unable to open						41.98	7.80		41.95	7.70		41.92	7.85		41.66	8.74	
11/06/08																						45.31	5.09	
07/31/12							43.35	7.39														43.36	7.04	
10/24/12																						44.68	5.72	
01/23/13																						43.25	7.15	

TABLE 1: GROUNDWATER ELEVATION TABLE

Facility Name:Handy Way #3333 **Facility ID#:598516641** **All Measurements = Feet**
No Data = Blank

WELL NO.	MW-17			MW-18			CW-1			CW-2			CW-3			CW-4								
DIAMETER (IN.)	2			2			2			2			2			2								
WELL DEPTH (FT.)	15.00			13.14			14.70			11.20			14.40			14.60								
SCREEN INT. (FT.)	5-15			3-13.14			-			2.0-11.2'			-			-								
TOC ELEVATION (FT.)	48.71			49.80			50.31			49.80			49.99			50.44								
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
03/28/94							44.61	5.70		44.61	5.19		44.47	5.52		44.44	6.00							
09/15/94																								
09/26/94							47.76	2.55		47.90	1.90		47.89	2.10		47.86	2.58							
11/10/94							46.64	3.67		46.75	3.05		46.55	3.44		46.49	3.95							
05/19/95							destroyed/						destroyed/			destroyed/								
06/02/95							abandoned			44.97	4.83		abandoned			abandoned								
06/21/95										46.48	3.32													
08/08/95										48.24	1.56													
12/18/95										45.74	4.06													
06/29/00										41.94	7.86													
10/26/00										42.94	6.86													
11/30/00										42.14	7.66													
01/29/01	41.23	7.48								41.27	8.53													
05/24/01	40.74	7.97								40.90	8.90													
06/04/01																								
11/02/01	44.68	4.03								44.31	5.49													
02/22/02	43.59	5.12								43.69	6.11													
07/23/02	45.16	3.55		45.51	4.29					45.40	4.40													
10/04/02	46.11	2.60		46.55	3.25					46.23	3.57													
05/20/03	44.42	4.29		44.75	5.05					44.43	5.37													
08/28/03	45.73	2.98		46.38	3.42					46.19	3.61													
11/20/03	44.51	4.20		44.86	4.94					44.73	5.07													
02/27/04	44.05	4.66		44.22	5.58					44.16	5.64													
06/03/04	42.29	6.42		42.40	7.40					42.35	7.45													
12/07/04	44.54	4.17		44.91	4.89					44.78	5.02													
04/18/05	44.20	4.51		44.43	5.37					44.33	5.47													
10/14/05	45.49	3.22		45.88	3.92					45.72	4.08													
04/28/06	42.44	6.27		42.53	7.27					42.50	7.30													
11/21/06	42.54	6.17		42.72	7.08					42.65	7.15													
06/28/07				42.19	7.61					42.10	7.70													
12/05/07				41.71	8.09					41.65	8.15													
07/17/08										42.25	7.55													
11/06/08										45.42	4.38													
07/31/12				43.54	6.26					43.42	6.38													
10/24/12										44.76	5.04													
1/23/2013										43.30	6.50													

Notes:
Elevations are in feet referenced to a Seminole County roadway bench mark of 49.63 feet AMSL.
The top of casing elevation is slightly below ground.
CW-2 was repaired May 31, 1995, and the top of casing elevation changed slightly.

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-1	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1	<1	<1	<3	<2						
	02/22/02	<1	<1	<1	<3	10	<5	<5	<5			
	07/23/02	<1	<1	<1	<3	20	<5	<5	<5			
	10/04/02	<1	<1	<1	<3	5	<5	<5	<5			
	05/20/03	<1	<1	<1	<3	<1	<5	<5	<5			
	08/28/03	<1	<1	<1	<3	<1	<5	<5	<5			
	11/20/03	<1	<1	<1	<3	<2	<5	<5	<5			
	02/27/03	<1	<1	<1	<3	<5	<5	<5	<5			
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	05/01/06	1 U	6	1 U	3 U	5 U	1.0 U	1.0 U	1.0 U			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	**4.9**	1.0 U	2.6	1.5 U	1.0 U	**15**	0.36 I	0.40 I			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.13 I	0.10 U	0.10 U			
MW-2	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-3	09/26/94	<1	6	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	06/04/01	<1	<1	<1	<3	9	<5	<5	<5			
	11/02/01	<1	<1	<1	<3	6						
	02/22/02	<1	<1	<1	<3	2						
	07/23/02	<1	<1	<1	<3	6						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-4	09/27/94	**370**	**420**	**430**	**1690**	19				12	<1	<0.02
	05/19/95	**390**	5	**560**	**269**	13						
	08/08/95	**490**	10	**700**	**390**	**210**						
	06/29/00	**150**	<10	**600**	**<30**	<20						
Duplicate	06/29/00	**150**	<10	**610**	**<30**	<20						
	10/26/00	**82**	<10	**200**	**<30**	<20						
Duplicate	10/26/00	**79**	<10	**180**	**<30**	<20						
	01/29/01	**16**	<1.0	**53**	5.0	3.0	**210**	**71**	**40**	<5.0		
	06/04/01	**30**	<1	**48**	4*	3.0	**180**	**65**	**37**			
	11/02/01	**14**	1	**57**	5	24	**77**	**20**	**25**			
	02/22/02	**44**	3	**248**	3*	<1	**88**	**25**	18			
	07/23/02	**23**	2	**96**	4	5	**99**	**24**	**21**			
	10/04/02	**17**	1	**86**	<4	<1	**76**	**22**	18			
	05/20/03	**13**	1	**59**	3	<1	**51**	14	13			
	08/28/03	**11**	1	**90**	<3	<1	**75**	20	15			
	11/20/03	**11**	1	**62**	4	<2	**83**	**25**	**21**			
	02/27/04	**4**	<1	17	<3	<5	**38**	11	9			
	06/03/04	**12**	2	**37**	4	<5	**148**	**38**	**30**			
	12/07/04	**6**	4	**68**	7	<5	**57**	17	11			
	04/18/05	**2**	<1	**17**	<3	<5	**49**	11	9.5			
	10/14/05	**5**	0.9	**67**	2.6	<5	**79**	20	14			
	04/28/06	**4**	0.6 I	**37**	2.2 I	5 U	**30**	7.5	7.5			
	11/21/06	**1**	0.5 U	10	1.7 U I	2.8 I	**57**	10	6.5			
	06/28/07	**6**	1.0 U	**94**	1.6 I	1.0 U	**43**	6.9	7.3			
	12/05/07	**1.5**	1.0 U	24	1.5 U	1.0 U	**23**	4.7	4.2			
	07/17/08	0.7 I	1.0 U	18	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	11/06/08	**1.6**	1.0 U	**50**	1.5 U	1.0 U	**18**	2.8	2.3			
	07/31/12	**1.2**	1.0 U	15	1.5 U	1.0 U	**25**	2.4	4.2			
	10/24/12	0.5 I	1.0 U	6.3	1.5 U	1.0 U	7.8	0.92	0.6			
	01/23/13	0.8 I	1.0 U	9.5	1.5 U	1.0 U	9.8	1.5	1.6			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-5D	09/27/94	<1	<1	<1	<3	<2				**131**	<1	<0.02
MW-6	09/27/94	<1	<1	<1	<3	<2				<5	<1	<0.02
MW-7	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
MW-8	06/02/95	**4**	<1	<1	10	**4400**				**18**	<1	<0.02
	08/08/95	**1**	3	1	8	44						
	06/29/00	<1.0	<1.0	<1.0	<3.0	6.0 **						
	01/29/01	<1.0	<1.0	<1.0	<3.0	14	<10	<10	<10	<5.0		
	06/04/01	<1	<1	<1	<3	43						
	11/02/01	<1	<1	<1	<3	<1						
	02/22/02	<1	<1	<1	<3	1						
	07/23/02	<1	<1	<1	<3	4						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-9	06/02/95	<1	<1	<1	<3	<2				**15**	<1	<0.02
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	10/26/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	01/29/01	<1.0	<1.0	<1.0	<3.0	<2.0	<10	<10	<10	<5.0		
MW-10	06/02/95	<1	**800**	2	3	**2300**				**20**	<1	<0.02
	08/08/95	<1	3	<1	<3	16						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	06/04/01	<1	<1	<1	<3	<1	<5	<5	<5			
	04/28/06									2 U		
MW-11	06/02/95	<1	<1	<1	<3	<2				**31**	<1	<0.02
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	04/28/06									2 U		
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
MW-12	12/18/95	<1	<1	<1	<3	<2						
MW-13	10/26/00	<1.0	<1.0	<1.0	<3.0	<2.0						
MW-14	10/26/00	<1	<1	**45**	3	20						
	11/22/00	<1	<1	<1	<3	15						
	01/29/01	<1	<1	<1	<3	6						

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-15	10/26/00	<1	<1	<1	<3	4						
MW-16	01/29/01	<1.0	<1.0	<1.0	3.0	<2.0	<10	<10	<10	**150**		
	06/04/01	<1	<1	<1	<3	<1				<5		
	11/02/01	<1	<1	<1	<3	<1						
	02/22/02	<1	<1	<1	<3	<1						
	07/23/02	<1	<1	<1	<3	<1						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	04/18/05	<1	<1	<1	<3	<5	<1	<1	<1			
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	04/28/06	1 U	1 U	1 U	3 U	5 U	0.5 I	1.0 U	1.0 U			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
MW-17	01/29/01	<1.0	<1.0	<1.0	<3.0	<2.0	<10	<10	<10	**18**		
	04/28/06									2 U		
	11/21/06									0.004 I		

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-18	07/23/02	<1	<1	<1	<3	<1	<5	<5	<5			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
CW-1	03/28/94	<1	<1	<1	<3	<2						
	09/27/94	<1	2	<1	<3	<2				<5	<1	<0.02
CW-2	03/28/94	**140**	<10	**410**	**380***	<20						
	09/27/94	**700**	20	**890**	**840**	24				<5	<10	<0.02
Duplicate	09/27/94	**610**	20	**840**	**820**	20				<5	<10	<0.02
	06/02/95	**8**	<1	22	<3	3				11	<1	<0.02
	08/08/95	**1**	<1	2	<3	**100**						
	06/29/00	**6.2**	<1.0	**67**	<3.0	<2.0						
	10/26/00	**82**	<1	**200**	<3	<2						
	06/04/01	**6**	1	**44**	3	3	**37**	5	<5			
	11/02/01	<1	<1	<1	<3	<1	<5	<5	<5			
	02/22/02	<1	<1	<1	<3	<1	<5	<5	<5			
	07/23/02	<1	<1	9	<3	<1	<5	<5	<5			
	10/04/02	<1	<1	<1	<3	<1	<5	<5	<5			
	05/20/03	<1	<1	3	<3	<1	<5	<5	<5			
	08/28/03	<1	<1	<1	<3	<1	<5	<5	<5			
	11/20/03	<1	<1	8	<3	<2	<5	<5	<5			
	02/27/04	<1	<1	19	<3	<5	11	5.6	<5			
	06/03/04	<1	<1	5	<3	<5	<5	<5	<5			
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	04/18/05	<1	<1	<1	<3	<5	1.1	<1	<1			
	10/14/05	<1	<1	5	<3	<5	11	7.4	4.8			
	04/28/06	1 U	1 U	0.9 I	3 U	5 U	3.4	2.7	1.7			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	2	1.5 U	1.0 U	4.5	2.8	1.5 I			
	12/05/07	0.5 U	1.0 U	2.2	1.5 U	1.0 U	3.1	2.3	1.7			
	07/17/08	0.5 U	1.0 U	2.1	1.5 U	1.0 U	6.8	1.1	1.9			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
CW-3	03/28/94	**560**	<10	**120**	**61***	**120**						
	09/27/94	**290**	<10	**320**	**80***	20				8	<10	<0.02
CW-4	03/28/94	<1	<1	<1	<3	15						
	09/27/94	<1	<1	<1	<3	<2				<5	<1	<0.02

Note:
1. MTBE = Methyl tert butyl ether
2. EDB = 1,2 Dibromoethane
3. GCTLs = Groundwater Cleanup Target Levels
4. NADCs= Natural Attenuation Default Concentrations
# indicates dissolved lead was also run on this sample, with results of <0.005 mg/L.
U indicates the compound was analysed but not detected.
I indicates the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Figures

PINCH A PENNY
(FORMER HANDY WAY FOOD
STORE NO. 3333)

SIDEWALK

APPROXIMATE LOCATION OF
FORMER TANK FARM

UST

UST

CANOPY

APPROXIMATE LOCATION OF
FORMER TANK FARM

RETENTION POND

APPROXIMATE LOCATION OF FORMER TANK
FARM, CANOPY AND DISPENSER ISLAND

MW-13
MW-14
MW-15
MW-9
MW-7
MW-10
MW-18
MW-8
MW-4
CW-2
MW-5D
MW-11
MW-16
CW-3
MW-3
MW-17
CW-1
MW-6
CW-4
MW-2
MW-17
MW-12

SIDEWALK

SIDEWALK

STATE ROAD 434

MEDIAN

TUSKAWILLA ROAD

LEGEND

- COMPLIANCE WELL LOCATION
- MONITOR WELL LOCATION
- ABANDONED MONITOR/COMPLIANCE WELL LOCATION
- STREET LIGHT POLE
- FENCE
- OVERHEAD UTILITY
- UNDERGROUND WATER LINE

N

0' 15' 30' 60'

AECOM

FIGURE 1
SITE PLAN

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

11/06/12

60277373

REVISED BY: JC
DRAWN BY: JJL
L:\work\FDEP\Preapproval\Handy Way 3333\7.0_Deliverables\CAD\F1_SITE_PLAN.dwg

PINCH A PENNY
(FORMER HANDY WAY FOOD
STORE NO. 3333)

SIDEWALK

APPROXIMATE LOCATION OF
FORMER TANK FARM

MW-13
(NM)

MW-14
(NM)

UST

UST

CANOPY

MW-15
(NM)

APPROXIMATE LOCATION OF
FORMER TANK FARM

MW-9
(NM)

MW-7
(NM)

CW-1

MW-10
(NM)

MW-18
(NM)

CW-2
(43.30)

MW-8
(NM)

MW-4
(43.67)

MW-5D

MW-11
(NM)

MW-16
(43.25)

CW-3

MW-3
(NM)

MW-1
(43.21)

RETENTION POND

APPROXIMATE LOCATION OF FORMER TANK
FARM, CANOPY AND DISPENSER ISLAND

43.30

43.25

TUSKAWILLA ROAD

SIDEWALK

MW-6

CW-4

MW-2

MW-17
(NM)

MW-12

43.30

43.25

STATE ROAD 434

MEDIAN

LEGEND

- COMPLIANCE WELL LOCATION
- MONITOR WELL LOCATION
- (NM) NOT MEASURED
- (43.30) GROUNDWATER ELEVATION IN FEET
- GROUNDWATER FLOW CONTOUR LINE
- GROUNDWATER FLOW DIRECTION
- ANOMALOUS DATA POINT – NOT USED FOR CONTOURS
- ABANDONED MONITOR/COMPLIANCE WELL LOCATION
- STREET LIGHT POLE
- FENCE
- OE OVERHEAD UTILITY
- W UNDERGROUND WATER LINE

N

0' 15' 30' 60'

AECOM

FIGURE 2
GROUNDWATER CONTOUR MAP
JANUARY 23, 2013

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

02/01/2013

60277373

REVISED BY: JC
DRAWN BY: JJL
L:\work\FDEP\Preapproval\Handy Way 3333\7.0_Deliverables\CAD\F2_GW_CONTOUR.dwg

PINCH A PENNY
(FORMER HANDY WAY FOOD
STORE NO. 3333)

SIDEWALK

APPROXIMATE LOCATION OF
FORMER TANK FARM

CANOPY

UST

UST

MW-13

MW-14

MW-15

MW-9

MW-7

MW-10

MW-18

MW-8

MW-4

CW-2

MW-5D

MW-11

MW-16

CW-3

MW-3

RETENTION POND

APPROXIMATE LOCATION OF
FORMER TANK FARM, CANOPY
AND DISPENSER ISLAND

CW-1

MW-6

CW-4

MW-2

MW-17

MW-12

MW-1

SIDEWALK

SIDEWALK

STATE ROAD 434

MEDIAN

TUSKAWILLA ROAD

7/31/12	
B	0.5 U
T	1.0 U
E	0.5 U
X	1.5 U
N	0.1 U
1-M	0.1 U
2-M	0.1 U
MTBE	1.0 U

7/31/12		10/24/12	01/23/13
B	0.5 U	0.5 U	0.5 U
T	1.0 U	1.0 U	1.0 U
E	0.5 U	0.5 U	0.5 U
X	1.5 U	1.5 U	1.5 U
N	0.1 U	0.1 U	0.1 U
1-M	0.1 U	0.1 U	0.1 U
2-M	0.1 U	0.1 U	0.1 U
MTBE	1.0 U	1.0 U	1.0 U

7/31/12	
B	0.5 U
T	1.0 U
E	0.5 U
X	1.5 U
N	NS
1-M	NS
2-M	NS
MTBE	1.0 U

7/31/12		10/24/12	01/23/13
B	**1.2**	0.5 I	0.8 I
T	1.0 U	1.0 U	1.0 U
E	15	6.3	9.5
X	1.5 U	1.5 U	1.5 U
N	**25**	7.8	9.8
1-M	4.2	0.92	1.5
2-M	2.4	0.60	1.6
MTBE	1.0 U	1.0 U	1.0 U

7/31/12	
B	0.5 U
T	1.0 U
E	0.5 U
X	1.5 U
N	0.1 U
1-M	0.1 U
2-M	0.1 U
MTBE	1.0 U

7/31/12		10/24/12	01/23/13
B	0.5 U	0.5 U	0.5 U
T	1.0 U	1.0 U	1.0 U
E	0.5 U	0.5 U	0.5 U
X	1.5 U	1.5 U	1.5 U
N	NS	0.1 U	0.1 U
1-M	NS	0.1 U	0.1 U
2-M	NS	0.1 U	0.1 U
MTBE	1.0 U	1.0 U	1.0 U

7/31/12		10/24/12	01/23/13
B	0.5 U	0.5 U	0.5 U
T	1.0 U	1.0 U	1.0 U
E	0.5 U	0.5 U	0.5 U
X	1.5 U	1.5 U	1.5 U
N	NS	0.1 U	0.1 U
1-M	NS	0.1 U	0.1 U
2-M	NS	0.1 U	0.1 U
MTBE	1.0 U	1.0 U	1.0 U

7/31/12		10/24/12	01/23/13
B	0.5 U	0.5 U	0.5 U
T	1.0 U	1.0 U	1.0 U
E	0.5 U	0.5 U	0.5 U
X	1.5 U	1.5 U	1.5 U
N	NS	0.1 U	0.1 U
1-M	NS	0.1 U	0.1 U
2-M	NS	0.1 U	0.1 U
MTBE	1.0 U	1.0 U	1.0 U

N

0' 15' 30' 60'

LEGEND

- COMPLIANCE WELL LOCATION
- MONITOR WELL LOCATION
- ABANDONED MONITOR/COMPLIANCE WELL LOCATION
- STREET LIGHT POLE
- — x - x - x - x — FENCE
- —— OE —— OVERHEAD UTILITY
- —— W —— UNDERGROUND WATER LINE

7/31/12	DATE
B	0.5U BENZENE
T	2.1 TOLUENE
E	0.6U ETHYLBENZENE
X	1.1U TOTAL XYLENES
N	3.2U NAPHTHALENE
1-M	2.9U 1-METHYLNAPHTHALENE
2-M	2.9U 2-METHYLNAPHTHALENE
MTBE	3.4U METHYL TERT BUTYL ETHER

ALL CONCENTRATION UNITS IN MICROGRAMS/LITER
NS NOT SAMPLED FOR THIS ANALYTE
I ESTIMATED VALUE
U UNDETECTED AT SPECIFIED CONCENTRATION
BOLD EXCEEDS FDEP GCTL

AECOM

FIGURE 3
GROUNDWATER CONTAMINATION MAP
JANUARY 2013

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

02/01/2013 60277373

REVISED BY: JC
DRAWN BY: JJL
L:\work\FDEP\Preapproval\Handy Way 3333\7.0_Deliverables\CAD\F3_GW_CONTAMINATION.dwg

Appendix A

Laboratory Analytical Report

Southern Research Laboratories, Inc.

2251 Lynx Lane, Suite 1
Orlando, Florida 32804
(407) 522-7100 Fax (407) 522-7043
Toll Free 1 (888) 420-Test

Thank you **Mr. Daniel Phillips** for the opportunity to be of service to you and your company; we **S**incerely **A**ppreciate **Y**our **B**usiness. SRL certifies these **Laboratory Results** were produced in accordance with NELAC Standards. Hold times and preservation requirements were met for all analytes unless specifically noted in the report. Results relate only to the samples as received.

Client Name: **AECOM**	Date(s) Collected: 01/23/13
Contact Name: Daniel Phillips	Date Received: 01/23/13
Project Name: HW 3333	Time Received: 13:18
Project Number: NA	Date Reported : 01/31/13
Phone Number: (407) 304-4400	Date Facsmiled : 01/31/13
Fax Number: (407) 304-4401	SRL Work Order # 13-01024

SRL WO #	Clients #	Matrix	Analysis Requested
13-01024-001	CW-2/0123/13	Liquid	EPA8260 (VOA)/8270(PAH)
13-01024-002	MW-1/012313	Liquid	EPA8260 (VOA)/8270(PAH)
13-01024-003	MW-4/012313	Liquid	EPA8260 (VOA)/8270(PAH)
13-01024-004	MW-16/012313	Liquid	EPA8260 (VOA)/8270(PAH)
13-01024-005	Trip Blank	Liquid	EPA8260 (VOA)

Sherri Payne
Vice President & Quality Assurance Officer
Southern Research Laboratories, Inc.

This report shall not be reproduced except in full, without written approval of the laboratory.

Southern Research Laboratories, Inc.
an MBE Environmental Laboratory
2251 Lynx Lane, Suite 1
Orlando, Florida 32804 (407) 522-7100

NELAP Certified
FDOH Cert # : E83484
SRL Lab Ref # : 13-01024
Received Date : 01/23/13

Daniel Phillips
AECOM
320 E. South Street
Orlando, Florida 32801 (407) 304-4400

Project Number/Project Name
NA
HW 3333
Winter Springs, FL

EPA Method 5030/8260B VOA {602} Compounds in Water by GC-MS

Client ID #	**:**	**CW-2/0123/13**	**MW-1/012313**	**MW-4/012313**	**MW-16/012313**			
SRL (Lab) ID#	**:**	13-01024-001	13-01024-002	13-01024-003	13-01024-004			
Date Collected	**:**	01/23/13	01/23/13	01/23/13	01/23/13			
Lab FDOH Certification #	**:**	E83484	E83484	E83484	E83484			
Date Prepared	**:**	01/29/13	01/29/13	01/29/13	01/29/13			
Date Analyzed	**:**	01/29/13	01/29/13	01/29/13	01/29/13	**MDL**	**PQL**	**CAS Number**
Methyl-tert-butyl-ether		1.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0	1634-04-4
Benzene		0.5 U	0.5 U	**0.8 I**	0.5 U	0.5	1.0	71-43-2
Toluene		1.0 U	1.0 U	1.0 U	1.0 U	1.0	2.0	108-88-3
Chlorobenzene		0.2 U	0.2 U	0.2 U	0.2 U	0.2	1.0	108-90-7
Ethylbenzene		0.5 U	0.5 U	**9.5**	0.5 U	0.5	1.0	100-41-4
m & p **X**ylene		1.0 U	1.0 U	1.0 U	1.0 U	1.0	2.0	108-38-3/106-42-3
o-**X**ylene		0.5 U	0.5 U	0.5 U	0.5 U	0.5	1.0	95-47-6
1,3-Dichlorobenzene		0.5 U	0.5 U	0.5 U	0.5 U	0.5	1.0	541-73-1
1,4-Dichlorobenzene		0.5 U	0.5 U	0.5 U	0.5 U	0.5	1.0	106-46-7
1,2-Dichlorobenzene		0.5 U	0.5 U	0.5 U	0.5 U	0.5	1.0	95-50-1
Total BTEX		3.5 U	3.5 U	**12.8**	3.5 U	3.5	7.0	NA
Units	**:**	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Dilution Factor (MEDF)	**:**	1	1	1	1	1	1	
Surrogate (% Rec)	**:**					(Surrogate Control Limits)		
4-Bromofluorobenzene		78.8%	78.3%	92.1%	79.7%	70-130		

Client ID #	**:**	**Trip Blank**				
SRL (Lab) ID#	**:**	13-01024-005				
Date Collected	**:**	01/21/13				
Lab FDOH Certification #	**:**	E83484				
Date Prepared	**:**	01/29/13				
Date Analyzed	**:**	01/29/13	**MDL**	**PQL**	**CAS Number**	
Methyl-tert-butyl-ether		1.0 U	1.0	3.0	1634-04-4	
Benzene		0.5 U	0.5	1.0	71-43-2	
Toluene		1.0 U	1.0	2.0	108-88-3	
Chlorobenzene		0.2 U	0.2	1.0	108-90-7	
Ethylbenzene		0.5 U	0.5	1.0	100-41-4	
m & p **X**ylene		1.0 U	1.0	2.0	108-38-3/106-42-3	
o-**X**ylene		0.5 U	0.5	1.0	95-47-6	
1,3-Dichlorobenzene		0.5 U	0.5	1.0	541-73-1	
1,4-Dichlorobenzene		0.5 U	0.5	1.0	106-46-7	
1,2-Dichlorobenzene		0.5 U	0.5	1.0	95-50-1	
Total BTEX		3.5 U	3.5	7.0	NA	
Units	**:**	ug/L	ug/L	ug/L		
Dilution Factor (MEDF)	**:**	1	1	1		
Surrogate (% Rec)	**:**		(Surrogate Control Limits)			
4-Bromofluorobenzene		78.8%	70-130			

Southern Research Laboratories, Inc.
an MBE Environmental Laboratory
2251 Lynx Lane, Suite 1
Orlando, Florida 32804 (407) 522-7100

NELAP Certified
FDOH Cert # : E83484
SRL Lab Ref # : 13-01024
Received Date : 01/23/13

Daniel Phillips
AECOM
320 E. South Street
Orlando, Florida 32801 (407) 304-4400

Project Number/Project Name
NA
HW 3333
Winter Springs, FL

EPA Method 3510/8270C-SIM Polynuclear Aromatic Hydrocarbon Compounds in Water by GC-MS

Client ID #	**:**	**CW-2/0123/13**	**MW-1/012313**	**MW-4/012313**	**MW-16/012313**			
SRL (Lab) ID#	**:**	13-01024-001	13-01024-002	13-01024-003	13-01024-004			
Date Collected	**:**	01/23/13	01/23/13	01/23/13	01/23/13			
Lab FDOH Certification #	**:**	E83484	E83484	E83484	E83484			
Date Extracted	**:**	01/29/13	01/29/13	01/29/13	01/29/13			
Date Analyzed	**:**	01/30/13	01/30/13	01/30/13	01/30/13	**MDL**	**PQL**	**CAS Number**
Naphthalene		0.10 U	**0.13 I**	**9.8**	0.10 U	0.10	0.50	91-20-3
2-Methylnaphthalene		0.10 U	0.10 U	**1.6**	0.10 U	0.10	0.50	91-57-6
1-Methylnaphthalene		0.10 U	0.10 U	**1.5**	0.10 U	0.10	0.50	90-12-0
Acenaphthylene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	208-96-8
Acenaphthene		0.10 U	0.10 U	**0.12 I**	0.10 U	0.10	0.50	83-32-9
Fluorene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	86-73-7
Phenanthrene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	85-01-8
Anthracene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	120-12-7
Fluoranthene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	206-44-0
Pyrene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	129-00-0
Benzo (a) anthracene		0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.10	56-55-3
Chrysene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	218-01-9
Benzo (b) fluoranthene		0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.10	205-99-2
Benzo (k) fluoranthene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	207-08-9
Benzo (a) pyrene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	50-32-8
Indeno (1,2,3-cd) pyrene		0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.10	193-39-5
Dibenzo (a,h) anthracene		0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.10	53-70-3
Benzo (g,h,i) perylene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	191-24-2
Units	**:**	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Dilution Factor (MEDF)	**:**	1	1	1	1	1	1	
Surrogate (% Rec)						(Surrogate Control Limits)		
Nitrobenzene-D5		76.3%	80.1%	86.3%	79.6%		60-140	
2-Fluorobiphenyl		101.4%	88.8%	84.1%	92.6%		60-140	
p-Terphenyl-D14		105.0%	98.9%	91.6%	101.4%		60-140	

Southern Research Laboratories, Inc.
an MBE Environmental Laboratory
2251 Lynx Lane, Suite 1
Orlando, Florida 32804 (407) 522-7100

NELAP Certified
FDOH Cert # : E83484
SRL Lab Ref # : 13-01024
Received Date : 01/23/13

Daniel Phillips
AECOM
320 E. South Street
Orlando, Florida 32801 (407) 304-4400

Project Number/Project Name
NA
HW 3333
Winter Springs, FL

EPA Method 3510/8270C-SIM Polynuclear Aromatic Hydrocarbon Compounds in Water by GC-MS

Client ID # : **Method Blank**
SRL (Lab) ID# : MB012913
Date Collected : NA
Lab FDOH Certification # : E83484
Date Extracted : 01/29/13
Date Analyzed : 01/30/13

		MDL	PQL	CAS Number
Naphthalene	0.10 U	0.10	0.50	91-20-3
2-Methylnaphthalene	0.10 U	0.10	0.50	91-57-6
1-Methylnaphthalene	0.10 U	0.10	0.50	90-12-0
Acenaphthylene	0.10 U	0.10	0.50	208-96-8
Acenaphthene	0.10 U	0.10	0.50	83-32-9
Fluorene	0.10 U	0.10	0.50	86-73-7
Phenanthrene	0.10 U	0.10	0.50	85-01-8
Anthracene	0.10 U	0.10	0.50	120-12-7
Fluoranthene	0.10 U	0.10	0.50	206-44-0
Pyrene	0.10 U	0.10	0.50	129-00-0
Benzo (a) anthracene	0.05 U	0.05	0.10	56-55-3
Chrysene	0.10 U	0.10	0.50	218-01-9
Benzo (b) fluoranthene	0.05 U	0.05	0.10	205-99-2
Benzo (k) fluoranthene	0.10 U	0.10	0.50	207-08-9
Benzo (a) pyrene	0.10 U	0.10	0.50	50-32-8
Indeno (1,2,3-cd) pyrene	0.05 U	0.05	0.10	193-39-5
Dibenzo (a,h) anthracene	0.05 U	0.05	0.10	53-70-3
Benzo (g,h,i) perylene	0.10 U	0.10	0.50	191-24-2
Units :	ug/L	ug/L	ug/L	
Dilution Factor (MEDF) :	1	1	1	
Surrogate (% Rec)		(Surrogate Control Limits)		
Nitrobenzene-D5	78.1%		60-140	
2-Fluorobiphenyl	81.3%		60-140	
p-Terphenyl-D14	110.8%		60-140	

	% Recovery LCS/MS/MSD	Acceptable Limits	%RPD MS/MSD	Acceptable Limits
Naphthalene	95/86/88	60-140	2.1	30
Fluorene	103/101/104	60-140	1.3	30
Fluoranthene	92/89/90	60-140	1.0	30
Chrysene	86/89/87	60-140	1.7	30
Benzo (a) pyrene	83/81/83	60-140	2.4	30

Southern Research Laboratories, Inc.
Quality Assurance/Quality Control Report

Client: **AECOM** SRL# 13-01024
Project: **NA** QC012813009.D
Handy Way 3333 MSQC012813 25-26.D
Winter Garden, FL Spiked sample 012813014.D {MW-9}

VOC Analytes	Method Blank Value	LCS Obs. Value	LCS True Value	LCS % Rec.	Sample Value	Spike Amount Added	MS Value	MSD Value	MS % Rec.	MSD % Rec.	% Rec. Control Lower Limit	% Rec. Control Upper Limit	% RPD	RPD Control Limits
1,1-Dichloroethene (8)	0	32.0	25.0	128	0	25	21.9	24.4	88	98	70	130	10.8	30
Trans-1-2-Dichloroethene (11)	0	26.1	25.0	104	0	25	31.8	32.0	127	128	70	130	0.6	30
Chloroform (19)	0	27.2	25.0	109	0	25	27.6	27.6	110	110	70	130	0.2	30
Benzene (25)	0	28.8	25.0	115	**1.2**	25	24.6	25.1	93	96	70	130	2.2	30
Trichloroethene (28)	0	26.2	25.0	105	0	25	20.3	21.4	81	86	70	130	5.3	30
1,2-Dichloropropane (31)	0	30.8	25.0	123	0	25	24.7	26.3	99	105	70	130	6.2	30
Toluene (35)	0	26.5	25.0	106	0	25	20.6	21.4	82	86	70	130	3.8	30
Tetrachloroethene (36)	0	26.3	25.0	105	0	25	19.9	20.8	80	83	70	130	4.3	30
Chlorobenzene (44)	0	22.5	25.0	90	0	25	17.4	17.6	70	70	70	130	0.9	30
Ethylbenzene (45)	0	25.9	25.0	103	0	25	21.3	22.3	85	89	70	130	4.6	30
o-Xylene (48)	0	23.3	25.0	93	0	25	20.2	20.8	81	83	70	130	2.9	30
Surrogates:														
Dibromofluoromethane	108	10.0	10	100	107	10	11.3	11.3	113	113	70	130	0.2	30
1.2-Dichloroethane-D4	126	11.2	10	112	108	10	11.3	11.4	113	114	70	130	0.5	30
Toluene-D8	90.7	10.1	10	101	82.8	10	10.4	10.7	104	107	70	130	2.7	30
4-Bromofluorobenzene	100	9.2	10	92.4	85.6	10	8.3	8.3	82.9	83	70	130	0.5	30

SRL Quality Assurance Officer

Southern Research Laboratories, Inc.
an MBE Environmental Laboratory
2251 Lynx Lane, Suite 1
Orlando, Florida 32804 (407) 522-7100

NELAP Certified
FDOH Cert # : E83484
SRL Lab Ref # : 13-01024
Received Date : 01/23/13

Daniel Phillips
AECOM
320 E. South Street
Orlando, Florida 32801 (407) 304-4400

Project Number/Project Name
NA
HW 3333
Winter Springs, FL

DATA QUALIFIER CODES

Reporting Exceptions and Qualified Data

When quality control results are outside established control limits reanalysis, including re-extraction (if applicable), is preferred. If re-analysis is not viable or desirable, then results may be qualified. Sample results associated with quality control data that exceed acceptance criteria will be qualified with an appropriate comment.

D = Data reported from a dilution and or multiple dilutions.

I = Estimated Value, The reported value is between the Laboratory Method Detection Limit (**MDL**) and the Laboratory Practical Quantitation Limit (**PQL**)

J = Estimated value

L = Off-Scale high; exceeds the linear range or highest calibration standard.

O = Sampled, but analysis lost or not performed

Q = Sample held beyond normal holding time

U = indicates the compound was analyzed for, but not detected. The numerical value preceding the "U" is the limit of detection for that compound based upon the dilution. **MEDF** = **M**atrix **E**ffected **D**ilution **F**actor.

V = Analyte was detected in both the sample and associated Laboratory Method Blank; Laboratory Contamination

Y = The analysis was from an unpreserved or improperly preserved sample. The data may not be accurate

Unless otherwise noted, ug/Kg and mg/Kg denote dry weight.

(SOILS) Actual Reporting Limit will depend on moisture content of sample and the amount of sample received.

Chain of Custody

13-01024

Page 1 of 1

Project Manager: Daniel Phillips	Project Name: HW 3333
Company: AECOM	Project Location: Winter Springs, FL
Address: 3320 E. South Street, 2nd Floor	
City, State, Zip: Orlando, Florida 32801	
Phone: +1 (407) 304-4400 Fax: +1 (407) 304-4401	

Southern Research Laboratories, Inc.
2251 Lynx Lane, Suite #1
Orlando, Florida 32804
(407) 522-7100
Toll Free 1 (888) 420-TEST
Fax: (407) 522-7043

Sampled by [Print Name(s)] / Affiliation: Austin Slater / AECOM

Sampler(s) Signature(s): Austin Slater

Project Number:

REQUESTED DUE DATE:

Sampling QAP No.:

Approval Date:

	Sample Identification	Sampled Date:	Sampled Time:	Grab or Composite	Matrix: (see codes)	Total Number of Containers	Preservatives (see codes): H	Preservatives (see codes): I	Analyses Requested: BTEX/MTBE	Analyses Requested: 8270 PAH	Comments:
1	CW-2/ 012313	1/23/13	1037	Grab	GW	3			X	X	13-01024-001
2	MW-1/		1148			3			X	X	13-01024-002
3	MW-4/		1226			3			X	X	13-01024-003
4	MW-16/		1113			3			X	X	13-01024-004
5	Trip Blank	1-21-13	16:50		W	2			X		13-01024-005

Comments:

Shipment Method:		Relinquished by: / Affiliation:	Date:	Time:	Accepted by: / Affiliation:	Date:	Time:
Out: / /	Via:	Aiden Turner	1-21-13	19:05	Austin Slater / AECOM	1/23/13	0800
Returned: / /	Via:	Austin Slater / AECOM	1/23/13	1318	BPayne	1/23/13	13:18

Additional Comments:

Cooler No.(s) / Temperature(s) (°C): X376 1.8°C

Sampling Kit No.: 5924

Equipment ID No.:

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water(Blanks) HW = Potential Haz Waste O = Other(Specify:)

Preservative Codes: H = Hydrochloric Acid & Ice I = Ice Only N = Nitric Acid & Ice S = Sulfuric Acid & Ice X = Sodium Hydroxide & Ice O = Other(Specify)

Appendix B

FDEP Groundwater Sampling Logs

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former HW #3333	SITE LOCATION:	Winter Springs, FL	
WELL NO:	CW-2	SAMPLE ID:	CW-2/012313	DATE: 1/23/13

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/4"	2 feet to 11.2 feet	6.50	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (11.2 feet – 6.50 feet) X .16 gallons/foot = .75 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
7.5'	7.5'	1018	1036	1.11

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (mS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1030	.75	.75	.06	6.75	6.56	21.3	618	0.96	1.76	none	none
1032	.12	.87	.06	6.75	6.46	21.0	615	1.14	2.01	4	11
1034	.12	.99	.06	6.75	6.45	21.0	613	1.17	1.88	4	4
1036	.12	1.11	.06	6.75	6.43	21.0	613	1.20	1.64	4	4

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Dustin Slater / AECOM		1037	1045

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N)	FILTER SIZE: ____ µm
7.5'	PE	Filtration Equipment Type:	

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
CW-2	2	CG	40mL	HCl	—	—	8260B AROM	RFPP	<100 ml/min
012313	1	AG	1L	ICE	—	—	8270 PAH	APP	—

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former HW# 3333	SITE LOCATION:	Winter Springs, FL	
WELL NO:	MW-1	SAMPLE ID:	MW-1/012313	DATE: 1/23/13

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/4"	4.1 feet to 14.1 feet	6.63	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (14.1 feet – 6.63 feet) X .16 gallons/foot = 1.20 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
7.5'	8'	1125	1147	1.68

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1141	1.20	1.20	.08	6.91	5.46	22.0	166	0.95	1.63	none	none
1143	.16	1.36	.08	6.91	5.45	21.9	165	0.96	1.58	"	"
1145	.16	1.52	.08	6.91	5.43	22.0	165	0.93	1.13	"	"
1147	.16	1.68	.08	6.91	5.42	22.0	164	0.94	1.45	"	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Dustin Slater / AECOM		1148	1155

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
8'	PE		

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-1	2	CG	40mL	HCl	—	—	8260B Aromatics	RFPP	<100mL/min
012313	1	AG	1L	ICE	—	—	8270 PAH	APP	—

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former HW #3333		SITE LOCATION: Winter Springs, FL	
WELL NO: MW-4	SAMPLE ID: MW-4/012313		DATE: 1/23/13

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): ¼"	WELL SCREEN INTERVAL DEPTH: 3.8 feet to 13.8 feet	STATIC DEPTH TO WATER (feet): 6.13	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (13.8 feet – 6.13 feet) X .16 gallons/foot = 1.23 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
7'	7.5'	1159	1225	1.61

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1219	1.25	1.25	.06	6.46	6.54	24.9	765	0.44	1.94	lt. yellow	Petro
1221	.12	1.37	.06	6.46	6.54	24.9	764	0.42	1.47	"	"
1223	.12	1.49	.06	6.46	6.54	24.9	760	0.40	1.36	"	"
1225	.12	1.61	.06	6.46	6.53	24.9	757	0.39	1.21	"	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dustin Slater / AECOM	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1226	SAMPLING ENDED AT: 1233
PUMP OR TUBING DEPTH IN WELL (feet): 7.5'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-4	2	CG	40mL	HCl	—	—	8260B Aroms	RFPP	<100 ml/min
012313	1	AG	1L	ICE	—	—	8270 PAH	APP	—

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former HW #3333	SITE LOCATION:	Winter Springs, FL
WELL NO:	MW-16	SAMPLE ID:	MW-16/012313
DATE:	1/23/13		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/4"	4.5 feet to 14.5 feet	7.15	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (14.5 feet – 7.15 feet) X .16 gallons/foot = 1.18 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
8'	8'	1047	1112	1.67

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm	DISSOLVED OXYGEN (circle units) mg/l or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1106	1.25	1.25	.07	7.32	6.56	23.2	627	1.07	1.03	none	none
1108	.14	1.39	.07	7.32	6.56	23.2	630	0.95	0.79	"	"
1110	.14	1.53	.07	7.32	6.55	23.2	624	0.85	1.40	"	"
1112	.14	1.67	.07	7.32	6.54	23.3	624	0.79	1.43	"	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Austin Slater / AECOM	Austin Slater	1113	1120

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
8'	PE		

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-16	2	CG	40mL	HCl	—	—	8260B AECOM	RFPP	<100mL/min
012313	1	AG	1L	ICE	—	—	8270 PAH	APP	—

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

DEP-SOP-001/01

FT 1200 Field Measurement of Specific Conductance and pH

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE LOCATION: Former HW #3333

INSTRUMENT (MAKER/MODEL#): YSI 556 MPS / Hach 2100P **INSTRUMENT #:** 1 / SN 07M100453 / 1 / SN 31373

PARAMETER: *CONDUCTIVITY (+/-5%), pH (+/-0.2)*

Standard A	*pH 7.00 SU @ 25°C*	*Lot*	*1639*	*Expires*	*2/13*
Standard B	*pH 4.01 SU @ 25°C*	*Lot*	*1634*	*Expires*	*1/13*
Standard C	*pH 10.01 SU @ 25°C*	*Lot*	*1645*	*Expires*	*11/12*
Standard D	*Cond. 84 µS/cm @ 25°C*	*Lot*	*9477*	*Expires*	*1/13*
Standard E	*Cond. 447 µS/cm @ 25°C*	*Lot*	*9808*	*Expires*	*2/13*
Standard F	*Cond. 1413 µS/cm @ 25°C*	*Lot*	*2174*	*Expires*	*1/13*

Standard G 0.1-10 NTU *Standard H 41-100 NTU* *Standard I >100 NTU*

DATE (mm/dd/yy)	TIME (hr:min)	STD (A,B,C,...)	STD VALUE	INSTRUMENT RESPONSE	DEV	WITHIN RANGE?	TYPE (INIT, CONT)	SAMPLER INITIALS
1/23/13	1006	Temp.	20°	20.4°	-------	-------	-------	DS
"	"	A	7.02	6.95	-.07	yes	Initial	"
"	"	B	4.00	4.00	—		"	"
"	"	C	10.05	10.01	-.04		"	"
"	"	D	85.9	76	+.13%		"	"
"	"	E	404	398	-1.49%		"	"
"	"	F	1277	1252	-1.96%	↓	"	"
1/23/13	1238	Temp.	22°	21.9°	-------	-------	-------	DS
"	"	A	7.01	7.09	+.08	yes	Final	"
"	"	B	4.00	3.98	-.02		"	"
"	"	C	10.03	9.97	-.06		"	"
"	"	D	79.1	77	-2.65%		"	"
"	"	E	421	416	-1.19%		"	"
"	"	F	1330	1307	-1.73%	↓	"	"
1/23/13	1004	G	6.25	6.01	-3.84%	yes	Initial	DS
"	"	H	54.7	54.3	-.73%		"	"
"	"	I	567	555	-2.12%	↓	"	"
1/23/13	1235	G	6.25	6.06	-3.04%	yes	Final	DS
"	"	H	54.7	54.7	—		"	"
"	"	I	567	561	-1.06%	↓	"	"

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE LOCATION: Former Hw #3333

INSTRUMENT (MAKER/MODEL#) YSI 556 MPS **INSTRUMENT #** 1 / S/N 07M100457

PARAMETER: *DISSOLVED OXYGEN (+/-0.3 mg/L)*

STANDARDS: *Temperature (°C) and Dissolved Oxygen (mg/L)*

DATE (mm/dd/yy)	TIME (hr:min)	STD	STD VALUE	INSTRUMENT RESPONSE	DEV	WITHIN RANGE?	TYPE (INIT, CONT)	SAMPLER INITIALS
1/23/13	1014	Temp.	17.8°	17.8°	------	------	------	DS
"	"	D.O.	9.506	9.50	-	yes	Initial	"
1/23/13	1245	Temp.	21.0°	21.0°	------	------	------	DS
"	"	D.O.	8.915	9.07	+.16	yes	Final	"
		Temp.			------	------	------	
"	"	D.O.						"
		Temp.			------	------	------	
"	"	D.O.						"
		Temp.			------	------	------	
"	"	D.O.						"
		Temp.			------	------	------	
"	"	D.O.						"
		Temp.	------		------	------	------	
"	"	D.O.						"
		Temp.	------		------	------	------	
"	"	D.O.						"
		Temp.	------		------	------	------	
"	"	D.O.						"

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
BOB MARTINEZ CENTER
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

October 2, 2013

CERTIFIED MAIL #7013 1710 0002 1762 5171
RETURN RECEIPT REQUESTED

Ms. Robbie Ondick
989 Greentree Drive
Winter Park, Florida 32789-2787

Subject: Site Rehabilitation Completion Order
Handy Way Food Store #3333
170 Tuscawilla Rd
Winter Springs, Seminole County
FDEP Facility ID# 598516641
Discharge Dates: September 28, 1987 (EDI); August 7, 2000 (SRFA)
Discharge Score: 56

Dear Ms. Ondick:

The Orange County Environmental Protection Division (OCEPD), on behalf of the Florida Department of Environmental Protection (Department), has reviewed the Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) dated June 14, 2013 (received on June 19, 2013) and the Monitoring Well Abandonment Report dated August 28, 2013 (received September 3, 2013), prepared and submitted by AECOM for the petroleum product discharges referenced above. Documentation submitted with the SRCR/NFAP confirms that criteria set forth in Subsection 62-780.680(1), Florida Administrative Code (F.A.C.), have been met. Please refer to the attached maps of the source property and analytical summary tables. The SRCR/NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the facility for petroleum product contamination associated with the discharges referenced above, except as set forth below.

In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the facility, the Department may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the SRCR/NFAP or otherwise allowed by Chapter 62-780, F.A.C.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below.

Persons affected by this Order have the following options:

(A) If you choose to accept the Department's decision regarding the SRCR/NFAP you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order.

(B) If you choose to challenge the decision, you may do the following:

(1) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or

(2) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to Subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Robbie Ondick, shall mail a copy of the request to Robbie Ondick at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Robbie Ondick,

shall mail a copy of the petition to Robbie Ondick at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

(a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;

(b) A statement of when and how each petitioner received notice of the Department's action or proposed action;

(c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;

(d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;

(e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice

of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding the OCEPD's review of the SRCR/NFAP should be directed to David M. Press, P.G. at (407) 836-1507. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 598516641. Please use this identification on all future correspondence with the Department or the OCEPD.

Sincerely,

Valerie K. Huegel
Program Administrator
Petroleum Restoration Program

VKH/dp

Attachments

ec: Bret LeRoux, FDEP Central District Office – Bret.LeRoux@dep.state.fl.us
David M. Press, OCEPD – David.Press@ocfl.net
Carlos S. Gonzalez, OCEPD – Carlos.Gonzalez2@ocfl.net
Daniel S. Phillips, P.G., AECOM – Daniel.Phillips@aecom.com
Wesley Curtis, St. Johns River Water Management District – wcurtis@sjrwmd.com
FDEP File

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to
§120.52 Florida Statutes, with the
designated Department Clerk, receipt
of which is hereby acknowledged.

Theresa Sellers — 10/2/13

Clerk (or Deputy Clerk) — Date

ENVIRONMENTAL PROTECTION DIVISION
Lori Cunniff, CEP, CHMM, Deputy Director
Community, Environmental and Development Services Department
800 Mercy Drive, Suite 4
Orlando, FL 32808-7896
407-836-1400 ▪ Fax 407-836-1499
www.ocfl.net

P.G. CERTIFICATION

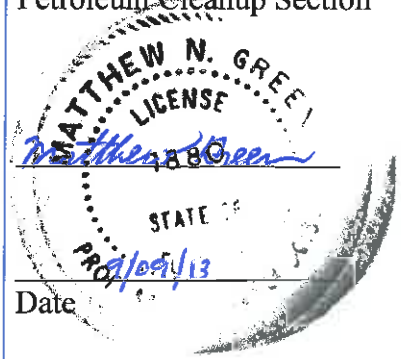
Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) dated June 14, 2013 (received on June 19, 2013) and Monitoring Well Abandonment Report dated August 28, 2013 (received September 3, 2013), for Handy Way Food Store #3333, located at 170 Tuscawilla Rd, Winter Springs, FDEP Facility ID# 598516641.

I hereby certify that in my professional judgment, the components of this Site Rehabilitation Completion Report and No Further Action Proposal prepared for the September 28, 1987 and August 7, 2000 petroleum product discharges discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-780, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the site rehabilitation objectives stated in Chapter 62-780, F.A.C., have been met.

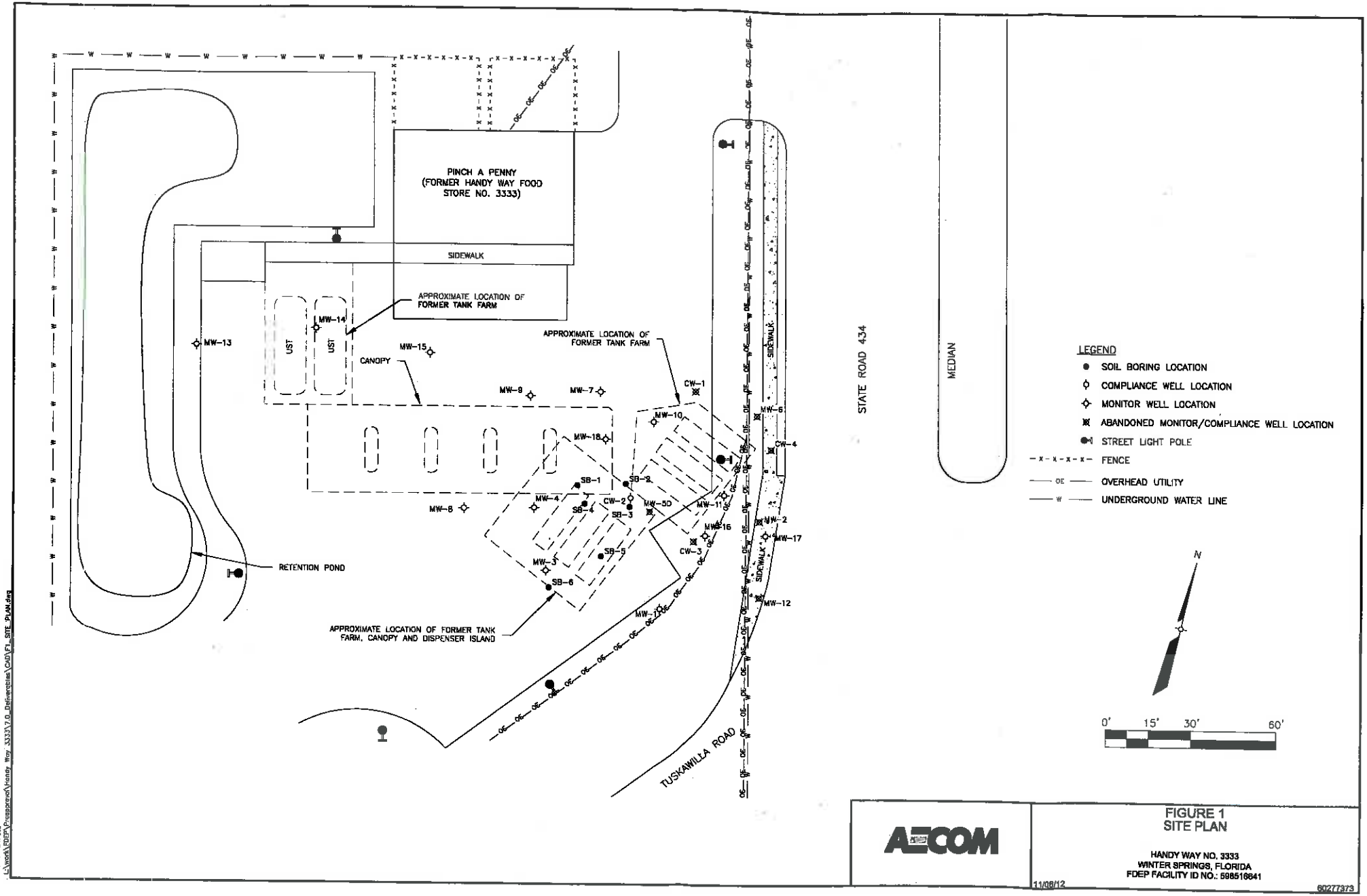
__ I personally completed this review.

_X_ This review was conducted by David M. Press working under my direct supervision.

Matthew N. Green, P.G.
Professional Geologist # 1880
Petroleum Cleanup Section



Matthew Green
9/04/13
Date



REVISED BY: JC
DRAWN BY: JM
L:\work\FDEP\Preapproved\Handy Way 3333\7.0_Deliverables\Cad\Fl_SITE_PLAN.dwg

FAC ID 598516644

TABLE 3: SOIL ANALYTICAL DATA

Facility Name: Handy Way #3333 **Facility ID#: 59/8516641** **Analytical Results = mg/kg**

Boring No.	Date Collected	Depth to Water (feet)	Sample Interval (FBLS)	Net OVA Reading (ppm)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene
		feet	FBLS	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SCTL - Residential					1.2	7,500	1,500	130	4,400	460	55	200	210
SCTL - Industrial					1.7	60,000	9,200	700	24,000	2,700	300	1800	2100
SCTL - Leachability					0.007	0.5	0.6	0.2	0.09	340	1.2	3.1	8.5
SB-1	05/28/13	6	4	0	0.001 U	0.001 U	0.001 U	0.003 U	0.001 U	3.9 U	0.011 U	0.011 U	0.011 U

U indicates the compound was analyzed for but not detected

I indicated the value is an estimate, The reported value is between the Detection Limit and the Practical Quantitation Limit

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloro ethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-1	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1	<1	<1	<3	<2						
	02/22/02	<1	<1	<1	<3	10	<5	<5	<5			
	07/23/02	<1	<1	<1	<3	20	<5	<5	<5			
	10/04/02	<1	<1	<1	<3	5	<5	<5	<5			
	05/20/03	<1	<1	<1	<3	<1	<5	<5	<5			
	08/28/03	<1	<1	<1	<3	<1	<5	<5	<5			
	11/20/03	<1	<1	<1	<3	<2	<5	<5	<5			
	02/27/03	<1	<1	<1	<3	<5	<5	<5	<5			
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	05/01/06	1 U	6	1 U	3 U	5 U	1.0 U	1.0 U	1.0 U			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	4.9	1.0 U	2.6	1.5 U	1.0 U	15	0.36 I	0.40 I			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.13 I	0.10 U	0.10 U			
MW-2	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
MW-3	09/26/94	<1	6	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	06/04/01	<1	<1	<1	<3	9	<5	<5	<5			
	11/02/01	<1	<1	<1	<3	6						
	02/22/02	<1	<1	<1	<3	2						
	07/23/02	<1	<1	<1	<3	6						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-4	09/27/94	370	420	430	1690	19				12	<1	<0.02
	05/19/95	390	5	560	269	13						
	08/08/95	490	10	700	390	210						
	06/29/00	150	<10	600	<30	<20						
Duplicate	06/29/00	150	<10	610	<30	<20						
	10/26/00	82	<10	200	<30	<20						
Duplicate	10/26/00	79	<10	180	<30	<20						
	01/29/01	16	<1.0	53	5.0	3.0	210	71	40	<5.0		
	06/04/01	30	<1	48	4*	3.0	180	65	37			
	11/02/01	14	1	57	5	24	77	20	25			
	02/22/02	44	3	248	3*	<1	88	25	18			
	07/23/02	23	2	96	4	5	99	24	21			
	10/04/02	17	1	86	<4	<1	76	22	18			
	05/20/03	13	1	59	3	<1	51	14	13			
	08/28/03	11	1	90	<3	<1	75	20	15			
	11/20/03	11	1	62	4	<2	83	25	21			
	02/27/04	4	<1	17	<3	<5	38	11	9			
	06/03/04	12	2	37	4	<5	148	38	30			
	12/07/04	6	4	68	7	<5	57	17	11			
	04/18/05	2	<1	17	<3	<5	49	11	9.5			
	10/14/05	5	0.9	67	2.6	<5	79	20	14			
	04/28/06	4	0.6 I	37	2.2 I	5 U	30	7.5	7.5			
	11/21/06	1	0.5 U	10	1.7 U I	2.8 I	57	10	6.5			
	06/28/07	6	1.0 U	94	1.6 I	1.0 U	43	6.9	7.3			
	12/05/07	1.5	1.0 U	24	1.5 U	1.0 U	23	4.7	4.2			
	07/17/08	0.7 I	1.0 U	18	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	11/06/08	1.6	1.0 U	50	1.5 U	1.0 U	18	2.8	2.3			
	07/31/12	1.2	1.0 U	15	1.5 U	1.0 U	25	2.4	4.2			
	10/24/12	0.5 I	1.0 U	6.3	1.5 U	1.0 U	7.8	0.92	0.6			
	01/23/13	0.8 I	1.0 U	9.5	1.5 U	1.0 U	9.8	1.5	1.6			
MW-5D	09/27/94	<1	<1	<1	<3	<2				131	<1	<0.02
MW-6	09/27/94	<1	<1	<1	<3	<2				<5	<1	<0.02
MW-7	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-8	06/02/95	4	<1	<1	10	4400				18	<1	<0.02
	08/08/95	1	3	1	8	44						
	06/29/00	<1.0	<1.0	<1.0	<3.0	6.0 **						
	01/29/01	<1.0	<1.0	<1.0	<3.0	14	<10	<10	<10	<5		
	06/04/01	<1	<1	<1	<3	43						
	11/02/01	<1	<1	<1	<3	<1						
	02/22/02	<1	<1	<1	<3	1						
	07/23/02	<1	<1	<1	<3	4						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	05/28/13									2.30 U		
MW-9	06/02/95	<1	<1	<1	<3	<2				15	<1	<0.02
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	10/26/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	01/29/01	<1.0	<1.0	<1.0	<3.0	<2.0	<10	<10	<10	<5.0		
	05/28/13									2.30 U		
MW-10	06/02/95	<1	800	2	3	2300				20	<1	<0.02
	08/08/95	<1	3	<1	<3	16						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	06/04/01	<1	<1	<1	<3	<1	<5	<5	<5			
	04/28/06									2 U		
	05/28/13									2.30 U		
MW-11	06/02/95	<1	<1	<1	<3	<2				31	<1	<0.02
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	04/28/06									2 U		
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	05/28/13									2.30 U		

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-12	12/18/95	<1	<1	<1	<3	<2						
MW-13	10/26/00	<1.0	<1.0	<1.0	<3.0	<2.0						
MW-14	10/26/00	<1	<1	45	3	20						
	11/22/00	<1	<1	<1	<3	15						
	01/29/01	<1	<1	<1	<3	6						
	03/13/01											
	03/30/01									<5	<1	<0.02
MW-15	10/26/00	<1	<1	<1	<3	4	<10	<10	<10			
MW-16	01/29/01	<1.0	<1.0	<1.0	3.0	<2.0	<10	<10	<10	150		
	06/04/01	<1	<1	<1	<3	<1				<5		
	11/02/01	<1	<1	<1	<3	<1						
	02/22/02	<1	<1	<1	<3	<1						
	07/23/02	<1	<1	<1	<3	<1						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	04/18/05	<1	<1	<1	<3	<5	<1	<1	<1			
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	04/28/06	1 U	1 U	1 U	3 U	5 U	0.5 I	1.0 U	1.0 U			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	05/28/13									2.30 U		
MW-17	01/29/01	<1.0	<1.0	<1.0	<3.0	<2.0	<10	<10	<10	18		
	04/28/06									2 U		
	11/21/06									0.004 I		

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloro ethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-18	07/23/02	<1	<1	<1	<3	<1	<5	<5	<5			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
CW-1	03/28/94	<1	<1	<1	<3	<2						
	09/27/94	<1	2	<1	<3	<2				<5	<1	<0.02
CW-2	03/28/94	140	<10	410	380*	<20						
	09/27/94	700	20	890	840	24				<5	<10	<0.02
Duplicate	09/27/94	610	20	840	820	20				<5	<10	<0.02
	06/02/95	8	<1	22	<3	3				11	<1	<0.02
	08/08/95	1	<1	2	<3	100						
	06/29/00	6.2	<1.0	67	<3.0	<2.0						
	10/26/00	82	<1	200	<3	<2						
	06/04/01	6	1	44	3	3	37	5	<5			
	11/02/01	<1	<1	<1	<3	<1	<5	<5	<5			
	02/22/02	<1	<1	<1	<3	<1	<5	<5	<5			
	07/23/02	<1	<1	9	<3	<1	<5	<5	<5			
	10/04/02	<1	<1	<1	<3	<1	<5	<5	<5			
	05/20/03	<1	<1	3	<3	<1	<5	<5	<5			
	08/28/03	<1	<1	<1	<3	<1	<5	<5	<5			
	11/20/03	<1	<1	8	<3	<2	<5	<5	<5			
	02/27/04	<1	<1	19	<3	<5	11	5.6	<5			
	06/03/04	<1	<1	5	<3	<5	<5	<5	<5			
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	04/18/05	<1	<1	<1	<3	<5	1.1	<1	<1			
	10/14/05	<1	<1	5	<3	<5	11	7.4	4.8			
	04/28/06	1 U	1 U	0.9 I	3 U	5 U	3.4	2.7	1.7			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	2	1.5 U	1.0 U	4.5	2.8	1.5 I			
	12/05/07	0.5 U	1.0 U	2.2	1.5 U	1.0 U	3.1	2.3	1.7			
	07/17/08	0.5 U	1.0 U	2.1	1.5 U	1.0 U	6.8	1.1	1.9			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloro ethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
CW-3	03/28/94	560	<10	120	61*	120						
	09/27/94	290	<10	320	80*	20						
										8	<10	<0.02
CW-4	03/28/94	<1	<1	<1	<3	15						
	09/27/94	<1	<1	<1	<3	<2						
										<5	<1	<0.02

Note:
1. MTBE = Methyl tert butyl ether
2. EDB = 1,2 Dibromoethane
3. GCTLs = Groundwater Cleanup Target Levels
4. NADCs= Natural Attenuation Default Concentrations
# indicates dissolved lead was also run on this sample, with results of <0.005 mg/L.
U indicates the compound was analysed but not detected.
I indicates the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

FAC ID 598516641

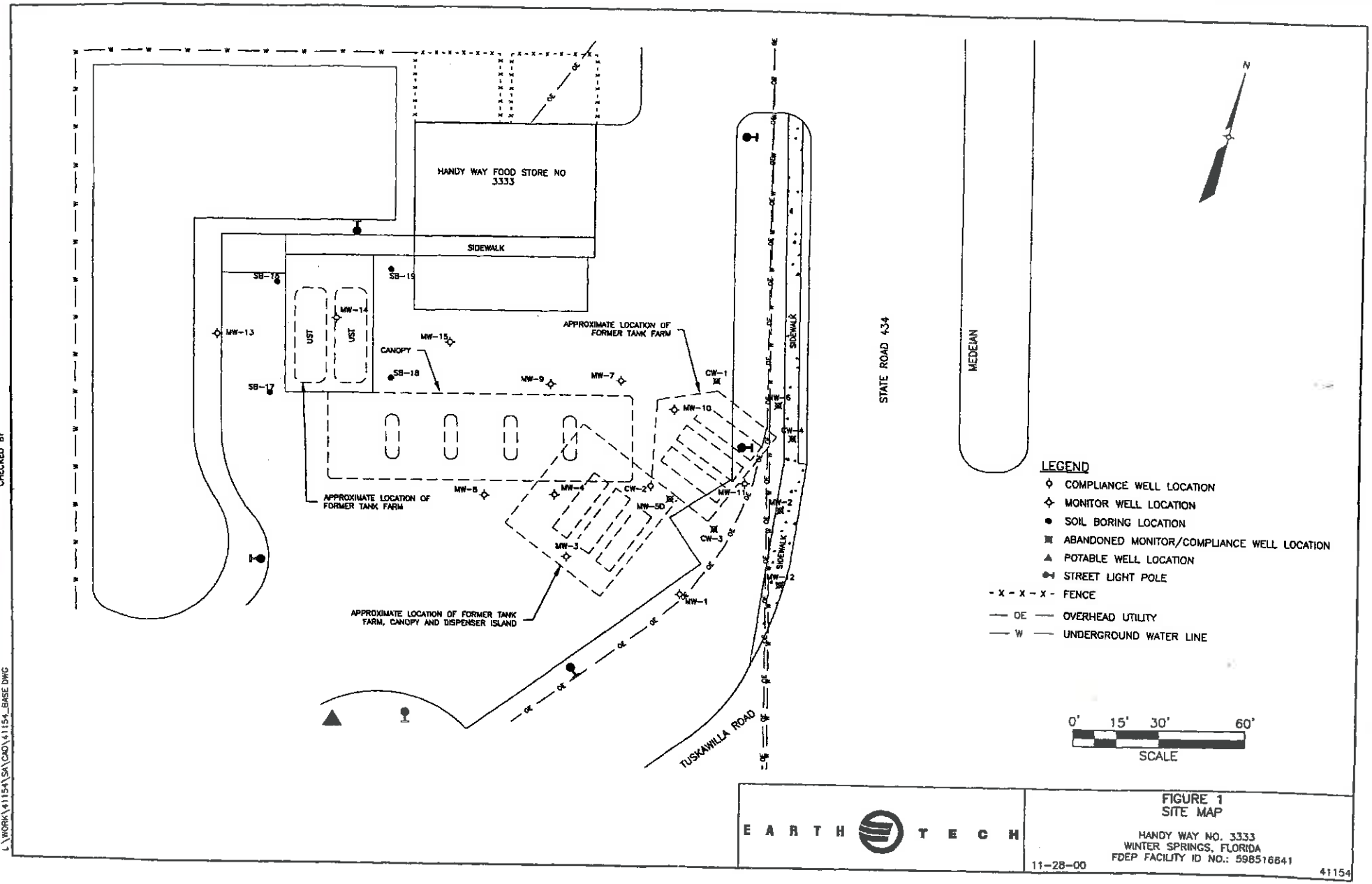


TABLE 2: SOIL ANALYTICAL DATA

Facility Name: Handy Way # 3333

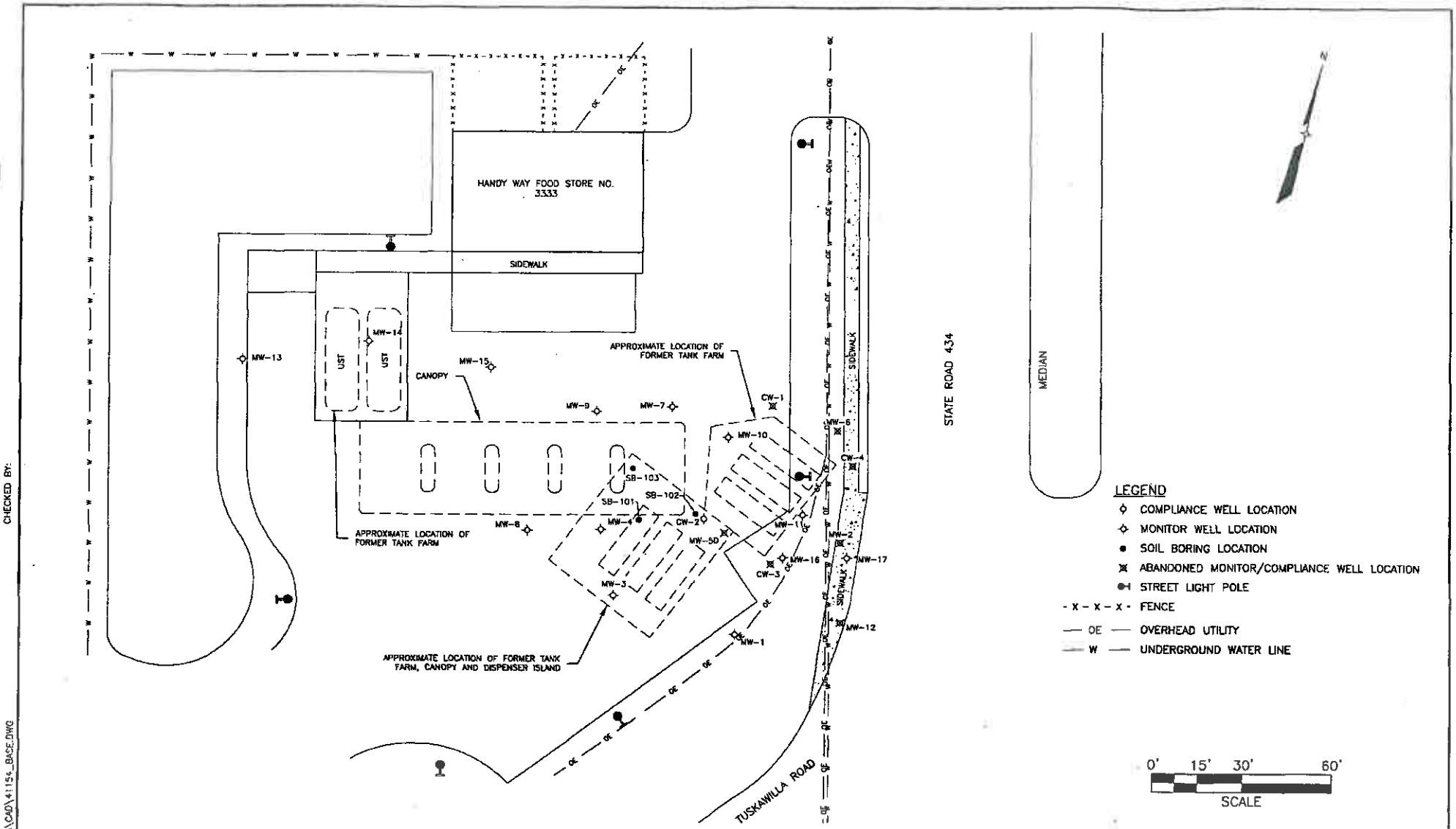
Facility ID#: 598516641

Analytical Results = µg/kg
ND = Not Detected
Blank = No Data

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Total VOA	Fractional Organic Carbon							
SB-18 (6-8')	10/18/00	<1.1	1.1	2.2	3.9*	8 3*	0.0069%							
SB-18 (10-12')	10/18/00	<1.3	<1 3	<1 3	<3.9	<7 8	0.012%							
MW-15 (6-8')	10/18/00	<1 4	<1 4	<1 4	<4.2	<8 4	0.0081%							
Florida SCTLs.		7	500	600	200	1307								

* - Value represents the sum of positive values plus detection limit values for components reported as non-detected

FAC ID 598516641



EARTH TECH

FIGURE 1
SITE MAP

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

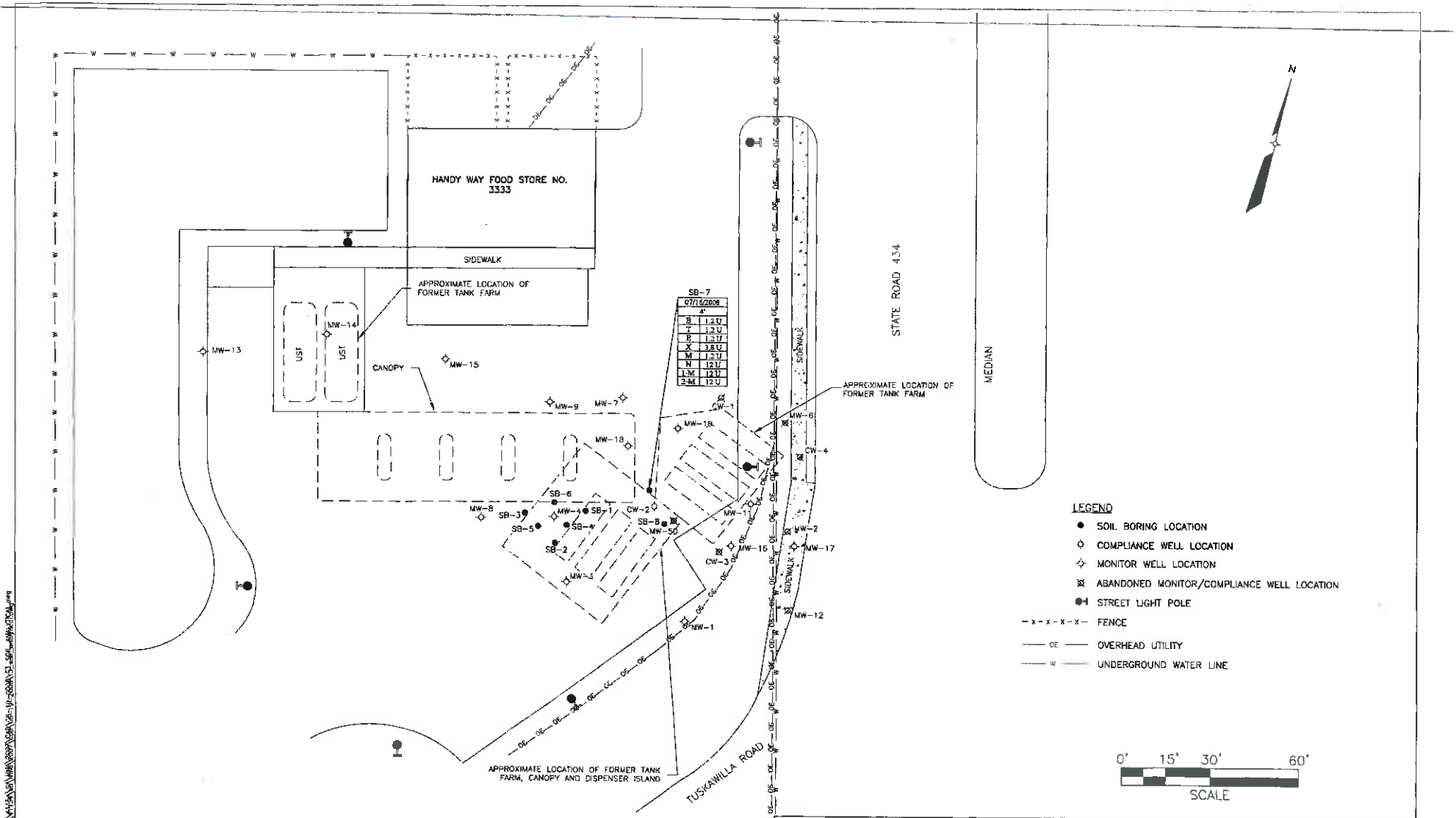
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FAC ID 598516641



EARTH TECH | AECOM

FIGURE 3
SOIL ANALYTICAL MAP
JULY 16, 2008

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

08-19-2008

41154

REVISED BY: JH
REVISED ON: 08-19-2008
\\Wallace\Jobs\work\41154\GIS\MXD\598516641_SB_MW_CW_08-19-2008.mxd

TABLE 2: SOIL ANALYTICAL DATA

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/kg**

Boring No.	Date Collected	Depth to Water (feet)	Sample Interval (FBLS)	Net OVA Reading (ppm)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene
		feet	FBLS	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SCTL - Residential					1.2	7,500	1,500	130	4,400	55	200	210
SCTL - Industrial					1.7	60,000	9,200	700	24,000	300	1800	2100
SCTL - Leachability					0.007	0.5	0.6	0.2	0.09	1.2	3.1	8.5
SB-1-09	06/04/01	9	9-10	120	<1	<1	<1	<3	8	<330	<330	<300
SB-2-09	06/04/01	9	9-10	50	<1	<1	<1	<3	<1	<330	<330	<300
SB-3-10	06/04/01	9	9-10	10	<1	<1	<1	<3	<1	<330	<330	<300
SB-7 (4')	07/16/08	7.5	4-5	2	1.2 U	1.2 U	1.2 U	3.8 U	1.2 U	12 U	12 U	12 U

U indicates the compound was analyzed for but not detected

I indicated the value is an estimate, The reported value is between the Detection Limit and the Practical Quantitation Limit

SITE ASSESSMENT REPORT

7-Eleven Store No. 34786
1205 E. State Road 434
Winter Springs, Seminole County, Florida
FDEP Facility ID No. 59/9045623
Work Order No. 2013-59-W4270A
Site Priority Score: 46 (PLIRP)
Discharge Date: April 26, 1003

July 30, 2013
Shaw Project No. 149035

Submitted to:

Orange County Environmental Protection Division
800 Mercy Drive, Suite 4
Orlando, Florida 32808

Prepared by:

Shaw Environmental, Inc.
A CB&I Company
1228 Winter Garden Vineland Road
Winter Garden, Florida 34787

PROFESSIONAL CERTIFICATION

PROFESSIONAL GEOLOGIST LICENSED IN THE STATE OF FLORIDA

For

Site Assessment Report

7-Eleven Store No. 34786
1205 East State Road 434
Winter Springs, Seminole County, Florida
FDEP Facility ID No. 59/9045623
Program Site

I certify that I am currently licensed by the State of Florida as a Professional Geologist through examination, education, and experience. I certify that the above report was prepared or completed by me, or under my responsible charge, and to the best of my knowledge is true, accurate, complete, and intended to meet the Chapter 62-780, Florida Administrative Code requirements for Site Assessment. Additionally, I certify that Shaw Environmental, Inc. is currently licensed (License No. GB409) as a geology business by the State of Florida.

Reviewed by:

David R. Martinez, P.G.
State of Florida License No. 2513

Date: 7-30-13

Prepared by:

Daniel Roebke
Scientific Technician

Date: 7/30/2013

Shaw Environmental, Inc.
1228 Winter Garden Vineland Road
Winter Garden, Florida 34787

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Appendix C	Laboratory Analytical Reports and Chain-of-Custody Records
Appendix D	Slug Test Results and Aquifer Characteristics Calculations

List of Acronyms and Abbreviations

7-Eleven	7-Eleven, Inc.
Accutest	Accutest Laboratories
bls	below land surface
BPSS	Bureau of Petroleum Storage Systems
BTEX	sum of benzene, toluene, ethylbenzene, and xylene
btoc	below top-of-casing
DO	dissolved oxygen
DRF	Discharge Reporting Form
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FAC	Florida Administrative Code
FAC ID	Facility Identification
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
FID	flame-ionization detector
ft	foot or feet
ft/ft	foot per foot
GCTL	groundwater cleanup target level
GES	Groundwater & Environmental Services, Inc.
MTBE	methyl tert-butyl ether
NADC	Natural Attenuation Default Concentration
NAM	natural attenuation monitoring
OCEPD	Orange County Environmental Protection Division
OVA	organic vapor analyzer
PAHs	polynuclear aromatic hydrocarbons
ppm	parts per million
SCTL	soil cleanup target level
Shaw	Shaw Environmental, Inc., a CB&I company
SOP	Standard Operating Procedure
TRPH	total recoverable petroleum hydrocarbon
UST	underground storage tank

1.0 Introduction and Scope of Work

On May 3, 1993, Mobil Oil Corporation filed a Discharge Reporting Form (DRF) with the state indicating an unknown amount of free product was found in a monitoring well at a site in Winter Springs, Florida. A copy of the DRF is provided in **Appendix A**. The site priority score was set at 46, indicating a potential threat to human health and the environment. In 2011, 7-Eleven, Inc. (7-Eleven) acquired the subject property and re-designated it as 7-Eleven Store No. 34786.

Shaw Environmental, Inc. (Shaw), a CB&I company, was contracted to perform a site assessment to determine the possible extent of impact on the site. One monitoring well and nine soil borings were installed during the course of this assessment. Four previously-installed monitor wells were also sampled as part of the assessment.

2.0 Background

2.1 Area of Investigation

7-Eleven Store No. 34786 is located within Section 26, Township 20, Range 30 , of the United States Geological Survey, Casselberry, Florida Topographic Quadrangle. A site location map is included as **Figure 1**.

7-Eleven Store No. 34786 was constructed in 1990 on an approximate 0.50-acre parcel. The 648-sq ft retail building is located at the center of the property. The site is primarily covered by asphalt with grass landscaping at the perimeter, and a car wash on the south side of the property. The underground storage tank (UST) area is located on the south end of the site just north of the car wash. A site layout map is provided as **Figure 2**.

2.2 Previous Assessment Activities

A review of the Florida Department of Environmental Protection (FDEP) OCULUS online database revealed there was a petroleum discharge on April 26, 1993, a DRF was completed on March 3, 1993. The site was also determined to be eligible for funding under the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP). A monitoring well was installed on January 9, 2006. Then three more wells were installed during a Phase II Environmental Site Assessment (ESA) on March 14 and 15, 2007, with the supervision of Groundwater & Environmental Services, Inc. (GES). On December 11, 2008, GES filed a Limited Closure Summary Report describing activities during a tank removal at this site. During the removal, soils were collected and concentrations of benzene were reported to be above soil cleanup target limits (SCTL). In July 2009 the FDEP raised the funding threshold to 60, suspending funding for the site.

2.3 Site Chronology

The following is a chronological summary of recent environmental activities performed at the facility:

Date	Environmental Activity
April 8, 2013	Shaw oversees the installation of eight soil borings (SB-1, SB-3 thru SB-9)
April 15, 2013	Shaw conducts groundwater sampling on wells MW-1 thru MW-3 and MW-5
April 16, 2013	Receive soil analytical results indicating there was no SCTL exceedance
April 23, 2013	Receive groundwater analytical results indicating benzene concentration in MW-5 exceeds the groundwater cleanup target level (GCTL)
May 16, 2013	Aquifer ("slug") test is conducted

Date	Environmental Activity
July 12, 2013	Shaw oversees the installation of MW-6
July 15, 2013	Shaw conducts groundwater sampling of MW-6
July 25, 2013	Shaw receives groundwater analytical results from samples collected at MW-6. There were no GCTL exceedances

3.0 Site Assessment Activities and Results

3.1 Water Well Survey and Area Land Use

Shaw utilized the Florida Department of Health (FDOH) Bureau of Environmental Health EHWATER database to create a radius map displaying known supply wells in the vicinity of the subject site. The map indicated that four public supply wells were located within a ½-mile radius of the site, and five private wells were located within a ¼-mile radius.

Shaw utilized the FDOH EHWATER website database to search for nearby petroleum or dry-cleaning facilities within a ½-mile radius around the site. The search listed one site:

- Handyway Store No. 3333, FAC ID 59/8516641. This site was an active gas station. There was a discharge on September 28, 1987. A site assessment was conducted resulting in remediation activities. The site is currently undergoing quarterly natural attenuation monitoring (NAM) sampling.

The FDOH Supply Well Inventory and Facilities Inventory search results are summarized in **Tables 1 and 2** and depicted on **Figure 3**.

Shaw reviewed aerial photographs and utilized field-verification to determine land use in the vicinity of the site. The area within ½-mile of the site includes commercial, residential, and undeveloped zoning classifications. The area land use is shown on **Figure 4**.

3.2 Initial Investigation

On April 26, 1993, there was a petroleum discharge at 7-Eleven Store No. 34786. There are no records of a site assessment previously conducted. GES installed four monitoring wells (MW-1, MW-2, MW-3, and MW-5) during a Phase II ESA. The four wells were sampled semi-annually between March 2007 and 2009. Four USTs were replaced with two USTs during October and November 2008. Approximately 1,381 tons of pea gravel and soil were removed from the UST area and disposed during the tank replacement due to high organic vapor analyzer (OVA) readings from around the tank pit.

3.3 Soil Boring Installation

On April 8, 2013, Shaw supervised the installation of eight soil borings. The soil boring locations are depicted on **Figure 2**. The soil borings were installed in accordance with FDEP Bureau of Petroleum Storage Systems (BPSS) standards using a track-mounted direct-push rig to a total depth of 13 ft below land surface (bls). Soil samples were collected at 1-ft intervals to a depth of approximately 13 ft bls for organic vapor analysis using a Photovac MicroFID OVA equipped with a flame ionization detector (FID). Eight-ounce grab samples were collected, placed into clean 16-ounce jars, and allowed to equilibrate for approximately five minutes.

Following equilibration, the headspace in each glass jar was screened for the presence of organic vapors using an OVA-FID in accordance with Chapter 62-780.600(19), Florida Administrative Code (FAC). The OVA-FID was calibrated onsite to 500 parts per million (ppm) methane and zero-gas sources prior to the sample screening activities.

The field screening results indicated net organic vapor readings ranging from 0 to 43.0 ppm. OVA field readings and lithologic descriptions are presented in **Table 3**. Copies of the FDEP boring logs, FDEP well construction and development logs, and equipment calibration records are provided in **Appendix B**.

Shaw collected two soil samples for laboratory analysis: SB-3@12ft and SB-9@4ft. The samples were submitted to Accutest Laboratories (Accutest) in Orlando, Florida, for analysis of benzene, toluene, ethylbenzene, and xylenes (collectively known as BTEX) and methyl tert-butyl ether (MTBE) by EPA Method 8260B, polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270D, and total recoverable petroleum hydrocarbons (TRPH) by FDEP Method FL-PRO.

The laboratory analytical report indicated that no SCTL exceedances were detected in either of the samples. The soil analytical results are summarized in **Table 4** and a map summarizing the vadose zone assessment is included as **Figure 5**. Copies of the laboratory analytical reports and chain-of-custody documentation are provided in **Appendix C**.

3.4 Groundwater Sample Collection and Results

On April 15, 2013, Shaw returned to the site to sample the monitoring wells. Well purging and groundwater sampling activities were conducted in accordance with FDEP *SOP 001/01, FS 2200, Groundwater Sampling*, revised March 31, 2008, (effective December 3, 2008), and FDEP *SOP-PCS-005 Groundwater Sampling SOP Variances and Clarifications for Bureau of Petroleum Storage System Sites*, May 2, 2005. A peristaltic pump and clean polyethylene tubing were used for purging and sampling activities. Electronic water quality meters were used to track water quality parameters during purging activities. FDEP groundwater sampling logs were used to document well purging time, volume, and rates; depth to groundwater; monitored water quality parameters (hydrogen-ion concentration [pH], temperature, conductivity, dissolved oxygen [DO], turbidity, color, and odor); and sampling data for each well. The samples were collected in laboratory-supplied bottles and couriered to Accutest. Laboratory analytical results indicated no concentrations in excess of the Chapter 62-777, FAC, Table I, GCTLs in monitor wells MW-1, MW-2, and MW-3. The sample from MW-5 had concentrations exceeding the GCTLs for benzene and naphthalene.

On July 12, 2013, Shaw oversaw the installation of MW-6 on the southeast border of the property. Shaw returned on July 15, 2013, to sample MW-6. Shaw received the analytical results showing there were no GCTL exceedances in the groundwater collected from MW-6.

Monitor well construction data is presented in **Table 5**; groundwater analytical results are summarized in **Table 6**; **Figure 6** shows groundwater analytical results next to their corresponding wells. Laboratory analytical reports are included in **Appendix C**. Copies of the FDEP groundwater sampling logs, well construction and development logs, and field instrument calibration records are provided in **Appendix B**.

3.5 Water Level Measurements

Prior to each groundwater sampling event, depth-to-water from below top-of-casing (btoc) measurements for each of the existing wells was recorded. On April 25, 2013, depth-to-water measurements ranged from 8.48 to 9.11 ft btoc.

Relative top-of-casing elevations were surveyed by qualified Shaw personnel and calculated with depth-to-water measurements from each sampling event to determine groundwater flow. Water table elevation contours representative of the groundwater surface on April 25, 2013, indicate a groundwater gradient of 0.0094 feet per foot (ft/ft) towards the southeast.

Shaw returned to the site on July 15, 2013, to record the summer groundwater elevations. Water table elevation contours representative of the groundwater surface on April 25, 2013, indicate a groundwater gradient of 0.0074 ft/ft towards the southeast. Free-phase product was not encountered during any event.

A groundwater elevation summary is provided in **Table 7**. Groundwater elevation maps showing groundwater elevation contour intervals from April 25 and July 15, 2013 are provided as **Figure 7** and **Figure 8** respectively.

3.6 Site Lithology

Data collected during the assessment activities indicates that the site is underlain by mainly fine sand. Interspersed in the fine sand are lenses of silty-sand. A geologic cross-section showing the site lithology is illustrated on **Figure 9**. Copies of the boring logs (describing site lithology) are provided in **Appendix B**.

3.7 Slug Tests and Results

On May 16, 2013, Shaw performed slug tests on MW-1, MW-2, and MW-5 to assess the aquifer characteristics beneath the facility. During the slug tests, a volume of water was instantaneously removed from the well and the groundwater recovery rate was monitored by a Mini Troll® Level-Logger. The recovery rate was recorded logarithmically for the entire test. The data was

then analyzed using AQTESOLV for Windows by Hydrosolv Inc.™ The Bouwer and Rice 1976 Method for unconfined aquifers was chosen from AQTESOLV to calculate the range of hydraulic conductivity values associated with the aquifer. The hydraulic conductivity values were within acceptable ranges for unconsolidated deposits as found in R. Allen Freeze and John A. Cherry's 1979 Groundwater and C.W. Fetter's 1988 Applied Hydrogeology Second Edition. The estimated average linear groundwater velocity (V) for the surficial aquifer was calculated using the equation V=KI/n, where K=Hydraulic Conductivity, I=Hydraulic Gradient, and n=effective porosity. Aquifer characteristics are summarized in the following table.

Well ID	Screened Interval (ft)	Hydraulic Gradient (I) (ft/ft)	Effective Porosity (n) (%)	Hydraulic Conductivity (K) (ft/day)	Linear Groundwater Velocity (V) (ft/yr)
MW-1	5-15	0.0024	0.30	1.698	0.297
MW-2	5-15	0.0024	0.30	1.708	0.518
MW-5	5-15	0.0024	0.30	6.933	2.632

Slug test results and aquifer characteristic calculations are summarized in **Appendix D**.

4.0 Summary and Recommendations

- There are three public supply wells located within ½ mile of the facility.
- Analysis of groundwater samples collected on April 15, 2013, from MW-1, MW-2, MW-3, and MW-5 reported GCTLs were exceeded for benzene and naphthalene in the groundwater collected from MW-5.
- Analytical results from the MW-6 groundwater sample reported no GCTL exceedances, thereby delineating the extent of the plume.
- Although the GCTLs were exceeded for benzene and naphthalene in the groundwater collected from MW-5, the natural attenuation default concentration (NADC) guidance levels were not exceeded.
- Groundwater was initially indicated to flow to the southeast. Since then, the groundwater flow has been calculated to flow to the east.
- Free product was not encountered during site assessment activities.
- Net vadose zone OVA readings during soil boring activities and the installation of MW-6 (SB-10) were reported as less than 1 ppm.
- Soil analytical results from samples collected in the vadose zone during this assessment indicated that the SCTLs were not exceeded.
- The site is underlain by sand with lenses of silty sand.

Based upon the data gathered to date, contaminated soil does not exist outside the UST area. Accordingly, Shaw recommends that a Natural Attenuation Monitoring Plan be implemented for this site as per Chapter 62-780, FAC.

5.0 Disclaimer

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client and the county, unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, county, FDEP, purposes, locations, timeframes, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

TABLES

TABLE 1: WATER WELL SURVEY SUMMARY

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Map ID	Address		Use	Diameter (inches)	Total Depth	Casing Depth	Installation Date	Casing Material	Comments
	Owner	Location							
AAF0833	Carl Roberts	1175 E SR 434	Private Residential	2	NA	NA	NA	Galvanized	Inactive, Well Type 43
AAC0779	Pinch A Penny	170 Tuskawilla Rd	Limited Public Water	4	NA	NA	NA	Black Steel	Active, Well Type 42
AAK9365	NA	1249 Natures Way	Private Residential	2	NA	NA	NA	PVC	Active, Well Type 43
AAK3868	Donahoe	1233 Natures Way	Private Residential	4	NA	NA	NA	Black Steel	Active, Well Type 43
AAF0830	Lake Jessup Animal Hospital	190 Tuskawilla Rd	Limited Public Water	4	NA	NA	NA	Black Steel	Active, Well Type 42
59-57-00095	Lake Jessup Animal Hospital	190 Tuskawilla Rd	Registered LU Commercial	NA	NA	NA	NA	NA	Active, Registered LU Commercial
AAK9372	NA	Milky Way	Private Residential	2	0	0	NA	PVC	Active, Well Type 43
AAK9374	NA	290 Tuskawilla Rd	Private Residential	2	0	0	NA	PVC	Active, Well Type 43
AAK93639	Lofroos	300 Tuskawilla Rd	Private Residential	2	0	0	NA	Galvanized	Active, Well Type 43
AAF0886	Hi- Flavor Meats (Formerly)	201 Tuskawilla Rd	Non-Community Public	2	NA	NA	NA	Galvanized	Active, Well Type 41 (Non-Community Public Water System

Notes:

NA = data not readily available

TABLE 2: SUPER ACT FACILITIES SURVEY

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Name	Facility ID	Location	Facility Type	Distance from Site	Status	Comments
Handyway	8516641	170 Tuskawilla Rd	Retail Petroleum	0.07 mi	CLOSED	Three 10,000-gallon fuel tanks were removed

TABLE 3: OVA DATA AND LITHOLOGIC DESCRIPTION

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Boring Number	Date	Depth to Water (ft) (Observed)	Sample	OVA Reading (ppm)			Lithologic Description
				Unfiltered	Filtered	Net	
SB-1	04/08/13		1	<1	-	<1	Black/Grey, Fine, Sand, No Odor
			2	<1	-	<1	Black/Grey, Fine, Sand, No Odor
			3	<1	-	<1	Grey/Black, Fine, Sand, No Odor
			4	<1	-	<1	Grey/Black, Fine, Sand, No Odor
			5	<1	-	<1	Grey/Black, Fine, Sand, No Odor
			6	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
			7	<1	-	<1	Black, Silty Sand, Fine, No Odor
			8	<1	-	<1	Black, Silty Sand, Fine, No Odor
			9	<1	-	<1	Brown, Silty Sand, Find, No Odor
			10	<1	-	<1	Tan, Silty Sand, Fine, No odor
			11	<1	-	<1	Tan/Grey, Silty Sand, Fine, No Odor
		12	12	0.4	-	0.4	Brown, Silty Sand, Fine, No Odor
			13	<1	-	<1	Grey, Silty Sand, Fine, No Odor
SB-3	04/08/13		1	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Black, fine, Sand, No odor
			4	<1	-	<1	Black, fine, Sand, No odor
			5	<1	-	<1	Black, fine, Sand, No odor
			6	<1	-	<1	Tan, Fine, Sand, No odor
			7	<1	-	<1	Tan, Fine, Sand, No odor
			8	<1	-	<1	Black, fine, Sand, No odor
			9	<1	-	<1	Grey, fine, Sand, No Odor
			10	<1	-	<1	Grey, fine, Sand, No Odor
			11	16.5	18.9	NQ	Black, Fine, Silty Sand, No odor
		12	12	30.5	31.5	NQ	Black, Fine, Silty Sand, No odor
			13	51.1	8.1	43.0	Black, Fine, Silty Sand, No odor
SB-4	04/08/13		1	<1	-	<1	Tan, Fine, Sand, No odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Brown/Black, fine, Sand, No odor
			4	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			5	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			6	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			7	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			8	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			9	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			10	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			11	<1	-	<1	Grey, fine, Sand, No Odor
		12	12	<1	-	<1	Black, Fine, Silty Sand, No odor
			13	<1	-	<1	Dark Grey, Fine, Sand, No Odor
SB-5	04/08/13		1	<1	-	<1	Brown/Grey, fine, Sand, No odor
			2	0.5	-	0.5	Brown/Grey, fine, Sand, No odor
			3	<1	-	<1	Brown/Grey, fine, Silty Sand, No odor
			4	<1	-	<1	Grey, fine, Sand, No Odor
			5	<1	-	<1	Light Grey, fine, Sand, no odor
			6	<1	-	<1	Brown, Grey, Fine, Sand, No Odor
			7	<1	-	<1	Brown, Fine Sand, No Odor
			8	<1	-	<1	Brown, Fine Sand, No Odor
			9	<1	-	<1	Brown, Fine Sand, No Odor
			10	<1	-	<1	Brown, Fine Sand, No Odor
			11	<1	-	<1	Grey, fine, Sand, No Odor
		12	12	<1	-	<1	Grey, fine, Sand, No Odor
			13	<1	-	<1	Brown, Fine Sand, No Odor

TABLE 3: OVA DATA AND LITHOLOGIC DESCRIPTION

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Boring Number	Date	Depth to Water (ft) (Observed)	Sample	OVA Reading (ppm)			Lithologic Description
				Unfiltered	Filtered	Net	
SB-6	04/08/13		1	<1	-	<1	Brown, Fine, Sand, No odor
			2	<1	-	<1	Brown, Fine, Sand, No odor
			3	<1	-	<1	Brown, Fine, Sand, No odor
			4	<1	-	<1	Brown, Fine, Sand, No odor
			5	<1	-	<1	Grey, Fine, Sand, No odor
			6	<1	-	<1	Grey, Fine, Sand, No odor
			7	<1	-	<1	Grey, Fine, Sand, No odor
			8	<1	-	<1	Brown, Fine, Sand, No odor
			9	<1	-	<1	Brown, Fine, Silty Sand, No odor
			10	<1	-	<1	Brown, Fine, Silty Sand, No odor
			11	<1	-	<1	Brown, Fine, Silty Sand, No odor
			12	<1	-	<1	Brown, Fine, Silty Sand, No odor
			13	<1	-	<1	Brown, Fine, Silty Sand, No odor
SB-7	04/08/13		1	<1	-	<1	Tan, Fine, Sand, No odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
			4	<1	-	<1	Brown, Fine, Sand, No odor
			5	<1	-	<1	Brown/Grey, fine, Sand, No odor
			6	<1	-	<1	Brown/Tan, Fine, Silty Sand, No odor
			7	<1	-	<1	Tan, fine, Silty Sand, no odor
			8	<1	-	<1	Tan, fine, Silty Sand, no odor
			9	<1	-	<1	Tan, fine, Silty Sand, no odor
			10	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
			11	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
		12	12	<1	-	<1	Brown, Fine, Sand, No odor
			13	<1	-	<1	Grey, fine, Silty Sand, No odor
SB-8	04/08/13		1	<1	-	<1	Black/Grey, Fine, Sand, No Odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Grey, Fine, Sand, No Odor
			4	<1	-	<1	Grey, Fine, Sand, No Odor
			5	<1	-	<1	Grey, Fine, Sand, No Odor
			6	<1	-	<1	Grey, Fine, Sand, No Odor
			7	<1	-	<1	Grey, Fine, Sand, No Odor
			8	<1	-	<1	Grey, Fine, Sand, No Odor
			9	<1	-	<1	Grey, Fine, Sand, No Odor
			10	<1	-	<1	Grey, Fine, Sand, No Odor
			11	<1	-	<1	Dark, Grey, Fine, Sand, No Odor
		12	12	<1	-	<1	Dark, Grey, Fine, Sand, No Odor
			13	<1	-	<1	Grey, Fine, Sand, No Odor
SB-9	04/08/13		1	<1	-	<1	Tan, Fine, Sand, No odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Black, fine, Sand, No odor
			4	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			5	<1	-	<1	Grey, fine, Sand, No Odor
			6	<1	-	<1	Tan/Grey, Fine, Sand, No odor
			7	<1	-	<1	Tan/Grey, Fine, Sand, No odor
			8	<1	-	<1	Tan/Grey, Fine, Sand, No odor
			9	<1	-	<1	Grey, fine, Sand, No Odor
			10	<1	-	<1	Black, Fine, Silty Sand, No odor
			11	<1	-	<1	Black, Fine, Silty Sand, No odor
		12	12	<1	-	<1	Black, Fine, Silty Sand, No odor
			13	<1	-	<1	Grey, fine, Silty Sand, No odor

TABLE 3: OVA DATA AND LITHOLOGIC DESCRIPTION

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Boring Number	Date	Depth to Water (ft) (Observed)	Sample	OVA Reading (ppm)			Lithologic Description
				Unfiltered	Filtered	Net	
SB-10	07/12/13	7	1	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
			3	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			5	<1	-	<1	Tan, Fine, Sand, No odor
			7	-	-	-	No Recovery
			9	-	-	-	
			11	<1	-	<1	Brown, Fine Sand, No Odor
			13	<1	-	<1	Dark Grey, Fine, Clayey Sand, No Odor
			15	<1	-	<1	White, Fine-Medium, Clayey Sand, No Odor

Notes: ppm = parts per million
ft = feet
NQ = Not Quantifiable

TABLE 4: SOIL ANALYTICAL SUMMARY

Facility Name: 7-Eleven Store No. 34786 Facility ID No.: 59/9045623

Sample					Laboratory Analysis (mg/kg)																				
ID Number	Date	Approx. Depth to Water (feet)	Sample Interval (ft bls)	Net OVA reading	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TRPH	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i) perylene	Fluoranthene	Fluorene	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene Equivalent*	Benzo(a) pyrene	Benzo(a) anthracene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene
Toxic Equivalency Factor					**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**1**	**0.1**	**0.1**	**0.01**	**0.001**	**1.0**	**0.1**
SCTLs - Direct Exposure Industrial					**1.7**	**60,000**	**9,200**	**700**	**24,000**	**2,700**	**20,000**	**20,000**	**300,000**	**52,000**	**59,000**	**33,000**	**300**	**1,800**	**2,100**	**36,000**	**45,000**	**0.7**	*	*	*	*	*	*	*
SCTLs - Direct Exposure Residential					**1.2**	**7,500**	**1,500**	**130**	**4,400**	**460**	**2,400**	**1,800**	**21,000**	**2,500**	**3,200**	**2,600**	**55**	**200**	**210**	**2,200**	**2,400**	**0.1**	**0.1***	*	*	*	*	*	*
SCTLs - Leachability					**0.007**	**0.5**	**0.6**	**0.2**	**0.09**	**340**	**2.1**	**27**	**2,500**	**32,000**	**1,200**	**160**	**1.2**	**3.1**	**8.5**	**250**	**880**	**8**	**8**	**0.8**	**2.4**	**24**	**77**	**0.7**	**6.6**
SB-3 @ 12Ft	4/8/13	12	12	NA	0.00070 U	0.00070 U	0.00077 U	0.0021 U	0.00070 U	6.1 U	0.065 U	0.065 U	0.041 U	0.0081 U	0.041 U	0.065 U	0.065 U	0.065 U	0.065 U	0.041 U	0.041 U	-	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U
SB-9 @ 4Ft	4/8/13	12	4	<1	0.00074 U	0.00074 U	0.00082 U	0.0023 U	0.00074 U	10.6	0.058 U	0.058 U	0.036 U	0.0073 U	0.036 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.036 U	-	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U

Notes: SCTLs = Soil Cleanup Target Levels per Chapter 62-777, Table II, Florida Administrative Code
ft bls = feet below land surface
mg/kg = milligrams per kilogram
MTBE = methyl tertiary butyl ether
NA = not analyzed
ppm = parts per million
TRPH = total recoverable petroleum hydrocarbons
Bold indicates exceedance of Industrial SCTLs
Bold indicates SCTL exceeding Residential Criteria
Bold and Italics indicates exceedance of Leachability SCTLs
Flagged constituent data qualifers can be reviewed with attached laboratory final report
Blank = No data or not analyzed for that specific parameter
U = The compound was not detected
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
* = Equivalent concentration was calculated as the sum of each Polycyclic Aromatic Hydrocarbon concentration times its Toxic Equivalency Factor as taken from the February 2005 *Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.* If the analyte was not detected half the reporting limit is listed in ***bold italics***

TABLE 5: MONITOR WELL CONSTRUCTION DETAILS

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Well No.	Date Drilled	Installation Method	Total Well Depth (ft)	Screened Interval (ft bls)	Well Diameter (in)	Lithology of Screened Interval
MW-6	07/12/13	Direct Push	15	5-15	2	Sand

Notes:
ft = feet
ft bls = feet below land surface
in = inches
DPT = Direct Push Technology
* See detailed boring logs
Existing wells MW-1 through 5 were not installed by Shaw; thus their details are not included

Florida Department of Environmental Protection -- Bureau of Waste Cleanup -- Petroleum Cleanup Section

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Sample		Laboratory Analysis (µg/L)																									
ID Number	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TRPH	Lead	EDB	1,2-DCA	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd) pyrene	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene	Phenanthrene	Pyrene
GCTLs		**1**	**40**	**30**	**20**	**20**	**5,000**	**15**	**0.02**	**3**	**20**	**210**	**2,100**	**0.05**	**0.2**	**0.05**	**210**	**0.5**	**4.8**	**0.005**	**280**	**280**	**0.05**	**14**	**28**	**28**	**210**	**210**
NADCs		**100**	**400**	**300**	**200**	**200**	**50,000**	**150**	**2**	**300**	**200**	**2,100**	**21,000**	**5**	**20**	**5**	**2,100**	**50**	**480**	**0.5**	**2,800**	**2,800**	**5**	**140**	**280**	**280**	**2,100**	**2,100**
MW-1	04/15/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	140 U	N/A	N/A	N/A	0.38 U	0.38 U	0.24 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.24 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.24 U	0.24 U
MW-2	04/15/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	240 U	N/A	N/A	N/A	0.39 U	0.39 U	0.25 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.25 U	0.39 U	0.039 U	0.39 U	0.39 U	0.39 U	0.25 U	0.25 U
MW-3	04/15/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	210 U	N/A	N/A	N/A	0.39 U	0.39 U	0.24 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.24 U	0.39 U	0.039 U	0.39 U	0.39 U	0.39 U	0.24 U	0.24 U
MW-5	04/15/13	**4.8**	0.20 U	3.3	0.50 U	0.34 (I)	446	N/A	N/A	N/A	0.40 U	0.40 U	0.25 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.25 U	0.40 U	0.040 U	**15.3**	2.3	2.2	0.25 U	0.25 U
MW-6	07/15/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	0.150 (I)	NA	NA	NA	0.32 U	0.32 U	0.20 U	0.032 U	0.032 U	0.032 UV	0.032UV	0.032 UV	0.032 UV	0.032 U	0.20 U	0.32 U	0.032 UV	0.32 U	0.32 U	0.32 U	0.20 U	0.20 U

Notes: GCTLs = Groundwater Cleanup Target Levels per Chapter 62-777, Table I, Florida Administrative Code (FAC)

NADCs = Natural Attenuation Default Concentrations per Chapter 62-777, Table V, FAC

µg/L = micrograms per liter

1,2-DCA = 1,2-dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl tertiary butyl ether

TRPH = total recoverable petroleum hydrocarbons

Flagged constituent data qualifers can be reviewed with attached laboratory final report.

Bold indicates GCTLs exceeded

Bold indicates NADCs exceeded

NA = not analyzed for that specific parameter.

U = The compound was not detected.

I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

TABLE 7: GROUNDWATER ELEVATION DATA

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

WELL NO.	MW-1			MW-2			MW-3			MW-5			MW-6					
DIAMETER (inches)	2			2			8			2			2					
WELL DEPTH (ft bls)	16			15			15			15			15					
SCREEN INTERVAL (ft)	6-16			5-15			5-15			5-15			5-15					
TOC ELEVATION (ft)	100.17			100.03			99.84			100.00			98.78					
DATE	DTW	ELE	FP	DTW	ELE	FP	DTW	ELE	FP	DTW	ELE	FP	DTW	ELE	FP	DTW	ELE	FP
04/15/13	9.42	90.75	-	9.48	90.55	-	9.42	90.42	-	9.58	90.42	-	-	-	-			
04/25/13	8.81	91.36	-	8.75	91.28	-	8.48	91.36	-	9.11	90.89	-	-	-	-			
07/15/13	7.25	92.92	-	6.85	93.18	-	7.00	92.84	-	7.55	92.45	-	6.40	92.38	-			

Notes:

ft = foot or feet
bls = below land surface
DTW = Depth to Water
ELE = Elevation
FP = Free Product

FIGURES



REFERENCE:

7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP, CASSELBERRY, FLORIDA, DATED 1999.

SHAW ENVIRONMENTAL, INC.

1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

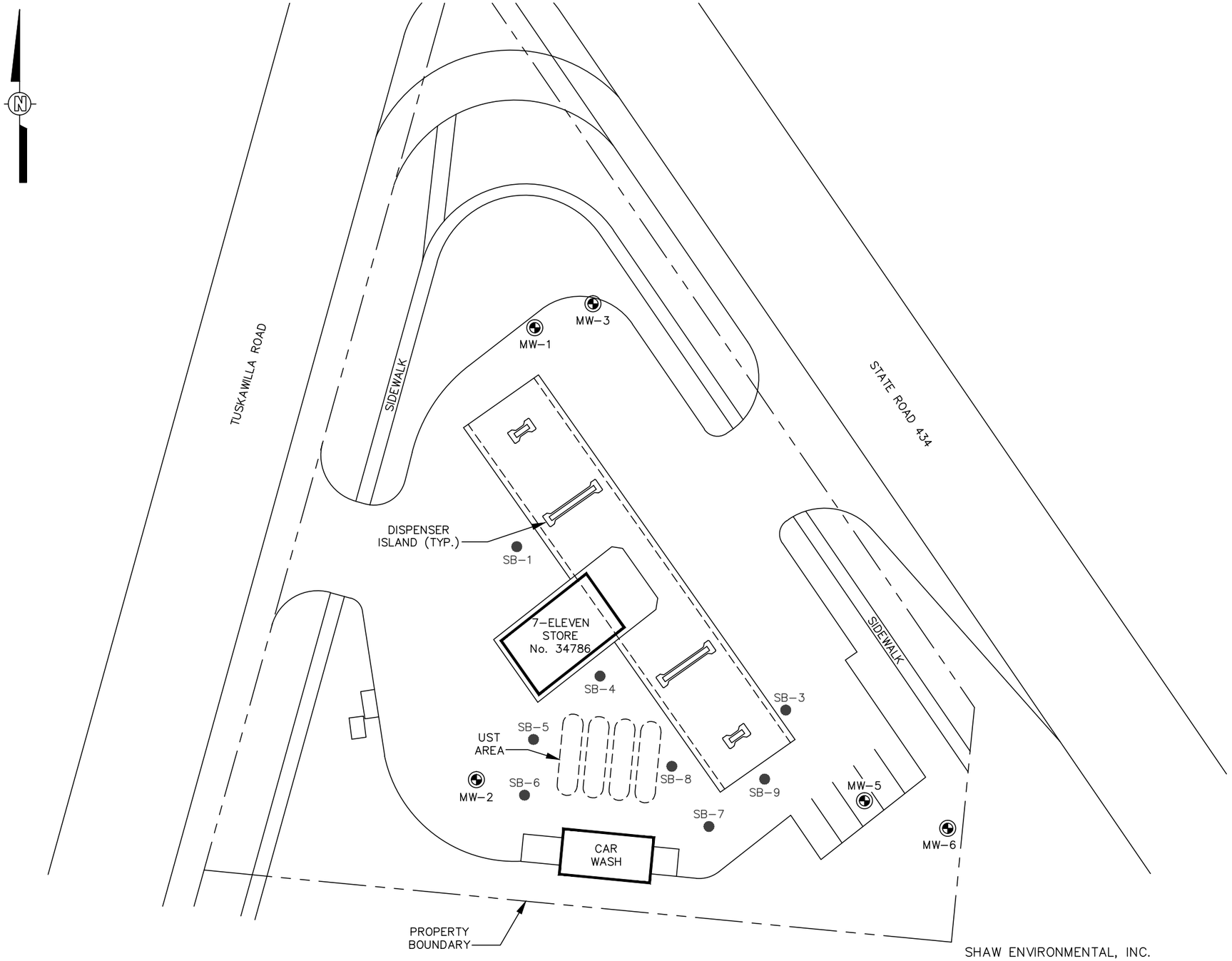
OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	7-22-13	9035A1

SITE LOCATION MAP

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

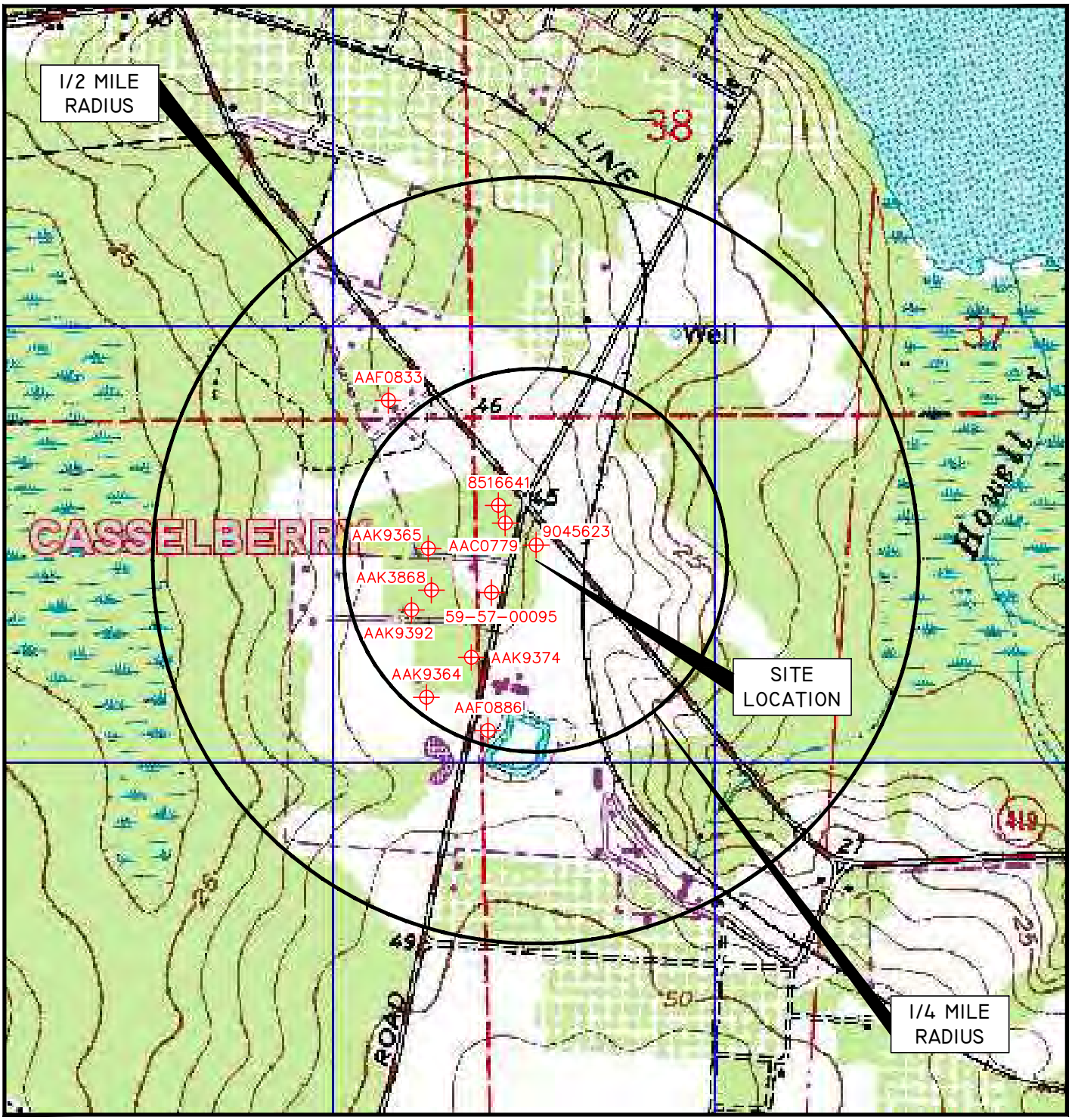
LOCATION: 1205 EAST STATE ROAD 434
WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	1



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WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

OFFICE: WINTER GARDEN	DATE: 7-22-13	ACAD FILE: 9035B1	
SITE MAP			
CLIENT: 7-ELEVEN, INC. STORE No. 34786			PM: DM
LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA			
DESIGNED: DR	DRAWN: SDJF	PROJECT NO.: 149035	FIGURE: 2



LEGEND:

SUPPLY WELL LOCATION

SHAW ENVIRONMENTAL, INC.

1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
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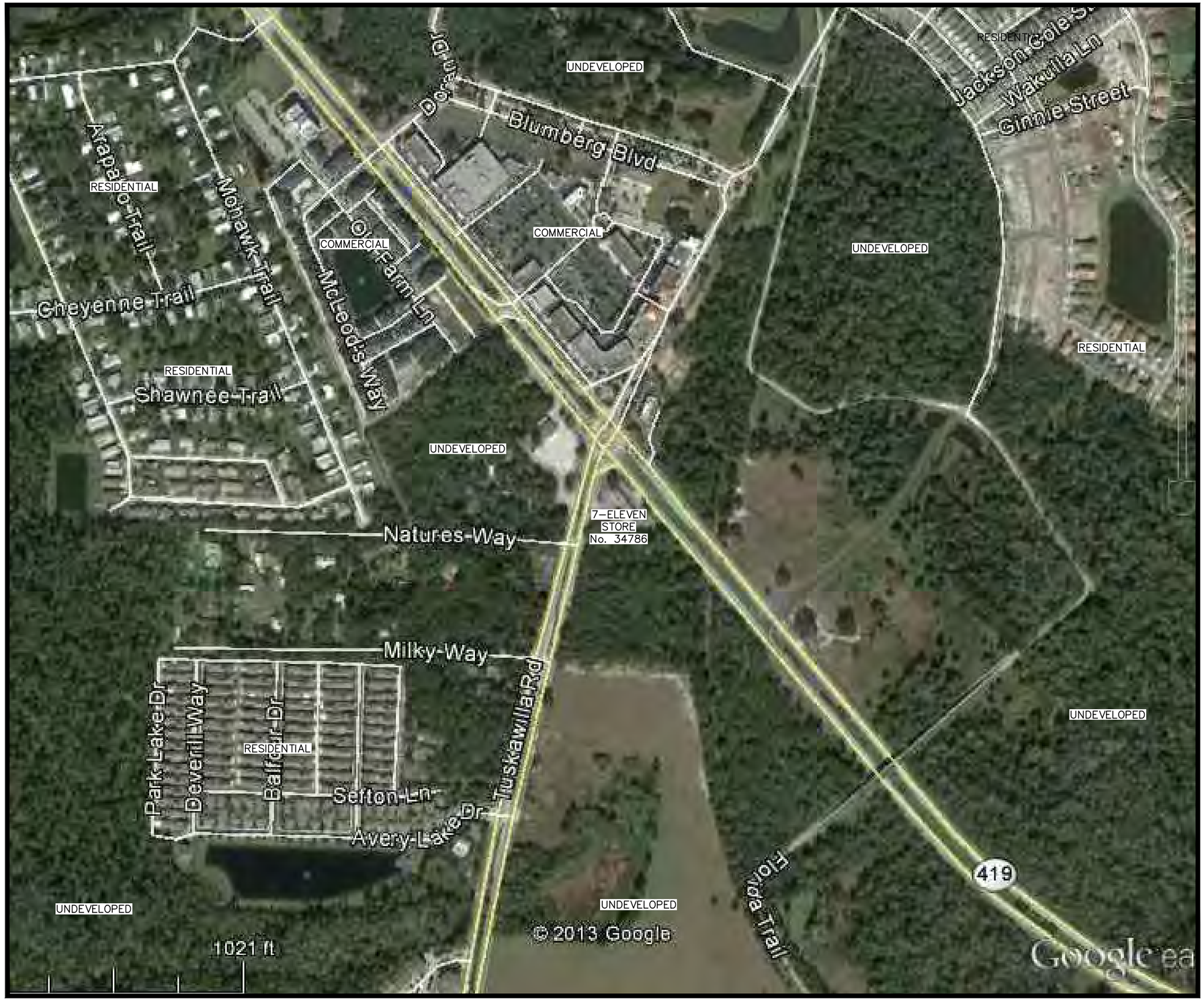
OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	7-22-13	9035A2

SUPPLY WELL AND FACILITIES SURVEY MAP

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434
WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	3



N

SCALE (FEET)

0 400 800

SHAW ENVIRONMENTAL, INC.

1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

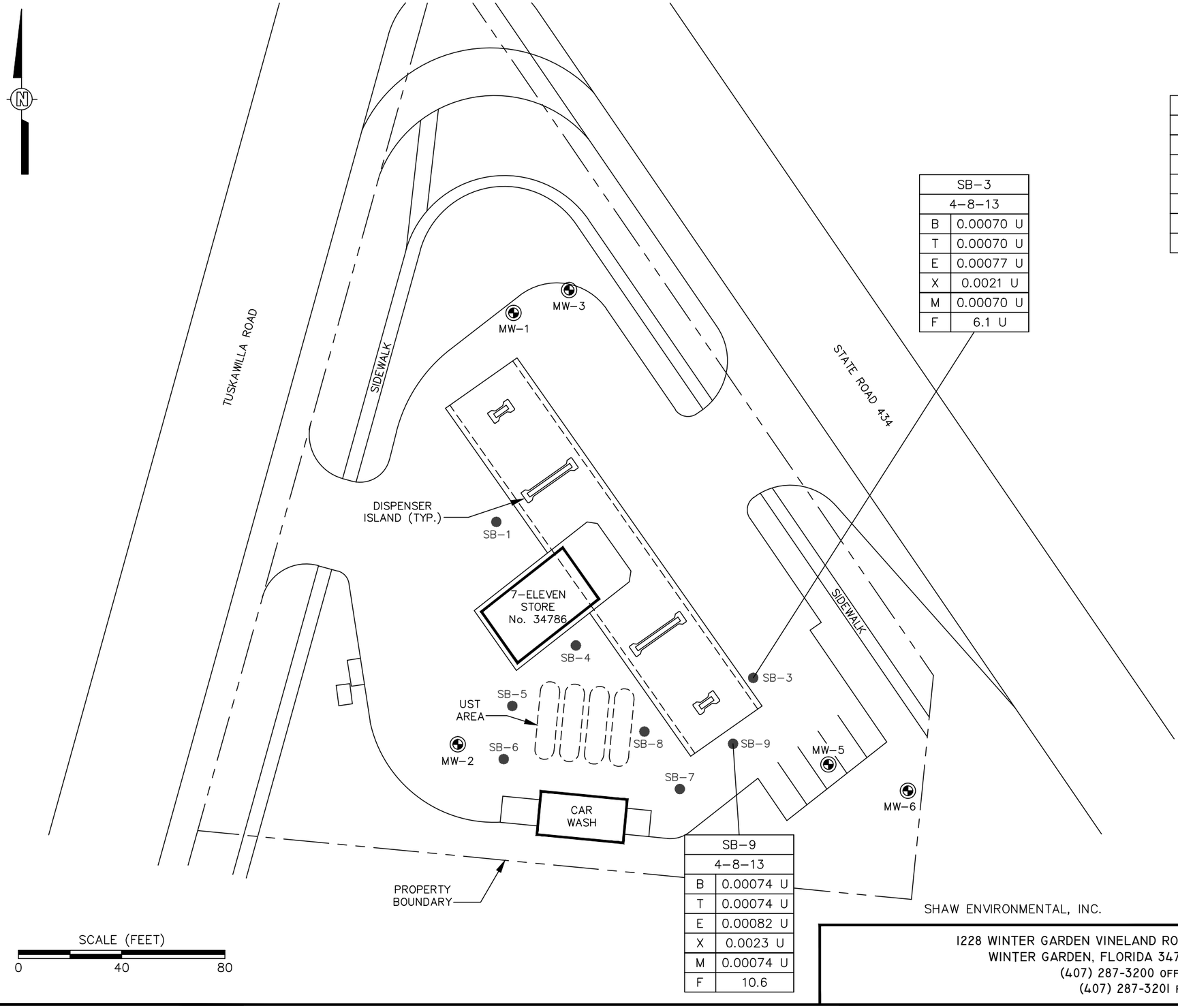
OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	7-22-13	9035B7

AREA LAND USE MAP

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434
WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	4



SB-3	
4-8-13	
B	0.00070 U
T	0.00070 U
E	0.00077 U
X	0.0021 U
M	0.00070 U
F	6.1 U

SB-9	
4-8-13	
B	0.00074 U
T	0.00074 U
E	0.00082 U
X	0.0023 U
M	0.00074 U
F	10.6

LEGEND:

- MONITORING WELL LOCATION
- SOIL BORING LOCATION

SB-3	WELL IDENTIFICATION
4-8-13	DATE OF SAMPLE
B 0.00070 U	BENZENE CONCENTRATION (mg/kg)
T 0.00070 U	TOLUENE CONCENTRATION (mg/kg)
E 0.00077 U	ETHYLBENZENE CONC. (mg/kg)
X 0.0021 U	TOTAL XYLENES CONC. (mg/kg)
M 0.00070 U	MTBE CONCENTRATION (mg/kg)
F 6.1 U	TRPH CONCENTRATION (mg/kg)

U — ANALYTE BELOW METHOD DETECTION LIMIT

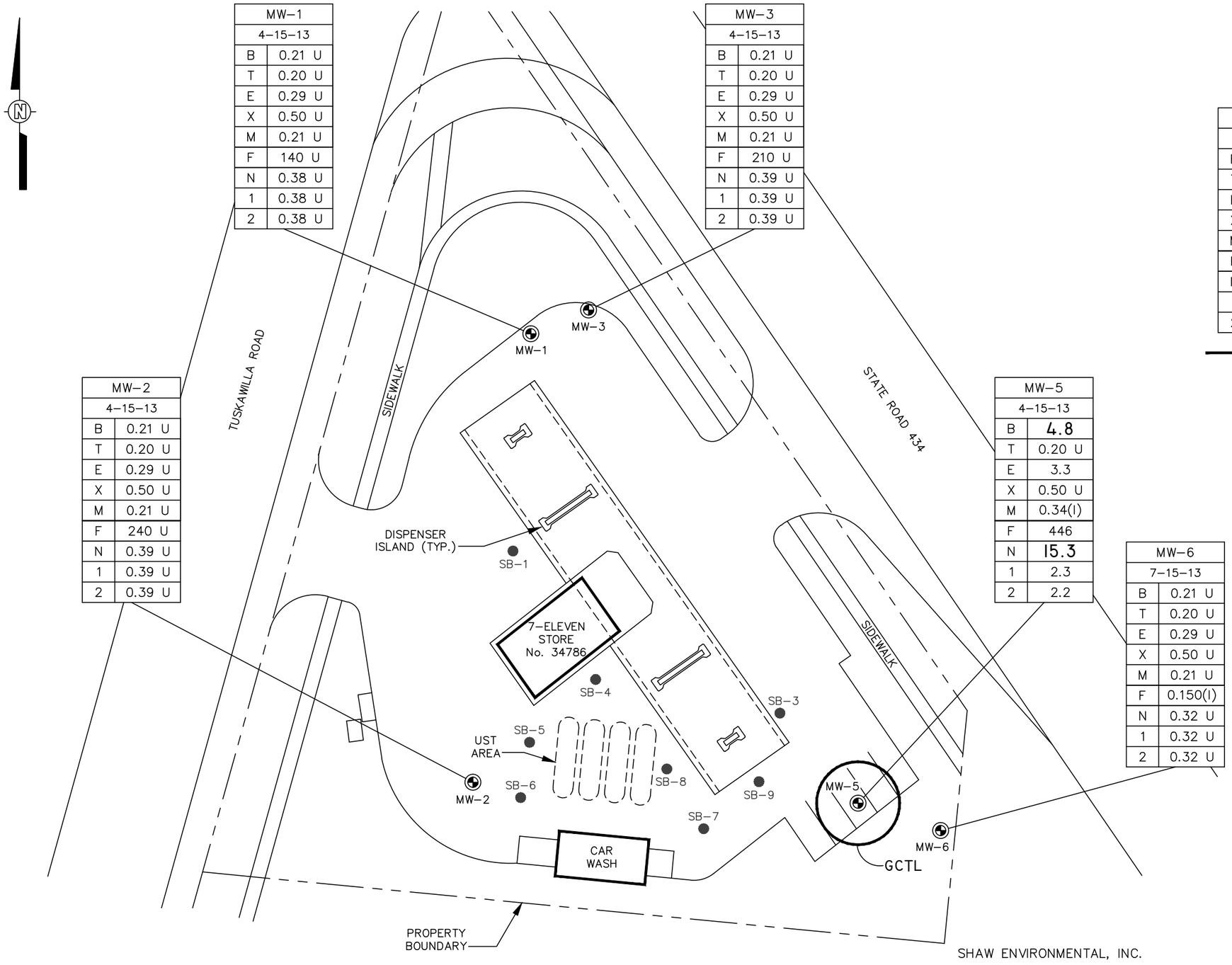
SHAW ENVIRONMENTAL, INC.
1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

OFFICE: WINTER GARDEN	DATE: 7-22-13	ACAD FILE: 9035B2

SOIL ANALYTICAL SUMMARY APRIL 8, 2013

CLIENT: 7-ELEVEN, INC. STORE No. 34786	PM: DM
LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA	

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	5



LEGEND:

- MONITORING WELL LOCATION
- SOIL BORING LOCATION

MW–3	
4–15–13	
B	0.21 U
T	0.20 U
E	0.29 U
X	0.50 U
M	0.21 U
F	210 U
N	0.39 U
1	0.39 U
2	0.39 U

- WELL IDENTIFICATION
- DATE OF SAMPLE
- BENZENE CONCENTRATION (ug/L)
- TOLUENE CONCENTRATION (ug/L)
- ETHYLBENZENE CONCENTRATION (ug/L)
- TOTAL XYLENES CONCENTRATION (ug/L)
- MTBE CONCENTRATION (ug/L)
- TRPH CONCENTRATION (ug/L)
- NAPHTHALENE CONCENTRATION (ug/L)
- 1–METHYLNAPHTHALENE CONC. (ug/L)
- 2–METHYLNAPHTHALENE CONC. (ug/L)

GCTL — GCTL EXCEEDANCE CONTOUR

U — ANALYTE BELOW METHOD DETECTION LIMIT

(I) — RESULT IS GREATER THAN OR EQUAL TO METHOD DETECTION LIMIT (MDL) BUT LESS THAN THE REPORTING LIMIT (RL)

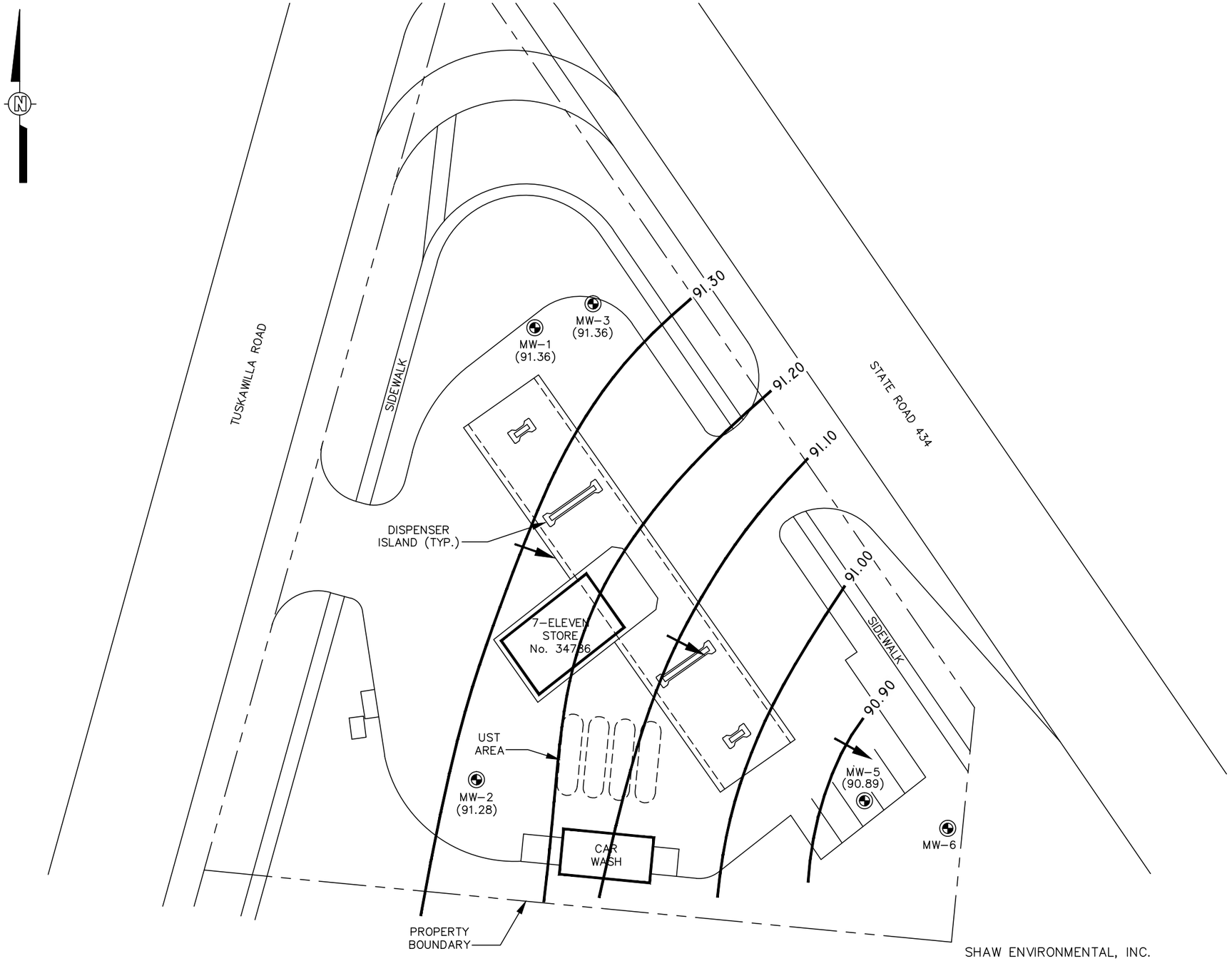
SHAW ENVIRONMENTAL, INC.
1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

OFFICE: WINTER GARDEN	DATE: 7–29–13	ACAD FILE: 9035B3

GROUNDWATER ANALYTICAL MAP APRIL 15 AND JULY 15, 2013

CLIENT: 7–ELEVEN, INC. STORE No. 34786	PM: DM
LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA	

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	6



LEGEND:

- MONITORING WELL LOCATION
- (90.89) GROUNDWATER ELEVATION (FEET)
- 91.30 GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

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1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
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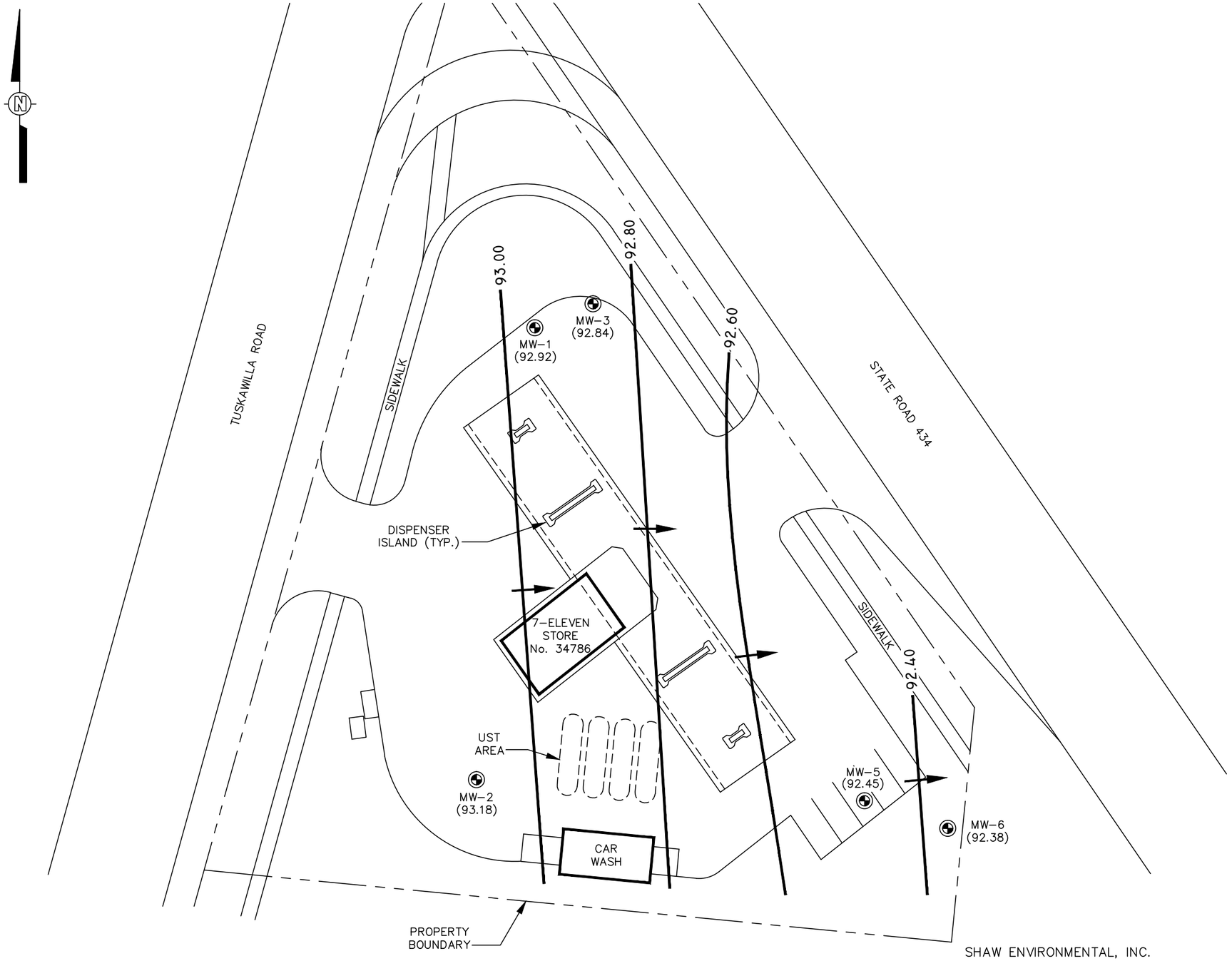
OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	7-22-13	9035B4

GROUNDWATER ELEVATION CONTOUR MAP APRIL 25, 2013

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	7



LEGEND:

- MONITORING WELL LOCATION
- (92.38) GROUNDWATER ELEVATION (FEET)
- 92.60 GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

SHAW ENVIRONMENTAL, INC.
1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

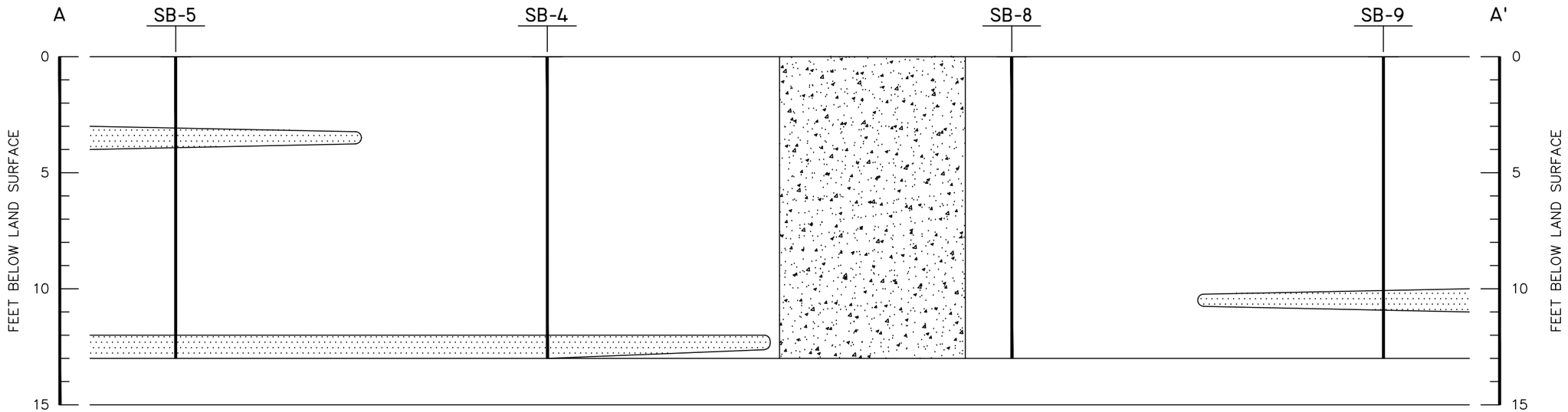
OFFICE: WINTER GARDEN	DATE: 7-22-13	ACAD FILE: 9035B5

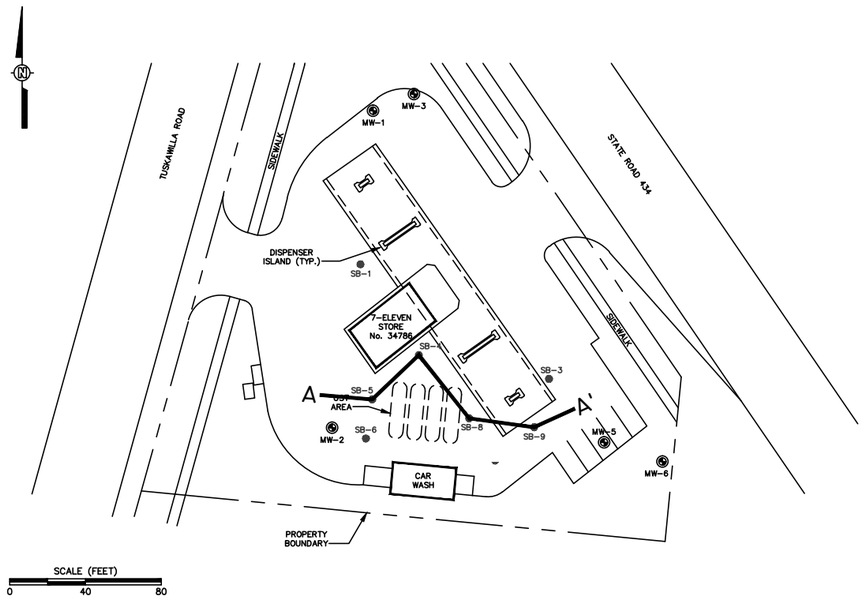
GROUNDWATER ELEVATION CONTOUR MAP JULY 15, 2013

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	8





LEGEND:

- SILTY SAND
- TANK PIT
- FINE SAND

HORIZONTAL SCALE
0 10 20 FEET

VERTICAL SCALE
0 5 10 FEET

SHAW ENVIRONMENTAL, INC.
1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

OFFICE: WINTER GARDEN	DATE: 7-29-13	ACAD FILE: 9035B1

LITHOLOGICAL CROSS-SECTION A-A' APRIL 8, 2013

CLIENT: 7-ELEVEN, INC. STORE No. 34786	PM: DM
LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA	

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	9

APPENDIX A
DISCHARGE REPORTING FORM

Florida Department of Environmental Regulation

Twin Towers Office Bldg. 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

NOT ON PCTOO6 11 2.2.94 3.14.94

Discharge Reporting Form

#0333

Use this form to notify the Department of Environmental Regulation of:

1. Results of tank tightness testing that exceed allowable tolerances within ten days of receipt of test result.
2. Petroleum discharges exceeding 25 gallons on pervious surfaces not described in Section 17-761.460 F.A.C. within one working day of discover
3. Hazardous substance (CERCLA regulated) discharges exceeding applicable reportable quantities established in 17-761.460(2) F.A.C., within one working day of the discovery
4. Within one working day of discovery of suspected releases confirmed by: (a) released regulated substances or pollutants discovered in the surrounding area, (b) unusual and unexplained storage system operating conditions, (c) monitoring results from a leak detection method or from a tank closure assessment that indicate a release may have occurred, or (d) manual tank gauging results for tanks of 550 gallons or less, exceeding ten gallons per weekly test or five gallons averaged over four consecutive weekly tests.

Mail to the DER District Office in your area listed on the reverse side of this form

PLEASE PRINT OR TYPE

Complete all applicable blanks

1. DER Facility ID Number: 599045623 2. Tank Number: _____ 3. Date: 5/3/92 3/94 4/94
4. Facility Name: MOBIL OIL CORPORATION 02-Q8M

   Facility Owner or Operator: MOBIL OIL CORPORATION

   Facility Address: 1205 STATE ROAD WINTER SPRINGS 32708

   Telephone Number: 407,366-3793 County: SEMINOLE

   Mailing Address: 3225 Gallows Road ZM. Fairfax, VA 22037
5. Date of receipt of test results or discovery: 4/26/93 month/day/year
6. Method of initial discovery. (circle one only)
   - A. Liquid detector (automatic or manual)
   - B. Vapor detector (automatic or manual)
   - C. Tightness test (underground tanks only).
   - D. Emptying and inspection.
   - E. Inventory control.
   - (F) Vapor/or visible signs of a discharge in the vicinity
   - G. Closure: _____ (explain)
   - H. Other: _____
7. Estimated number of gallons discharged: UNKNOWN AMOUNT OF FREE PRODUCT IN M/WEL
8. What part of storage system has leaked? (circle all that apply) A. Dispenser B. Pipe C. Fitting D. Tank (E) Unknown
9. Type of regulated substance discharged. (circle one)
   - A. leaded gasoline
   - (B) unleaded gasoline
   - C. gasohol
   - D. vehicular diesel
   - F. aviation gas
   - G. jet fuel
   - L. used/waste oil
   - M. diesel
   - O. new/lube oil
   - V. hazardous substance includes pesticides, ammonia, chlorine and derivatives (write in name or Chemical Abstract Service CAS number) _____
   - Z. other (write in name) _____
10. Cause of leak. (circle all that apply)
    - (A) Unknown
    - B. Split
    - C. Loose connection
    - D. Corrosion
    - E. Puncture
    - F. Installation failure
    - G. Spill _____
    - H. Overfill
    - I. Other (specify) _____
11. Type of financial responsibility. (circle one)
    - A. Third party insurance provided by the state insurance contractor
    - (B) Self-insurance pursuant to Chapter 17-769.500 F.A.C.
    - C. Not applicable
    - D. None

    5/3 CS
12. To the best of my knowledge and belief all information submitted on this form is true, accurate, and complete:

    MOBIL OIL CORPORATION
    Printed Name of Owner, Operator or Authorized Representative

    Robin A. Burns
    Signature of Owner-Operator or Authorized Representative

APPENDIX B
SOIL BORING LOGS,
WELL CONSTRUCTION AND DEVELOPMENT LOGS,
FDEP GROUNDWATER SAMPLING LOGS, AND
FIELD INSTRUMENT CALIBRATION RECORDS

March 24, 2020

David M. Press, P.G.
Environmental Protection Division
Orange County
3165 McCrory Place, Suite 200
Orlando, Florida 32803-3727

RE: Supplemental Site Assessment Report
Mobil- Winter Springs #731
1205 East State Road 434
Winter Springs, Seminole County, Florida
FDEP Facility ID #59/9045623

Dear Mr. Press:

FRS Environmental Remediation, Inc., dba Montrose Environmental Solutions (Montrose) has completed supplemental site assessment activities at the above referenced facility. Pertinent site features are depicted on Figure 1.

SITE HISTORY

On May 3, 1993, a Discharge Reporting Form (DRF) was filed indicating an unknown amount of free product was found in a monitoring well at the site.

A comprehensive Site Assessment Report (SAR) was submitted July 30, 2013 by Shaw Environmental, Inc. No OVA responses were detected above 0 ppm and no laboratory soil samples contained concentrations above Soil Cleanup Target Levels (SCTLs). Groundwater concentrations above Groundwater Cleanup Target Levels (GCTLs) was not identified with the exception of benzene (4.8 ug/L) in MW-5.

FIELD ACTIVITIES

Soil Boring Installation & Soil Screening

On March 13, 2020, Montrose personnel mobilized to the subject site and oversaw the advancement of three soil borings (SB-10 through SB-12). The soil borings were installed to eight feet below land surface (bls) utilizing a stainless-steel hand auger. SB-12 reached refusal at 4 feet bls. Soil samples from each boring were collected at two foot intervals and placed in 16 oz. glass (half-filled) mason jars and covered with aluminum foil. After allowing time for the organic vapors to accumulate in the headspace of each container, the samples were screened to determine the concentration of petroleum hydrocarbons with an Organic Vapor Analyzer equipped with a Photo-Ionization Detector

(OVA/PID). A summary of the organic vapor concentrations is presented in Table 1. The location of the soil borings and summary of organic vapor readings are depicted on Figure 2. Field notes and equipment calibration logs are included in Appendix A. Soil boring logs are included as Appendix B.

Monitoring Well Installation and Construction

On March 13, 2020, two shallow groundwater monitoring wells (MW-7 and MW-8) were installed at the locations shown on Figure 1. The monitoring wells were installed to a total depth of 15 feet bls and constructed with five feet of 2-inch diameter schedule 40 PVC well riser and ten feet of 2-inch diameter factory slotted well screen. After installation, the wells were purged onto an impervious surface until free of visible fines and completed flush to grade with a traffic rated manhole and a concrete well pad. A copy of the Well Construction and Development Logs are included with Appendix B.

Investigative Derived Waste (IDW) from monitoring wells was containerized in 55-gallon drums and transported offsite for disposal. Waste disposal documentation is provided in Appendix B. Prior to drum disposal, a preburn laboratory soil sample was collected for RCRA 4 metals. The laboratory analytical report is provided in Appendix C.

Soil Analytical Results

Three laboratory soil samples were collected during soil assessment activities. Soil samples were collected from SB-10 @ 2', SB-11 @ 2', and SB-12 @ 12' and submitted for laboratory analysis via EPA Method 8260 (BTEX/MTBE), EPA Method 8270 (PAHs), and FL-PRO (TRPH). Laboratory analytical results indicated that the concentration of all constituents were below SCTLs and/or laboratory Method Detection Limits (MDLs).

The soil laboratory results are summarized in Table 2. Laboratory analytical results are depicted on Figure 3. The laboratory analytical report and chain of custody are provided in Appendix C.

Monitoring Well Sampling

On March 18, 2020, Montrose personnel mobilized to the site and collected groundwater samples from monitoring wells MW-1 through MW-3, and MW-5 through MW-8. All sampling procedures were performed in accordance with the Department of Environmental Protection's Standard Operating Procedures for Groundwater Sampling (DEP-SOP-001/01, FS, 2200). All groundwater samples were collected using a peristaltic pump into laboratory supplied containers, placed on ice in a storage cooler, and transported to a certified lab for analysis. The groundwater samples were laboratory analyzed in accordance with EPA Method 8260 for BTEX/MTBE, EPA Method 8270 for PAHs, and FL-PRO for TRPH. Groundwater sampling logs and equipment calibration logs are included in Appendix A.

Groundwater Analytical Results

Groundwater analytical results indicated that all concentrations were below Groundwater Cleanup Target Levels (GCTLs) and/or laboratory Method Detection Limits (MDLs) during the March 18, 2020 groundwater sampling event. Analytical results are summarized on **Table 3** and are illustrated on **Figure 4**. A copy of the laboratory analytical report and chain of custody are included in **Appendix C**.

Water Table Measurements and Groundwater Flow

Montrose personnel collected depth-to-water measurements prior to groundwater sampling activities. The depth-to-water measurements and groundwater elevation calculations are summarized in **Table 4**. Based on the current data, groundwater flow in the surficial aquifer was generally to the southeast. A groundwater contour map is included as **Figure 5**.

CONCLUSIONS & RECOMMENDATIONS

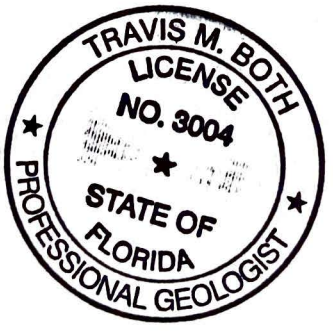
Based on soil and groundwater analytical results, the following conclusions and recommendations can be made regarding this site at this time:

- Soil contamination was not identified at the site.
- Groundwater impacts were not identified above GCTLs at the site. Previously impacted MW-5 has exhibited two consecutive clean rounds of groundwater sampling below GCTLs.
- At this time, the site qualifies for No Further Action. Montrose recommends submitting a change order to add in well abandonment to the current PO.

If you have any questions or comments, please contact this office at (813) 623-1557.

Sincerely,

Travis Both, P.G.
Project Manager
FL License No. 3004
Date: 3/25/2020



FIGURES

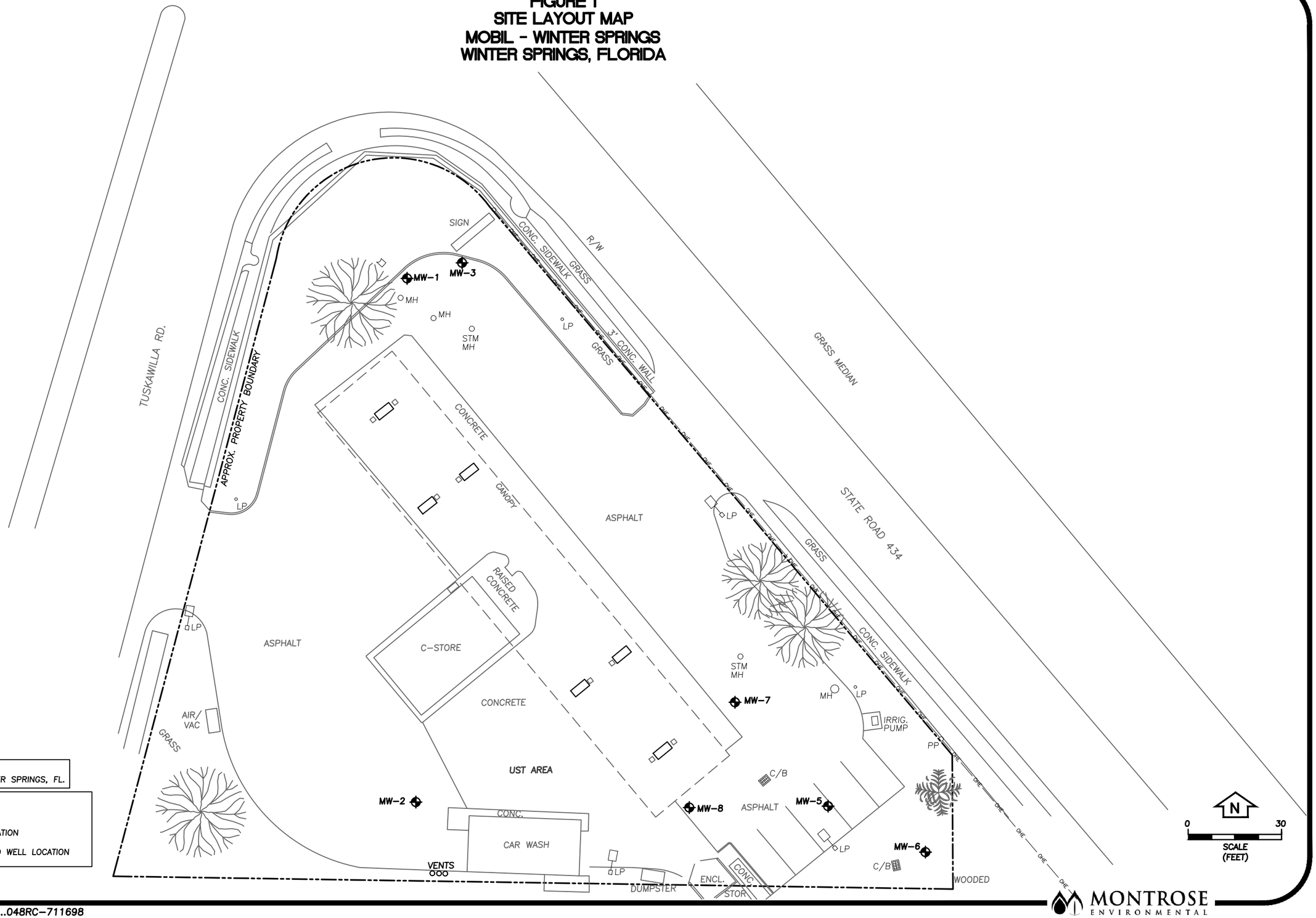
Florida Office
Environmental Solutions
120 E. Dr. MLK Jr. Blvd.
Tampa, FL 33603

T: 813.623.1557
F: 813.623.6320
info@montrose-env.com
www.montrose-env.com

Global Headquarters
1 Park Plaza
Suite 1000
Irvine, CA 92614

T: 949.988.3500
F: 949.988.3514
info@montrose-env.com
www.montrose-env.com

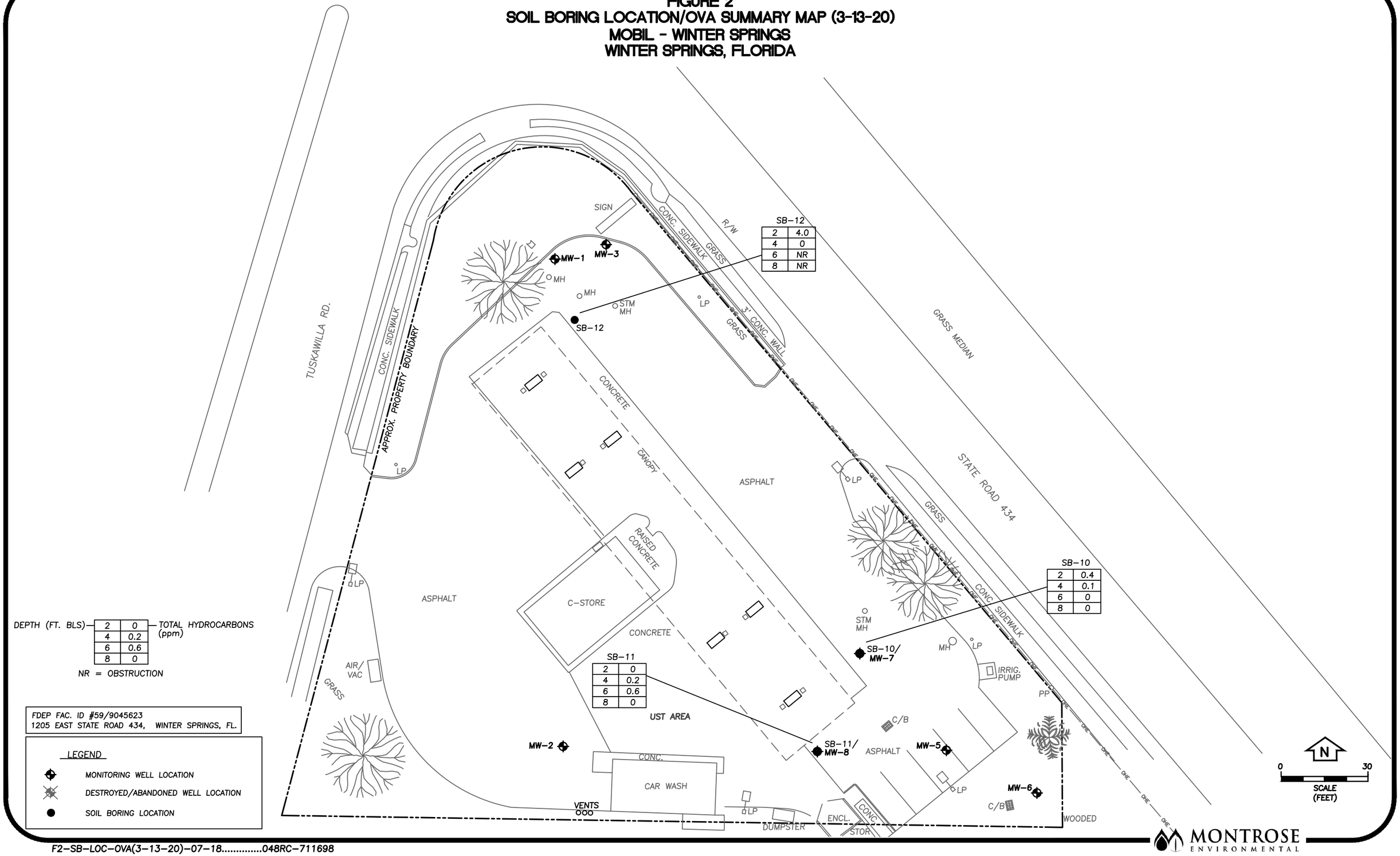
FIGURE 1
SITE LAYOUT MAP
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



F1-SITELAY-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

FIGURE 2
SOIL BORING LOCATION/OVA SUMMARY MAP (3-13-20)
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



DEPTH (FT. BLS) — TOTAL HYDROCARBONS (ppm)

2	0
4	0.2
6	0.6
8	0

NR = OBSTRUCTION

FDEP FAC. ID #59/9045623
1205 EAST STATE ROAD 434, WINTER SPRINGS, FL.

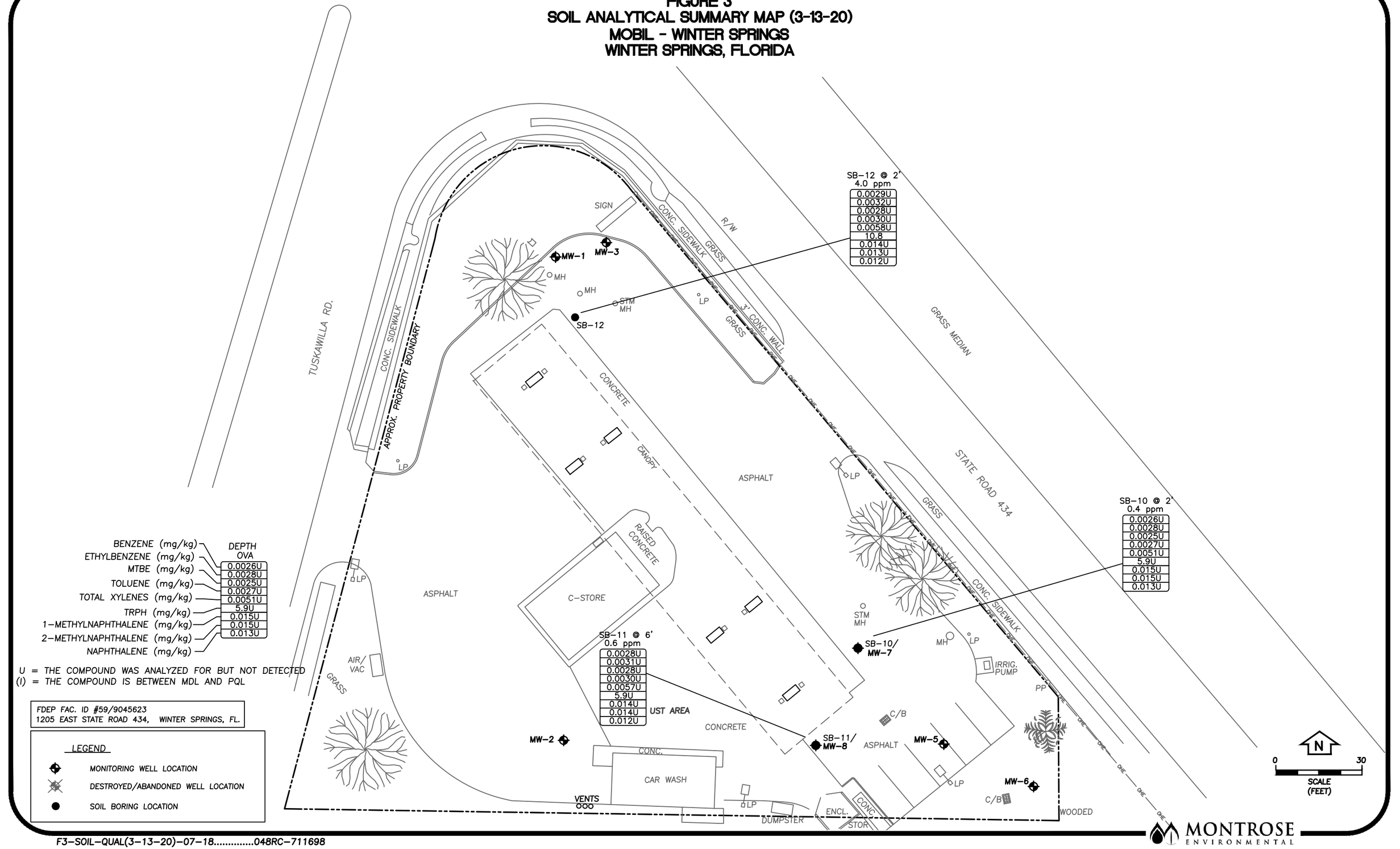
LEGEND

- MONITORING WELL LOCATION
- DESTROYED/ABANDONED WELL LOCATION
- SOIL BORING LOCATION

F2-SB-LOC-OVA(3-13-20)-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

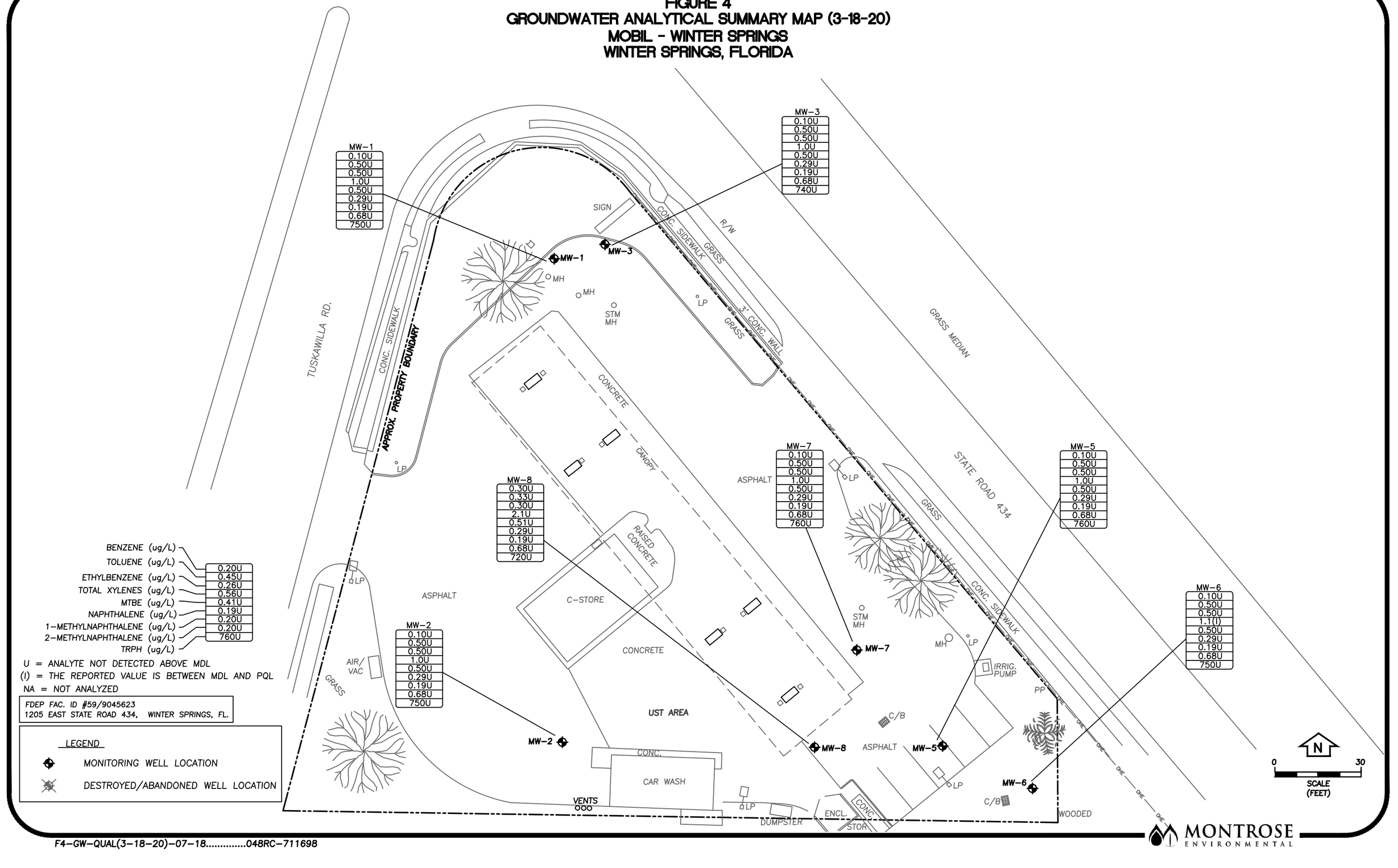
FIGURE 3
SOIL ANALYTICAL SUMMARY MAP (3-13-20)
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



F3-SOIL-QUAL(3-13-20)-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

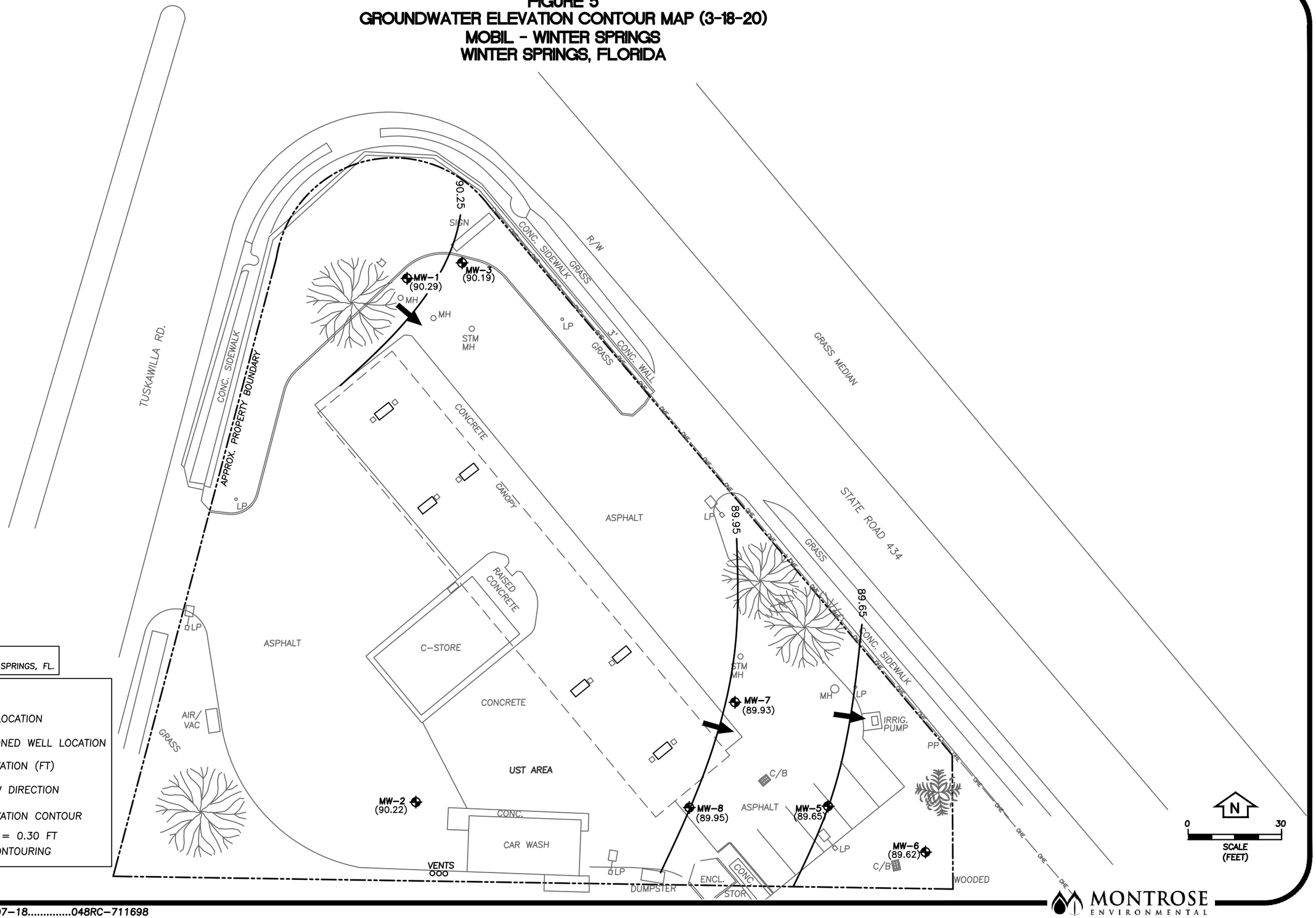
FIGURE 4
GROUNDWATER ANALYTICAL SUMMARY MAP (3-18-20)
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



F4-GW-QUAL(3-18-20)-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

FIGURE 5
GROUNDWATER ELEVATION CONTOUR MAP (3-18-20)
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



F5-GW-ELEV(3-18-20)-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

TABLES

Florida Office
Environmental Solutions
120 E. Dr. MLK Jr. Blvd.
Tampa, FL 33603

T: 813.623.1557
F: 813.623.6320
info@montrose-env.com
www.montrose-env.com

Global Headquarters
1 Park Plaza
Suite 1000
Irvine, CA 92614

T: 949.988.3500
F: 949.988.3514
info@montrose-env.com
www.montrose-env.com

TABLE 1: SUMMARY OF OVA/PID FIELD SCREENING RESULTS

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

NQ=Not Qantifiable

Sample	Date	Depth (FBLS)	OVA/PID Screening Results* (ppm)	
			Total Hydrocarbons	Comments
SB-1	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	0.4	
		13	<1	
SB-3	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	NQ	
		12	NQ	
		13	43.0	
SB-4	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-5	4/8/2013	1	<1	
		2	0.5	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	

TABLE 1: SUMMARY OF OVA/PID FIELD SCREENING RESULTS

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

NQ=Not Qantifiable

Sample	Date	Depth (FBLS)	OVA/PID Screening Results* (ppm)	
			Total Hydrocarbons	Comments
SB-6	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-7	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-8	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-9	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-10	7/12/2013	1	<1	
		3	<1	
		5	<1	
		7		No Recovery
		9		No Recovery
		11	<1	
		13	<1	
		15	<1	
SB-10	3/13/2020	2	0.4	lab sample
		4	0.1	
		6	0	
		8	0	
SB-11	3/13/2020	2	0	
		4	0.2	
		6	0.6	lab sample
		8	0	

TABLE 1: SUMMARY OF OVA/PID FIELD SCREENING RESULTS

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

NQ=Not Qantifiable

Sample	Date	Depth (FBLS)	OVA/PID Screening Results* (ppm)	
			Total Hydrocarbons	Comments
SB-12	3/13/2020	2	4.0	lab sample
		4	0	
		6		Obstruction
		8		Obstruction

TABLE 2: SOIL SAMPLE ANALYTICAL SUMMARY

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

Analytical Results = mg/kg
The compound was analyzed for but not detected = U
The reported value is between the laboratory method detection limit and the laboratory practical quantitiation limit = I
No Results = NR
Not Analyzed = NA

Sample ID	Depth (ft)	OVA (ppm)	Date	Benzene	Ethylbenzene	MTBE	Toluene	Total xylenes	TRPH	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)flouranthene	Benzo(ghi)perylene	Benzo(k)flouranthene	Chrysene	Dibenzo(a,h)anthracene	Flouranthene	Flourene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene Equivalency
Soil Cleanup Target Levels (Direct Exp. Residential)				**1.2**	**1,500**	**4,400**	**7,500**	**130**	**460**	**200**	**210**	**2,400**	**1,800**	**21,000**	**#**	**0.1**	**#**	**2,500**	**#**	**#**	**#**	**3,200**	**2,600**	**#**	**55**	**2,200**	**2,400**	**0.1**
Soil Cleanup Target Levels (Leachability)				**0.007**	**0.6**	**0.09**	**0.5**	**0.2**	**340**	**3.1**	**8.5**	**2.1**	**27**	**2,500**	**0.8**	**8**	**2.4**	**32,000**	**24**	**77**	**0.7**	**1,200**	**160**	**6.6**	**1.2**	**250**	**880**	**0.7**
SB-3	12	NA	4/8/2013	0.00070 U	0.00077 U	0.00070 U	0.00070 U	0.0021 U	6.1 U	0.065 U	0.065 U	0.065 U	0.065 U	0.041 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.041 U	0.065 U	0.0081 U	0.065 U	0.041 U	0.041 U	NA
SB-9	4	<1	4/8/2013	0.00074 U	0.00082 U	0.00074 U	0.00074 U	0.0023 U	10.6	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.036 U	0.058 U	0.0073 U	0.058 U	0.036 U	0.036 U	NA
SB-10	2	0.4	3/13/2020	0.0026 U	0.0028 U	0.0025 U	0.0027 U	0.0051 U	5.9 U	0.015 U	0.015 U	0.013 U	0.012 U	0.014 U	0.011 U	0.0096 U	0.010 U	0.0097 U	0.010 U	0.012 U	0.0089 U	0.013 U	0.014 U	0.0088 U	0.013 U	0.013 U	0.012 U	NA
SB-11	6	0.6	3/13/2020	0.0028 U	0.0031 U	0.0028 U	0.0030 U	0.0057 U	5.4 U	0.014 U	0.014 U	0.012 U	0.011 U	0.013 U	0.010 U	0.0089 U	0.0095 U	0.0090 U	0.0095 U	0.011 U	0.0082 U	0.012 U	0.013 U	0.0082 U	0.012 U	0.012 U	0.011 U	NA
SB-12	2	4.0	3/13/2020	0.0029 U	0.0032 U	0.0028 U	0.0030 U	0.0058 U	10.8	0.014 U	0.013 U	0.012 U	0.011 U	0.012 U	0.010 U	0.0087 U	0.0093 U	0.0088 U	0.0093 U	0.011 U	0.0080 U	0.011 U	0.012 U	0.0080 U	0.012 U	0.011 U	0.011 U	NA

 # = Concentration converted to benzo(a)pyrene equivalent column

TABLE 3: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

Analytical Results = ug/L
NA = Not Analyzed
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
U = Compound was analyzed but not detected
J = Estimated Result

Sample Location	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	FL-PRO TRPH	Lead	EDB	1,2-DCA	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Phenanthrene	Pyrene
GCTLs		**1**	**40**	**30**	**20**	**20**	**5000**	**15**	**0.02**	**3**	**20**	**210**	**2100**	**0.05**	**0.2**	**0.05**	**210**	**0.5**	**4.8**	**0.005**	**280**	**280**	**0.05**	**14**	**28**	**28**	**210**	**210**
NADCs		**100**	**400**	**300**	**200**	**200**	**50000**	**150**	**2**	**300**	**200**	**2100**	**21000**	**5**	**20**	**5**	**2100**	**50**	**480**	**0.5**	**2800**	**2800**	**5**	**140**	**280**	**280**	**2100**	**2100**
MW-1	4/15/2013	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	140 U				0.38 U	0.38 U	0.24 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.24 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.24 U	0.24 U
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.19 U	0.20 U	0.20 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	750 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-2	4/15/2013	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	240 U				0.39 U	0.39 U	0.25 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.25 U	0.39 U	0.039 U	0.39 U	0.39 U	0.39 U	0.25 U	0.25 U
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.18 U	0.19 U	0.19 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	750 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-3	4/15/2013	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	210 U				0.39 U	0.39 U	0.24 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.24 U	0.39 U	0.039 U	0.39 U	0.39 U	0.39 U	0.24 U	0.24 U
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.18 U	0.19 U	0.18 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	740 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-5	4/15/2013	**4.8**	0.20 U	3.3	0.50 U	0.34 I	446				0.40 U	0.40 U	0.25 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.25 U	0.40 U	0.040 U	**15.3**	2.3	2.2	0.25 U	0.25 U
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.18 U	0.19 U	0.18 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	760 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-6	7/15/2013	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	0.150 I				0.32 U	0.32 U	0.20 U	0.032 U	0.032 U	0.032 UV	0.032 U	0.032 UV	0.032 U	0.032 U	0.20 U	0.32 U	0.032 UV	0.32 U	0.32 U	0.32 U	0.20 U	0.20 U	
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.18 U	0.19 U	0.19 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.1 I	0.50 U	750 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-7	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	760 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-8	3/18/2020	0.30 U	0.33 U	0.30 U	2.1 U	0.51 U	720 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	

TABLE 4: GROUNDWATER ELEVATION DATA

Facility Name: Mobil-Winter Springs #731
Facility ID: 59/9045623

All Measurements = Feet
FP = Free Product
UK = Unknown
NM= Not Measured

WELL NO.	MW-1		MW-2		MW-3		MW-5		MW-6	
DIAMETER	2	in.	2	in.	8	in.	2	in.	2	in.
WELL DEPTH	16.00	feet	15.00	feet	15.00	feet	15.00	feet	15.00	feet
SCREEN INTERVAL	6-16	feet	5-15	feet	5-15	feet	5-15	feet	5-15	feet
TOC ELEVATION	100.17	feet	100.03	feet	99.84	feet	100.00	feet	98.78	feet

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
4/15/2013	90.75	9.42		90.55	9.48		90.42	9.42		90.42	9.58				
4/25/2013	91.36	8.81		91.28	8.75		91.36	8.48		90.89	9.11				
7/15/2013	92.92	7.25		93.18	6.85		92.84	7.00		92.45	7.55		92.38	6.40	
3/18/2020	90.29	9.88		90.22	9.81		90.19	9.65		89.65	10.35		89.62	9.16	

WELL NO.	MW-7		MW-8												
DIAMETER	2	in.	2	in.		in.			in.			in.			in.
WELL DEPTH	15.00	feet	15.00	feet		feet			feet			feet			feet
SCREEN INTERVAL	5-15	feet	5-15	feet		feet			feet			feet			feet
TOC ELEVATION	100.24	feet	100.09	feet		feet			feet			feet			feet

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
3/18/2020	89.93	10.31		89.95	10.14										

WELL NO.															
DIAMETER			in.			in.			in.			in.			in.
WELL DEPTH			feet			feet			feet			feet			feet
SCREEN INTERVAL			feet			feet			feet			feet			feet
TOC ELEVATION			feet			feet			feet			feet			feet

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP

APPENDIX A
Field Notes, Equipment Calibration Logs, and Groundwater Sampling Logs

Florida Office
Environmental Solutions
120 E. Dr. MLK Jr. Blvd.
Tampa, FL 33603

T: 813.623.1557
F: 813.623.6320
info@montrose-env.com
www.montrose-env.com

Global Headquarters
1 Park Plaza
Suite 1000
Irvine, CA 92614

T: 949.988.3500
F: 949.988.3514
info@montrose-env.com
www.montrose-env.com

Appendix iii

Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708

Inquiry Number: 7123398.2s
September 20, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

TUSKAWILLA RD & FL 434
WINTER SPRINGS, FL 32708

COORDINATES

Latitude (North):	28.6950110 - 28ˆ 41' 42.03''
Longitude (West):	81.2620680 - 81ˆ 15' 43.44''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	474399.5
UTM Y (Meters):	3174049.8
Elevation:	43 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	11610138 CASSELBERRY, FL
Version Date:	2018
East Map:	11610186 OVIEDO, FL
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20151017, 20150806
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
TUSKAWILLA RD & FL 434
WINTER SPRINGS, FL 32708

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	TOWN CENTER S.E.E.D.		BROWNFIELDS	Same	1 ft.
Reg	FORMER CENTRAL FLORI		BROWNFIELDS	Same	1107, 0.210, SSE
A1	EXXON MOBIL CORPORAT	1205 E STATE ROAD 43	EDR Hist Auto	Higher	1 ft.
A2	MOBIL R/S #10918	1205 E STATE ROAD 43	RGA LUST	Higher	1 ft.
A3	7-ELEVEN STORE #3478	1205 E STATE ROAD 43	RGA LUST	Higher	1 ft.
A4	MOBIL OIL CORP SS #Q	1205 E SR 434	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
A5	MOBIL #02-Q8M	1205 E HWY 434	RGA LUST	Higher	1 ft.
A6	MOBIL #02-Q8M	1205 E SR 434	RGA LUST	Higher	1 ft.
A7	MOBIL R/S # 10918	1205 E HWY 434	RGA LUST	Higher	1 ft.
A8	MOBIL-WINTER SPRINGS	1205 E STATE ROAD 43	LUST, UST, CLEANUP SITES, DWM CONTAM, Financial...	Higher	1 ft.
A9	FOREIGN CAR PARTS SE	1207 E STATE ROAD 43	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
A10		1205 STATE ROAD 434	HMIRS	Lower	1 ft.
11	1212 E. SR 434 DEBRI	1212 E. SR 434	SWF/LF	Lower	108, 0.020, NE
B12	SCRIMSHER PARCEL	E SR 434	DWM CONTAM, RESP PARTY	Lower	272, 0.052, SE
B13	WINTER SPRINGS CITY	80 MICHAEL BLAKE BLV	AST, Financial Assurance, NPDES	Lower	274, 0.052, ESE
14	HANDY WAY FOOD STORE	170 TUSCAWILLA RD	LUST, UST, DWM CONTAM, Financial Assurance	Higher	342, 0.065, NW
15	HI FLAVOR MEATS	315 TUSKAWILLA RD	RCRA NonGen / NLR, FINDS, ECHO	Lower	746, 0.141, SSW
16	2950 RAILROAD	2950 RAILROAD AVE	BROWNFIELDS, ASBESTOS	Lower	1018, 0.193, South
C17	PUBLIX SUPER MARKET	1160 E SR 434	AST	Higher	1121, 0.212, NNW
C18	PUBLIX SUPER MARKET	1160 E STATE ROAD 43	RCRA-VSQG	Higher	1121, 0.212, NNW
19	VACANT CHURCH AND WA	395 TUSKAWILLA RD. &	SWF/LF, ASBESTOS	Higher	1724, 0.327, SSW
20	WINTER SPRINGS CITY-	1126 E HWY 434	LUST, UST, AST, DWM CONTAM, Financial Assurance	Lower	2118, 0.401, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

Lists of state- and tribal hazardous waste facilities

SHWS ---------- Florida's State-Funded Action Sites

Lists of state and tribal leaking storage tanks

LAST ---------- Leaking Aboveground Storage Tank Listing
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FF TANKS ---------- Federal Facilities Listing
FEMA UST ---------- Underground Storage Tank Listing
INDIAN UST ---------- Underground Storage Tanks on Indian Land
TANKS ---------- Storage Tank Facility List

State and tribal institutional control / engineering control registries

ENG CONTROLS ---------- Institutional Controls Registry
INST CONTROL ---------- Institutional Controls Registry

Lists of state and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Sites
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY ---------- Recycling Centers
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
PRIORITYCLEANERS ---------- Priority Ranking List
Fl Sites ---------- Sites List
US CDL ---------- National Clandestine Laboratory Register
AQUEOUS FOAM ---------- Former Fire Training Facility Assessments Listing
PFAS ---------- PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid

Local Land Records

LIENS 2 ---------- CERCLA Lien Information

EXECUTIVE SUMMARY

Records of Emergency Release Reports

SPILLS	Oil and Hazardous Materials Incidents
SPILLS 90	SPILLS 90 data from FirstSearch
SPILLS 80	SPILLS 80 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
AIRS	Permitted Facilities Listing
ASBESTOS	ASBESTOS
DEDB	Ethylene Dibromide Database Results
DRYCLEANERS	Drycleaning Facilities
FL Cattle Dip. Vats	Cattle Dipping Vats
HW GEN	Hazardous Waste Generators
SITE INV SITES	Site Investigation Section Sites Listing
TIER 2	Tier 2 Facility Listing
UIC	Underground Injection Wells Database Listing
NPDES	Wastewater Facility Regulation Database
MINES MRDS	Mineral Resources Data System

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner---------- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS---------- Recovered Government Archive State Hazardous Waste Facilities List
RGA LF---------- Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 06/20/2022 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PUBLIX SUPER MARKET EPA ID:: FLR000242453	1160 E STATE ROAD 43	NNW 1/8 - 1/4 (0.212 mi.)	C18	68

EXECUTIVE SUMMARY

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Environmental Protection's Facility Directory (Solid Waste Facilities).

A review of the SWF/LF list, as provided by EDR, has revealed that there are 2 SWF/LF sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VACANT CHURCH AND WA	***395 TUSKAWILLA RD. &***	***SSW 1/4 - 1/2 (0.327 mi.)***	***19***	***72***
Database: SWF/LF, Date of Government Version: 04/11/2022				
Facility-Site Id: 104855				
Class Status: INACTIVE (I)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
1212 E. SR 434 DEBRI	1212 E. SR 434	NE 0 - 1/8 (0.020 mi.)	11	45
Database: SWF/LF, Date of Government Version: 04/11/2022				
Facility-Site Id: 98367				
Class Status: PRE-AUTHORIZED (B)				

Lists of state and tribal leaking storage tanks

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's PCTO1--Petroleum Contamination Detail Report.

A review of the LUST list, as provided by EDR, and dated 04/25/2022 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***
Discharge Cleanup Status: RA - RA ONGOING				
Facility Status: OPEN				
Facility-Site Id: 9045623				
HANDY WAY FOOD STORE	***170 TUSCAWILLA RD***	***NW 0 - 1/8 (0.065 mi.)***	***14***	***51***
Discharge Cleanup Status: NFA - NFA COMPLETE				
Facility Status: CLOSED				
Facility-Site Id: 8516641				

Lower Elevation	Address	Direction / Distance	Map ID	Page
WINTER SPRINGS CITY-	***1126 E HWY 434***	***NNW 1/4 - 1/2 (0.401 mi.)***	***20***	***73***
Discharge Cleanup Status: NFA - NFA COMPLETE				
Facility Status: OPEN				
Facility-Site Id: 8731664				

Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. Shortly after the September 11 event, the DEP was instructed to remove the detail about some of the storage tank facilities in the state from their reports. Federal-owned facilities and bulk storage facilities are included in that set.

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***
Database: UST, Date of Government Version: 05/05/2022 Tank Status: B Tank Status: U Facility-Site Id: 9045623 Facility Status: OPEN				
HANDY WAY FOOD STORE	***170 TUSCAWILLA RD***	***NW 0 - 1/8 (0.065 mi.)***	***14***	***51***
Database: UST, Date of Government Version: 05/05/2022 Tank Status: B Facility-Site Id: 8516641 Facility Status: CLOSED				

AST: Shortly after the Sept 11 event, the DEP was instructed to remove the detail about some of the storage tank facilities in the state from their reports. Federal-owned facilities and bulk storage facilities are included in that set.

A review of the AST list, as provided by EDR, has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PUBLIX SUPER MARKET	1160 E SR 434	NNW 1/8 - 1/4 (0.212 mi.)	C17	67
Database: AST, Date of Government Version: 05/05/2022 Facility-Site Id: 9809815 Facility Status: OPEN Facility Status: OPEN				

Lower Elevation	Address	Direction / Distance	Map ID	Page
WINTER SPRINGS CITY	***80 MICHAEL BLAKE BLV***	***ESE 0 - 1/8 (0.052 mi.)***	***B13***	***49***
Database: AST, Date of Government Version: 05/05/2022 Facility-Site Id: 9818667 Facility Status: OPEN Facility Status: OPEN				

Lists of state and tribal brownfield sites

BROWNFIELDS: Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

A review of the BROWNFIELDS list, as provided by EDR, has revealed that there are 3 BROWNFIELDS sites

within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOWN CENTER S.E.E.D.		0 - 1/8 (0.000 mi.)	0	8
Database: BROWNFIELDS AREAS, Date of Government Version: 12/07/2021				
FORMER CENTRAL FLORI		SSE 1/8 - 1/4 (0.210 mi.)	0	8
Database: BROWNFIELDS AREAS, Date of Government Version: 12/07/2021				

Lower Elevation	Address	Direction / Distance	Map ID	Page
2950 RAILROAD	***2950 RAILROAD AVE***	***S 1/8 - 1/4 (0.193 mi.)***	***16***	***65***
Database: BROWNFIELDS, Date of Government Version: 01/11/2022				
Database: BSRA, Date of Government Version: 02/28/2022				
Site Id: BF590702001				
Facility-Site Id: BF590702000				
Site Id: BF590702001				

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

HMIRS: The Hazardous Materials Incident Report System contains hazardous material spill incidents reported to the Department of Transportation. The source of this database is the U.S. EPA.

A review of the HMIRS list, as provided by EDR, and dated 03/21/2022 has revealed that there is 1 HMIRS site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1205 STATE ROAD 434	0 - 1/8 (0.000 mi.)	A10	44

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/20/2022 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL CORP SS #Q	***1205 E SR 434***	***0 - 1/8 (0.000 mi.)***	***A4***	***9***
EPA ID:: FLD984205518				
FOREIGN CAR PARTS SE	***1207 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A9***	***40***
EPA ID:: FLD981748007				

Lower Elevation	Address	Direction / Distance	Map ID	Page
HI FLAVOR MEATS	***315 TUSKAWILLA RD***	***SSW 1/8 - 1/4 (0.141 mi.)***	***15***	***60***

EXECUTIVE SUMMARY

EPA ID:: FLR000057604

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 05/13/2022 has revealed that there are 2 FINDS sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL CORP SS #Q Registry ID:: 110006386534	***1205 E SR 434***	***0 - 1/8 (0.000 mi.)***	***A4***	***9***
FOREIGN CAR PARTS SE Registry ID:: 110005991579	***1207 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A9***	***40***

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 04/02/2022 has revealed that there are 2 ECHO sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL CORP SS #Q Registry ID: 110006386534	***1205 E SR 434***	***0 - 1/8 (0.000 mi.)***	***A4***	***9***
FOREIGN CAR PARTS SE Registry ID: 110005991579	***1207 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A9***	***40***

CLEANUP SITES: This listing includes the locations of waste cleanup sites from various programs. The source of the cleanup site data includes Hazardous Waste programs, Site Investigation Section, Compliance and Enforcement Tracking, Drycleaning State Funded Cleanup Program (possibly other state funded cleanup), Storage Tank Contamination Monitoring.

A review of the CLEANUP SITES list, as provided by EDR, and dated 08/22/2022 has revealed that there is 1 CLEANUP SITES site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS DEP Cleanup Site Key: 72642594	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***

DWM CONTAM: A listing of active or known sites. The listing includes sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and drycleaning).

A review of the DWM CONTAM list, as provided by EDR, and dated 11/30/2021 has revealed that there are 4 DWM CONTAM sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS Program Site Id: 9045623	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***
HANDY WAY FOOD STORE Program Site Id: 8516641	***170 TUSCAWILLA RD***	***NW 0 - 1/8 (0.065 mi.)***	***14***	***51***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCRIMSHER PARCEL Program Site Id: ERIC_11188	***E SR 434***	***SE 0 - 1/8 (0.052 mi.)***	***B12***	***46***
WINTER SPRINGS CITY- Program Site Id: 8731664	***1126 E HWY 434***	***NNW 1/4 - 1/2 (0.401 mi.)***	***20***	***73***

A list of hazardous waste facilities required to provide financial assurance under RCRA.

A review of the Financial Assurance list, as provided by EDR, has revealed that there is 1 Financial Assurance site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS Database: Financial Assurance 3, Date of Government Version: 05/03/2022 Facility Status: OPEN Facility ID: 9045623	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***

RESP PARTY: Open, inactive and closed responsible party sites

A review of the RESP PARTY list, as provided by EDR, and dated 06/27/2022 has revealed that there is 1 RESP PARTY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCRIMSHER PARCEL Site Status: CLOSED	***E SR 434***	***SE 0 - 1/8 (0.052 mi.)***	***B12***	***46***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR

researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXON MOBIL CORPORAT	1205 E STATE ROAD 43	0 - 1/8 (0.000 mi.)	A1	8

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST: The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

A review of the RGA LUST list, as provided by EDR, has revealed that there are 5 RGA LUST sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL R/S #10918 Facility ID: 9045623	1205 E STATE ROAD 43	0 - 1/8 (0.000 mi.)	A2	9
7-ELEVEN STORE #3478 Facility ID: 9045623	1205 E STATE ROAD 43	0 - 1/8 (0.000 mi.)	A3	9
MOBIL #02-Q8M Facility ID: 9045623	1205 E HWY 434	0 - 1/8 (0.000 mi.)	A5	13
MOBIL #02-Q8M Facility ID: 9045623	1205 E SR 434	0 - 1/8 (0.000 mi.)	A6	13
MOBIL R/S # 10918 Facility ID: 9045623	1205 E HWY 434	0 - 1/8 (0.000 mi.)	A7	14

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
UPRIGHT RECYCLING/BRUCE G BECK	SWF/LF

OVERVIEW MAP - 7123398.2S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Sutton Crossing	CLIENT:	Native Geoscience, Inc.
ADDRESS:	Tuskawilla Rd & FL 434 Winter Springs FL 32708	CONTACT:	Clinton Wilhelm
LAT/LONG:	28.695011 / 81.262068	INQUIRY #:	7123398.2s
		DATE:	September 20, 2022 1:04 pm

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DETAIL MAP - 7123398.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Sutton Crossing	CLIENT:	Native Geoscience, Inc.
ADDRESS:	Tuskawilla Rd & FL 434 Winter Springs FL 32708	CONTACT:	Clinton Wilhelm
		INQUIRY #:	7123398.2s
LAT/LONG:	28.695011 / 81.262068	DATE:	September 20, 2022 1:05 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal hazardous waste facilities								
SHWS	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		1	0	1	NR	NR	2
Lists of state and tribal leaking storage tanks								
LUST	0.500		2	0	1	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FF TANKS	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		2	0	NR	NR	NR	2
AST	0.250		1	1	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
TANKS	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		1	2	0	NR	NR	3
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
Fl Sites	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		1	NR	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
SPILLS 80	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	1	NR	NR	NR	3
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		2	NR	NR	NR	NR	2
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		2	NR	NR	NR	NR	2
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
CLEANUP SITES	0.001		1	NR	NR	NR	NR	1
DEDB	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
DWM CONTAM	0.500		3	0	1	NR	NR	4
Financial Assurance	0.001		1	NR	NR	NR	NR	1
FL Cattle Dip. Vats	0.250		0	0	NR	NR	NR	0
HW GEN	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RESP PARTY	0.500		1	0	0	NR	NR	1
SITE INV SITES	0.500		0	0	0	NR	NR	0
TIER 2	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		5	NR	NR	NR	NR	5
- Totals --		0	26	5	3	0	0	34

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

TOWN CENTER S.E.E.D. / BROWNFIELD — **BROWNFIELDS** — **S109353651**
< 1/8 — **N/A**
1 ft. **CITY OF WINTER SPRINGS, FL**

BROWNFIELDS AREAS:

Name:	TOWN CENTER S.E.E.D. / BROWNFIELD
Address:	Not reported
City,State,Zip:	CITY OF WINTER SPRINGS, FL
Area id:	BF590803000
District:	CENTRAL
Acreage:	2220603.5
Resolution:	2008-36
Resolution Date:	09/04/2008
Source:	CITY OF WINTER SPRINGS
Object Id:	201
Method:	PAPER
Area:	2220603.49
XCoord:	666787.081
YCoord:	524645.8859

SSE **FORMER CENTRAL FLORIDA DRUM FACILITY** — **BROWNFIELDS** — **S108946006**
1/8-1/4 — **N/A**
1107 ft. **WINTER SPRINGS, FL**

BROWNFIELDS AREAS:

Name:	FORMER CENTRAL FLORIDA DRUM FACILITY
Address:	Not reported
City,State,Zip:	WINTER SPRINGS, FL
Area id:	BF590702000
District:	Central
Acreage:	6.15871000
Resolution:	2007-R-233
Resolution Date:	12/11/2007
Source:	Seminole County
Object Id:	225
Method:	PAPER
Area:	24923.4045
XCoord:	667230.890
YCoord:	523359.9865

A1 **EXXON MOBIL CORPORATION** — **EDR Hist Auto** — **1020699800**
1205 E STATE ROAD 434 — **N/A**
< 1/8 **WINTER SPRINGS, FL 32708**
1 ft.

Site 1 of 10 in cluster A

Relative: EDR Hist Auto
Higher

Actual:
43 ft.

Year:	Name:	Type:
1999	MOBILE ORLANDO JAWAD INC	Gasoline Service Stations
2002	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations
2003	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations
2004	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations
2005	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations, NEC
2006	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations, NEC
2007	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2008	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2009	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC

EXXON MOBIL CORPORATION (Continued) **1020699800**

2010	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2011	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2012	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2013	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2014	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC

A2 **MOBIL R/S #10918** **RGA LUST** **S115188214**
1205 E STATE ROAD 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 2 of 10 in cluster A

Relative: RGA LUST:
Higher

2010	MOBIL R/S #10918	1205 E STATE ROAD 434
2009	MOBIL R/S #10918	1205 E STATE ROAD 434

Actual:
43 ft.

A3 **7-ELEVEN STORE #34786** **RGA LUST** **S115159657**
1205 E STATE ROAD 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 3 of 10 in cluster A

Relative: RGA LUST:
Higher

2012	7-ELEVEN STORE #34786	1205 E STATE ROAD 434
2011	7-ELEVEN STORE #34786	1205 E STATE ROAD 434

Actual:
43 ft.

A4 **MOBIL OIL CORP SS #Q8M** **RCRA NonGen / NLR** **1000702716**
1205 E SR 434 **FINDS** **FLD984205518**
< 1/8 **WINTER SPRINGS, FL 32708** **ECHO**
1 ft.

Site 4 of 10 in cluster A

Relative: RCRA NonGen / NLR:
Higher

Date Form Received by Agency:		20111012
Handler Name:	MOBIL OIL CORP SS #Q8M	
Handler Address:		1205 E SR 434
Handler City,State,Zip:		WINTER SPRINGS, FL 32708
EPA ID:		FLD984205518
Contact Name:		DAN HORTON
Contact Address:		GALLOWS RD
Contact City,State,Zip:		FAIRFAX, VA 22037-0002
Contact Telephone:		703-849-3330
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		04
Land Type:		Private
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		FL
State District:		CD
Mailing Address:		GALLOWS RD

Actual:
43 ft.

MOBIL OIL CORP SS #Q8M (Continued) **1000702716**

Mailing City,State,Zip:		FAIRFAX, VA 22037-0002
Owner Name:	DAN HORTON	
Owner Type:		Private
Operator Name:	DONNA HYMES	
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Not reported
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported
202 GPRA Corrective Action Baseline:		No
Corrective Action Workload Universe:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:		No
TSDFs Only Subject to CA under Discretionary Auth Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Operating TSDF Universe:		Not reported
Full Enforcement Universe:		Not reported
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No
Financial Assurance Required:		Not reported
Handler Date of Last Change:		20130606
Recognized Trader-Importer:		No
Recognized Trader-Exporter:		No
Importer of Spent Lead Acid Batteries:		No
Exporter of Spent Lead Acid Batteries:		No

MOBIL OIL CORP SS #Q8M (Continued) **1000702716**

Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Hazardous Waste Summary:
Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: D018
Waste Description: BENZENE

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: DAN HORTON
Legal Status: Private
Date Became Current: 20000209
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: DONNA HYMES
Legal Status: Private
Date Became Current: 20111027
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: MOBIL OIL CORP SS # Q8M
Legal Status: Private
Date Became Current: 19910615
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: HORTON DAN
Legal Status: Private
Date Became Current: 20000209
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037

MOBIL OIL CORP SS #Q8M (Continued) **1000702716**

Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: DAN HORTON
Legal Status: Private
Date Became Current: 20000209
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19910802
Handler Name: MOBIL OIL CORP SS #Q8M
Federal Waste Generator Description: Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20111012
Handler Name: MOBIL OIL CORP SS #Q8M
Federal Waste Generator Description: Not a generator, verified
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 562998
NAICS Description: ALL OTHER MISCELLANEOUS WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

MOBIL OIL CORP SS #Q8M (Continued) **1000702716**

FINDS:
Registry ID: 110006386534

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000702716
Registry ID:	110006386534
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110006386534
Name:	MOBIL OIL CORP SS #Q8M
Address:	1205 E SR 434
City,State,Zip:	WINTER SPRINGS, FL 32708

A5 **MOBIL #02-Q8M** **RGA LUST** **S115187952**
1205 E HWY 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 5 of 10 in cluster A

Relative: RGA LUST:
Higher

2004	MOBIL #02-Q8M	1205 E HWY 434
2003	MOBIL #02-Q8M	1205 E HWY 434
2002	MOBIL #02-Q8M	1205 E HWY 434
2001	MOBIL #02-Q8M	1205 E HWY 434
2000	MOBIL #02-Q8M	1205 E HWY 434
1999	MOBIL #02-Q8M	1205 E HWY 434
1998	MOBIL #02-Q8M	1205 E HWY 434

Actual:
43 ft.

A6 **MOBIL #02-Q8M** **RGA LUST** **S115187953**
1205 E SR 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 6 of 10 in cluster A

Relative: RGA LUST:
Higher

1997	MOBIL #02-Q8M	1205 E SR 434

Actual:
43 ft.

A7 **MOBIL R/S # 10918** **RGA LUST** **S115188147**
1205 E HWY 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 7 of 10 in cluster A

Relative: RGA LUST:
Higher

2008	MOBIL R/S # 10918	1205 E HWY 434
2007	MOBIL R/S # 10918	1205 E HWY 434
2006	MOBIL R/S # 10918	1205 E HWY 434
2005	MOBIL R/S # 10918	1205 E HWY 434

Actual:
43 ft.

A8 **MOBIL-WINTER SPRINGS #731** **LUST** **U004130541**
1205 E STATE ROAD 434 **UST** **N/A**
< 1/8 **WINTER SPRINGS, FL 32708** **CLEANUP SITES**
1 ft. **DWM CONTAM**

Site 8 of 10 in cluster A **Financial Assurance**

Relative: LUST:
Higher

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	STATE
Facility Id:	9045623
Facility Status:	OPEN
Facility Type:	A - Retail Station
Facility Phone:	(813)681-4279
Facility Cleanup Rank:	4871
District:	Central District
Lat/Long (dms):	28 41 44.6788 / 81 15 43.9905
Section:	31
Township:	20S
Range:	31E
Feature:	Not reported
Method:	DPHO
Datum:	0
Score:	46
Score Effective Date:	2008-02-29 00:00:00
Score When Ranked:	30
Operator:	RICK HERWEH
Name Update:	2013-10-28 00:00:00
Address Update:	2018-10-25 00:00:00

Actual:
43 ft.

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	ONGO - ONGOING
Contact:	BILL MCKNIGHT | RICK HERWEH
Contact Company:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Contact Address:	PO BOX 1110
Contact City/State/Zip:	Brandon, FL 33509
Phone:	(813)681-4279
Bad Address Ind:	N
State:	FL
Zip:	32708, 2811
Score:	46
Score Effective Date:	2008-02-29 00:00:00
Related Party ID:	922
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	2013-10-28
RP Zip:	1110
RP Extension:	211

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Discharge Cleanup Summary:

Discharge Date:	4/26/1993
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	5/10/2013
Cleanup Work Status:	ACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

Petroleum Cleanup Program Eligibility:

Facility ID:	9045623
Discharge Date:	4/26/1993
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	5/10/2013
Cleanup Work Status:	INACTIVE
Information Source:	Not reported
Other Source Description:	Not reported
Application Received Date:	Not reported
Cleanup Program:	P - PETROLEUM LIABILITY AND RESTORATION INSURANCE PROGRAM
Eligibility Status:	Not reported
Elig Status Date:	Not reported
Letter Of Intent Date:	Not reported
Redetermined:	Not reported
Inspection Date:	Not reported
Site Manager:	PRESS_DM
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV
Deductible Amount:	Not reported
Deductible Paid To Date:	Not reported
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	Not reported
Cap Amount:	1200000

Contaminated Media:

Discharge Date:	4/26/1993
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	5/10/2013
Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	Yes
Contaminated Soil:	No
Contaminated Surface Water:	No
Contaminated Ground Water:	No

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Pollutant:	B - Unleaded Gas
Pollutant Other Description:	Not reported
Gallons Discharged:	25

Task Information:

District:	CD
Facility ID:	9045623
Facility Status:	OPEN
Facility Type:	A - Retail Station -
County:	SEMINOLE
County ID:	59
Cleanup Eligibility Status:	E
Source Effective Date:	Not reported
Discharge Date:	04-26-1993
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	05-10-2013
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	INACTIVE
Site Mgr:	PRESS_DM
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - Orange County
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	84141
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	89795

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

RA Cleanup Responsible: -
RA Funding Eligibility Type: -
RA Years to Complete: Not reported
RA Actual Cost: Not reported

Click here for Florida Oculus:

UST:
Facility ID: 9045623
Name: MOBIL-WINTER SPRINGS #731
Address: 1205 E STATE ROAD 434
City,State,Zip: WINTER SPRINGS, FL 32708
Facility Phone: 8136814279
Facility Status: OPEN
Facility Type: A
Type Description: Retail Station
Depco: P
Region: STATE
Positioning Method: DPHO
Latitude/Longitude: 28 41 45.5900000 / 81 15 43.8500000

UST:
Tank ID: 2
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 10/01/2008
Install Date: 11/1/1989
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5
Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Piping Description: Double wall

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 5
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 3
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 10/01/2008
Install Date: 11/1/1989
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5
Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F
Piping Description: Double wall

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 5
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 4
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 10/01/2008
Install Date: 11/1/1989
Substance: B
Content Description: Unleaded Gas

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Piping:

Tank ID:	5
Piping Category:	K
Piping Description:	Dispenser liners
Tank ID:	6
Piping Category:	K
Piping Description:	Dispenser liners
Tank ID:	5
Piping Category:	C
Piping Description:	Fiberglass
Tank ID:	5
Piping Category:	F
Piping Description:	Double wall
Tank ID:	5
Piping Category:	J
Piping Description:	Pressurized piping system
Tank ID:	6
Piping Category:	C
Piping Description:	Fiberglass
Tank ID:	6
Piping Category:	F
Piping Description:	Double wall
Tank ID:	6
Piping Category:	J
Piping Description:	Pressurized piping system

Monitoring:

Tank ID:	5
Petro Monitoring Category:	F
Monitoring Description:	Monitor dbl wall tank space
Tank ID:	5
Petro Monitoring Category:	G
Monitoring Description:	Electronic line leak detector
Tank ID:	5
Petro Monitoring Category:	K
Monitoring Description:	Monitor dbl wall pipe space
Tank ID:	6
Petro Monitoring Category:	F
Monitoring Description:	Monitor dbl wall tank space
Tank ID:	6
Petro Monitoring Category:	G
Monitoring Description:	Electronic line leak detector
Tank ID:	6
Petro Monitoring Category:	K

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Tank Capacity: 20000
Tank Location: UNDERGROUND
Tank Status: U
Status Date: 10/01/2008
Install Date: 10/1/2008
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F
Piping Description: Double wall

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 5
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 6
Tank Capacity: 20000
Tank Location: UNDERGROUND
Tank Status: U
Status Date: 10/01/2008
Install Date: 10/1/2008
Substance: D
Content Description: Vehicular Diesel
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5
Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F
Piping Description: Double wall

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 5
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 1
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 10/01/2008
Install Date: 11/1/1989
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5
Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F
Piping Description: Double wall

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 5
Petro Monitoring Category: K

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

CLEANUP SITES:
Name: MOBIL-WINTER SPRINGS #731
Address: 1205 E STATE ROAD 434
City,State,Zip: WINTER SPRINGS, FL 32708
DEP Cleanup Site Key: 72642594
Source Database Name: Storage Tank Contamination Monitoring
Source Database Id: 9045623
CPAC Program Area Id: TK
CLLC Cleanup Category Key: PETRO

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

RSC2 Remediation Status Key:	ACTIVE
Data Load Date:	08/22/2022
OC3 Office Id:	CD
Physical Address Line 2:	Not reported
OIC Object Of Interest Id:	FACIL
PC2 Proximity Id:	EXACT
Calc Coordinates Accuracy Level Id:	4
CMC2 Coordinate Method Id:	Digital Aerial Photography With Ground Control
DC4 Datum Id:	High Accuracy Reference Network
VSC1 Verification Status:	REVIEWED
Collect Username:	PERRY_JF59
Collect Date:	07/23/2003
Collect Affiliation:	CONTRACTOR
Map Source:	1994 doqs
Map Source Scale:	1010
Interpolation Scale:	Not reported
Verifier Username:	WOEBER_A
Verifier Affiliation:	DEPARTMENT OF ENVIRONMENTAL PR
Verification Date:	06/09/2005
Verified Coordinate Method Id:	Digital Aerial Photography With Ground Control
Source Database Name Code:	STCM
CMC2 Coordinate Method ID Code:	DPHO
DC4 Datum ID Code:	HARN
Verified Coordinate Method ID Code:	DPHO
Comments:	Not reported
Latitude/Longitude (deg/min/sec):	28 41 / 81 15

DWM CONTAM:

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Program Site Id:	9045623
Lat DD:	28
Lat MM:	41
Lat SS:	45.59
Long DD:	81
Long MM:	15
Long SS:	43.85
Office/ District:	CD
Program Area:	STORAGE TANKS
Priority Score:	46
Datum:	Not reported
Method:	DPHO
Facility Status:	OPEN
Facility Type:	A - Retail Station
Score Effective Date:	2008-02-29 00:00:00
Score When Ranked:	30
Rank:	4871
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	922
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	10/28/2013
RP Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
RP Address1:	PO BOX 1110

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

RP Address2:	ATTN: STORAGE TANK REGIS
RP City:	BRANDON
RP State:	FL
RP Zip5:	33509
RP Zip4:	1110
Contact:	BILL MCKNIGHT | RICK HERWEH
RP Phone:	(813)681-4279
RP Extension:	211
Site Manager:	PRESS_DM

FL Financial Assurance 3:

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	ANCON INSURANCE CO INC
Effective Date:	04/30/2010
Expire Date:	04/29/2011
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	ILLINOIS UNION
Effective Date:	04/30/2011
Expire Date:	04/30/2012
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	IRONSHORE SPECIALTY INSURANCE CO
Effective Date:	12/18/2012
Expire Date:	12/18/2013
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	LIBERTY SURPLUS INSURANCE CORP
Effective Date:	12/31/2013
Expire Date:	12/31/2014
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	LIBERTY SURPLUS INSURANCE CORP
Effective Date:	12/31/2014
Expire Date:	12/31/2015
Owner ID:	922

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	LIBERTY SURPLUS INSURANCE CORP
Effective Date:	12/31/2015
Expire Date:	12/31/2016
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	NAUTILUS INSURANCE COMPANY
Effective Date:	01/01/2017
Expire Date:	12/31/2017
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	SCOTTSDALE
Effective Date:	12/31/2017
Expire Date:	12/31/2018
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	LETTER OF CREDIT
Insurance Company:	Not reported
Effective Date:	01/31/2019
Expire Date:	01/31/2020
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	LETTER OF CREDIT
Insurance Company:	Not reported
Effective Date:	01/31/2020
Expire Date:	01/31/2021
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	LETTER OF CREDIT
Insurance Company:	Not reported
Effective Date:	01/31/2021
Expire Date:	01/31/2022
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	LETTER OF CREDIT
Insurance Company:	Not reported
Effective Date:	05/31/2018
Expire Date:	05/31/2019
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Finaincial Responsibility:	SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company:	Not reported
Effective Date:	05/01/2008
Expire Date:	04/30/2009
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company:	Not reported
Effective Date:	05/01/2009
Expire Date:	04/30/2010
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

A9 **FOREIGN CAR PARTS SERVICE** **RCRA NonGen / NLR** **1000202983**
1207 E STATE ROAD 434 **FINDS** **FLD981748007**
< 1/8 **WINTER SPRINGS, FL 32708** **ECHO**
1 ft.

Site 9 of 10 in cluster A

Relative: Higher
Actual: 44 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:	20121019
Handler Name:	FOREIGN CAR PARTS SERVICE
Handler Address:	1207 E STATE ROAD 434
Handler City,State,Zip:	WINTER SPRINGS, FL 32708-2811
EPA ID:	FLD981748007
Contact Name:	WAYNE NORMAN
Contact Address:	E STATE ROAD 434
Contact City,State,Zip:	WINTER SPRINGS, FL 32708-2811
Contact Telephone:	305-699-4505
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	04
Land Type:	Private
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported

FOREIGN CAR PARTS SERVICE (Continued) **1000202983**

Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		FL
State District:		CD
Mailing Address:		E STATE ROAD 434
Mailing City,State,Zip:		WINTER SPRINGS, FL 32708-2811
Owner Name:	WAYNE NORMAN	
Owner Type:		Private
Operator Name:	Not reported	
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Not reported
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported
202 GPRA Corrective Action Baseline:		No
Corrective Action Workload Universe:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:		No
TSDFs Only Subject to CA under Discretionary Auth Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Operating TSDF Universe:		Not reported
Full Enforcement Universe:		Not reported
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No
Financial Assurance Required:		Not reported

FOREIGN CAR PARTS SERVICE (Continued) **1000202983**

Handler Date of Last Change:	20130305
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: WAYNE NORMAN	
Legal Status:	Private
Date Became Current:	20000925
Date Ended Current:	Not reported
Owner/Operator Address:	1207 E STATE ROAD 434
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-2811
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: NORMAN WAYNE	
Legal Status:	Private
Date Became Current:	20000925
Date Ended Current:	Not reported
Owner/Operator Address:	1207 E STATE ROAD 434
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-2811
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: WAYNE NORMAN	
Legal Status:	Private
Date Became Current:	20000925
Date Ended Current:	Not reported
Owner/Operator Address:	1207 E STATE ROAD 434
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-2811
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20121019
Handler Name: FOREIGN CAR PARTS SERVICE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	FL
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No

FOREIGN CAR PARTS SERVICE (Continued) **1000202983**

Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19870114
Handler Name: FOREIGN CAR PARTS SERVICE
Federal Waste Generator Description: Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110005991579

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000202983
Registry ID: 110005991579
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005991579
Name: FOREIGN CAR PARTS SERVICE
Address: 1207 E STATE ROAD 434
City,State,Zip: WINTER SPRINGS, FL 32708

A10 **HMIRS** **2002033772**
N/A

1205 STATE ROAD 434 EAST
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 10 of 10 in cluster A

Relative: HMIRS:
Lower

Actual: Report #: 2002030877
42 ft. Site location: 1205 STATE ROAD 434 EAST
WINTER SPRINGS, FL
Place of origin: 9919 SOUTH ORANGE AVENUE
TAFT, FL 32824
Destination: EXXON MOBIL CHEMICAL CO
1205 STATE ROAD 434 EAST
WINTER SPRINGS, FL 32869
Carrier ID: 15472
Carrier reporting #: Not reported
Carrier: MC KENZIE TANK LINES INC
Carrier address: 122 APPLEYARD DRIVE
TALLAHASSEE, FL 32304
Shipper ID: 89722
Shipper name: KINDER MORGAN
Shipper address: 9919 SOUTH ORANGE AVENUE
TAFT, FL 32824
Shipping paper number: 793084
Consignee ID: 94895
Consignee name: EXXON MOBIL CHEMICAL CO
Consignee addess: 1205 STATE ROAD 434 EAST
WINTER SPRINGS, FL 32869
General cause: 20
Transportation mode: 4
Date: 03/02/2002
Commodity name: GASOLINE
Trade name: GASOLINE
Amount: 5.00 GAL
Result: Spillage
Hazard Class: 30
ID Number: UN1203
Hazardous: False
R.Q. met: False
Misc. info: 110 100
Vehicle Type: Cargo
Trans. phase: 263
Land use: 272
Community: 282
Accident/Derailment: False
Estimated speed: F
Highway type: 999
number of lanes: 0
Number evacuated: 0
Major injuries: 0
Minor injuries: 0
Fatalities: 0
Product loss: 5
Carrier damage: 0
Pvt/Pub damage: 0
Cleanup cost: 0
Other damage: 0
Reported damage: 5

(Continued) **2002033772**

Incident damage: 0

Inner and Outer Container Information:
Container type: MC307
Container capacity: 9500.00 GAL
Number failed: 1
Number in shipment: 1
Container gauge: Not reported
Manufacture's ID: 14196
Manuf. name: HEIL COMPANY
UNKNOWN, XX
Tank serial #: A3A7B417H5
Label: FLAM
Registration #: Not reported
Inspection date: 05/17/2001
Exemption #: Not reported
Contributing cause: NO RESPONSE
Contributing Object: NO RESPONSE
Contributing failure: NO RESPONSE
Affected side: NO RESPONSE
Other contributing cause: NO RESPONSE
Capacity container code: 0
Number failed code: 0
Shipment code number: 0

Remarks:
DRIVER WAS DROPPING REGULAR GASOLINE, CLAIMED THERE WAS A VAPOR BACK UP,
SPILLING APPROXIMATELY 5 GALLONS ON THE GROUND. DRIVER CLEANED UP AREA
WITH ABSORBENT PADS.

11
NE
< 1/8
0.020 mi.
108 ft.

1212 E. SR 434 DEBRIS STAGING AREA **SWF/LF** **S109689106**
1212 E. SR 434 **N/A**
CITY OF WINTER SPRINGS, FL 32708

Relative:
Lower

Actual:
40 ft.

SWF/LF:
Name: 1212 E. SR 434 DEBRIS STAGING AREA
Address: 1212 E. SR 434
City,State,Zip: CITY OF WINTER SPRINGS, FL 32708
Facility ID: 98367
District: CD
Lat/Long: 28:41:41 / 81:15:35
Class Type: 910
Classification: DISASTER DEBRIS MANAGEMENT SITE
Class Status: PRE-AUTHORIZED (B)
Section: Not reported
Township: Not reported
Range: Not reported
Responsible Authority Name: Not reported
Responsible Authority Address: Not reported
Responsible Authority City,St,Zip: Not reported
Responsible Authority Phone: Not reported
EMail Address1: Not reported
EMail Address2: Not reported

1212 E. SR 434 DEBRIS STAGING AREA (Continued) **S109689106**

Site Supervisor Name:	Not reported
Site Supervisor Addr:	Not reported
Site Supervisor City/State/Zip:	Not reported
Site Supervisor Telephone:	Not reported
Land Owner Name:	Not reported
Land Owner Address:	Not reported
Land Owner City/State/Zip:	Not reported
Land Owner Telephone:	Not reported

Click here for Florida Oculus:

B12 **SCRIMSHER PARCEL** **DWM CONTAM** **S118895025**
SE **E SR 434** **RESP PARTY** **N/A**
< 1/8 **WINTER SPRINGS,, FL 32708**
0.052 mi.
272 ft. **Site 1 of 2 in cluster B**

Relative: **Lower**
Actual: **34 ft.**

DWM CONTAM:

Name:	SCRIMSHER PARCEL
Address:	E SR 434
City,State,Zip:	WINTER SPRINGS,, FL
Program Site Id:	ERIC_11188
Lat DD:	28
Lat MM:	41
Lat SS:	37.4926
Long DD:	81
Long MM:	15
Long SS:	38.2828
Office/ District:	CD
Program Area:	RESPONSPARTY
Priority Score:	Not reported
Datum:	NAD83
Method:	DPHO
Facility Status:	Closed
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported
RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	George Houston

SCRIMSHER PARCEL (Continued) **S118895025**

RESP PARTY:

Name:	SCRIMSHER PARCEL
Address:	E SR 434
City,State,Zip:	WINTER SPRINGS,, FL 32708
District:	Central District
Site Id:	346911
Project Id:	352812
Site Status:	CLOSED
Project Manager:	HOUSTON_G
OGC Case Number:	Not reported
Initial Date Received:	08/23/2016
Contaminants:	Not reported
Offsite Cont Impact:	N
Priority Score:	Not reported
Datum:	NAD83
Method ID:	DPHO
Feature:	Not reported
Object Of Interest:	CAP_RAP SITE
Proximity To Object:	EXACT
Collect Username:	HOUSTON_G
Collect Affiliation:	Florida Department of Environmental Protection
Collect Program Id:	CR
Collect Date:	08/24/2016
Map Series Used:	IMAGERY_11_13
Map Source Scale:	12000
Interpolation Scale:	12000
Coordinate Accuracy Id:	3
Verify Method Id:	DPHO
Verifier Username:	HOUSTON_G
Verifier Affiliation:	Florida Department of Environmental Protection
Verifying Program Id:	CR
Verification Date:	08/24/2016
Decode for District:	Central District
Decode for Datum:	North American Datum of 1983
Decode for Method:	Digital Aerial Photography With Ground Control
Decode for Off Site COC:	No, the best available evidence (such as completed SAR) demonstrates that contamination above applicable standards or criteria DOES NOT extend offsite.
Decode for V_Method:	Digital Aerial Photography With Ground Control
Latitude/Longitude (deg/min/sec):	28 41 / 81 15
Source Facility Name:	Not reported
Source Facility ID:	Not reported
Program:	Not reported
Program Type:	Not reported
Program Status:	Not reported
WMD:	Not reported
ICR Indicator:	Not reported
Discharge Date:	Not reported
GIS ALBX:	Not reported
GIS ALBY:	Not reported
Site Manager:	Not reported
Site Phase Description:	Not reported
Offsite Contamination Key:	Not reported
Documents:	Not reported
Objectid:	Not reported

Name: SCRIMSHER PARCEL

SCRIMSHER PARCEL (Continued) **S118895025**

Address:	E SR 434
City,State,Zip:	WINTER SPRINGS,, FL 32708
District:	Central District
Site Id:	ERIC_11188
Project Id:	Not reported
Site Status:	CLOSED
Project Manager:	Not reported
OGC Case Number:	Not reported
Initial Date Received:	Not reported
Contaminants:	Not reported
Offsite Cont Impact:	Not reported
Priority Score:	Not reported
Datum:	NAD83
Method ID:	DPHO
Feature:	Not reported
Object Of Interest:	CAP_R
Proximity To Object:	EXACT
Collect Username:	HOUSTON_G
Collect Affiliation:	Not reported
Collect Program Id:	Not reported
Collect Date:	Not reported
Map Series Used:	IMAGERY_11_13
Map Source Scale:	12000
Interpolation Scale:	12000
Coordinate Accuracy Id:	3
Verify Method Id:	Not reported
Verifier Username:	Not reported
Verifier Affiliation:	Not reported
Verifying Program Id:	Not reported
Verification Date:	Not reported
Decode for District:	Central District
Decode for Datum:	North American Datum of 1983
Decode for Method:	Digital Aerial Photography With Ground Control
Decode for Off Site COC:	Not reported
Decode for V_Method:	Not reported
Latitude/Longitude (deg/min/sec):	28 41 / 81 15
Source Facility Name:	SCRIMISHER PARCEL
Source Facility ID:	138637
Program:	Responsible Party Cleanup
Program Type:	RESPONSPARTY
Program Status:	COMPLETE
WMD:	SJRWMD
ICR Indicator:	N
Discharge Date:	Not reported
GIS ALBX:	667143.17000000004
GIS ALBY:	523807.98999999999
Site Manager:	George Houston
Site Phase Description:	Phase 2 - Full Assessment
Offsite Contamination Key:	NOCONTAM
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/ERIC_11188/gis-facility!search
Objectid:	4185

B13 **WINTER SPRINGS CITY - LIFT STATION** **AST** **S125296873**
ESE **80 MICHAEL BLAKE BLVD** **Financial Assurance** **N/A**
< 1/8 **WINTER SPRINGS, FL 32708** **NPDES**
0.052 mi.
274 ft. **Site 2 of 2 in cluster B**

Relative: Lower

Actual: 36 ft.

AST:

Facility ID:	9818667
Name:	WINTER SPRINGS CITY - LIFT STATION
Address:	80 MICHAEL BLAKE BLVD
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	C
Type Description:	Fuel user/Non-retail
Depco:	P
Region:	STATE
Positioning Method:	Not reported
Latitude/Longitude:	Not reported

Tank:

Tank ID:	1
Tank Capacity:	631
Tank Location:	ABOVEGROUND
Tank Status:	U
Status Date:	08/01/2021
Install Date:	8/1/2021
Substance:	G
Content Description:	Emerg Generator Diesel
Vessel Indicator:	TANK
DEP Contractor:	P

Piping:

Tank ID:	1
Piping Category:	N
Piping Description:	Approved synthetic material
Tank ID:	1
Piping Category:	A
Piping Description:	Abv, no soil contact

Monitoring:

Tank ID:	1
Petro Monitoring Category:	Q
Monitoring Description:	Visual inspection of ASTs
Tank ID:	1
Petro Monitoring Category:	F
Monitoring Description:	Monitor dbl wall tank space
Tank ID:	1
Petro Monitoring Category:	1
Monitoring Description:	Continuous electronic sensing

Owner:

Owner ID:	24225
Owner Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address 2:	ATTN: STORAGE TANK REGIS

WINTER SPRINGS CITY - LIFT STATION (Continued) **S125296873**

Owner City,State,Zip: WINTER SPRINGS, FL 32708
Owner Contact: IAN FLETCHER
Owner Phone: 4073271800

Construction:
Tank ID: 1
Construction Category: C
Construction Description: Steel

Tank ID: 1
Construction Category: P
Construction Description: Level gauges/alarms

Tank ID: 1
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 1
Construction Category: I
Construction Description: Double wall

FL Financial Assurance 3:
Name: WINTER SPRINGS CITY - LIFT STATION
Address: 80 MICHAEL BLAKE BLVD
City,State,Zip: WINTER SPRINGS, FL 32708
Region: 3
Facility ID: 9818667
Facility Phone: 4073271800
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY INSURANCE CO
Effective Date: 11/09/2021
Expire Date: 11/09/2022
Owner ID: 24225
Onwer Name: WINTER SPRINGS CITY
Owner Address: 1126 E SR 434
Owner Address2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: WINTER SPRINGS, FL 32708
Contact: IAN FLETCHER
Resp Party Phone: 4073271800

WASTEWATER:
Name: WINTER SPRINGS RETIREMENT RESIDENCE
Address: 80 MICHAEL BLAKE BLVD
City,State,Zip: WINTER SPRINGS, FL
Facility ID: FLR10SS01
Facility Type: Construction Stormwater GP
Status: Active - Existing, permitted facility/site for which effluent, reclaimed water or wastewater residual discharge into the environment and/or monitoring is taking place.
District Office: TLST

WINTER SPRINGS CITY - LIFT STATION (Continued) **S125296873**

NPDES Permitted Site:	Not reported
Environmental Interest:	Not reported
Owner Type:	Private
Permit Capacity:	Not reported
Party Name:	James C Hall, PMTE
Company Name:	James C. Hall Company Inc.
RP Address:	225 Old Sanford Oviedo Rd
RP Address 2:	Not reported
RP City,Stat,Zip:	Winter Springs FL 32708-2651
Telephone:	4073274930
Email:	crystal@hallcompanyinc.com
Issue Date:	05/17/2019
Effective Date:	05/17/2019
Expiration Date:	05/16/2024
DOC Description:	Generic Permit
Latitude Degrees:	28
Latitude Minutes:	41
Latitude Seconds:	38.52
Longitude Degrees:	81
Longitude Minutes:	15
Longitude Seconds:	36.72
Treatment:	Not reported
Decode For Fstatus:	Active

14
NW
< 1/8
0.065 mi.
342 ft.

HANDY WAY FOOD STORE #3333 **LUST U003334173**
170 TUSCAWILLA RD **UST N/A**
WINTER SPRINGS, FL 32708 **DWM CONTAM**
Financial Assurance

Relative:
Higher

Actual:
45 ft.

LUST:

Name:	HANDY WAY FOOD STORE #3333
Address:	170 TUSCAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	STATE
Facility Id:	8516641
Facility Status:	CLOSED
Facility Type:	A - Retail Station
Facility Phone:	(904)327-1217
Facility Cleanup Rank:	556
District:	Central District
Lat/Long (dms):	28 41 47.7907 / 81 15 47.2791
Section:	36
Township:	20
Range:	30
Feature:	Not reported
Method:	DPHO
Datum:	0
Score:	56
Score Effective Date:	2013-02-01 00:00:00
Score When Ranked:	76
Operator:	BRENT PUZAK
Name Update:	Not reported
Address Update:	2000-08-29 00:00:00

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	CMPL - COMPLETED
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Contact Company:	THE PANTRY INC
Contact Address:	305 GREGSON DR
Contact City/State/Zip:	CARY, NC 27511
Phone:	(919)774-6700
Bad Address Ind:	N
State:	FL
Zip:	32708, 3715
Score:	56
Score Effective Date:	2013-02-01 00:00:00
Related Party ID:	10563
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	1999-05-03
RP Zip:	6496
RP Extension:	6549

Discharge Cleanup Summary:

Discharge Date:	8/7/2000
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV
Discharge Date:	9/28/1987
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

Petroleum Cleanup Program Eligibility:

Facility ID:	8516641
Discharge Date:	8/7/2000
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	Not reported
Other Source Description:	Not reported
Application Received Date:	Not reported
Cleanup Program:	S - SITE REHABILITATION FUNDING AGREEMENT
Eligibility Status:	Not reported
Elig Status Date:	Not reported
Letter Of Intent Date:	Not reported
Redetermined:	Not reported

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Inspection Date:	Not reported
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV
Deductible Amount:	Not reported
Deductible Paid To Date:	Not reported
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	Not reported
Cap Amount:	0
Facility ID:	8516641
Discharge Date:	9/28/1987
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	Not reported
Other Source Description:	Not reported
Application Received Date:	Not reported
Cleanup Program:	E - EARLY DETECTION INCENTIVE
Eligibility Status:	Not reported
Elig Status Date:	Not reported
Letter Of Intent Date:	Not reported
Redetermined:	Not reported
Inspection Date:	Not reported
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV
Deductible Amount:	Not reported
Deductible Paid To Date:	Not reported
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	Not reported
Cap Amount:	0

Contaminated Media:

Discharge Date:	8/7/2000
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	Not reported
Contaminated Monitoring Well:	Not reported
Contaminated Soil:	Not reported
Contaminated Surface Water:	Not reported
Contaminated Ground Water:	Yes
Pollutant:	B - Unleaded Gas
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported
Discharge Date:	9/28/1987
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	Yes
Pollutant:	A - Leaded Gas
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported

Task Information:

District:	CD
Facility ID:	8516641
Facility Status:	CLOSED
Facility Type:	A - Retail Station -
County:	SEMINOLE
County ID:	59
Cleanup Eligibility Status:	E
Source Effective Date:	07-10-2013
Discharge Date:	08-07-2000
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10-02-2013
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	06-19-2013
SRC Review Date:	07-10-2013
SRC Completion Status:	A - APPROVED
SRC Issue Date:	10-02-2013
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	PRESS_DM
Site Mgr End Date:	09-10-2013
Tank Office:	PCLP48 - Orange County
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

SA Task ID:	91160
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	90612
RA Cleanup Responsible:	ST - STATE
RA Funding Eligibility Type:	-
RA Years to Complete:	0
RA Actual Cost:	Not reported
District:	CD
Facility ID:	8516641
Facility Status:	CLOSED
Facility Type:	A - Retail Station -
County:	SEMINOLE
County ID:	59
Cleanup Eligibility Status:	E
Source Effective Date:	07-10-2013
Discharge Date:	09-28-1987
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10-02-2013
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	06-19-2013
SRC Review Date:	07-10-2013
SRC Completion Status:	A - APPROVED
SRC Issue Date:	10-02-2013
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	PRESS_DM
Site Mgr End Date:	09-10-2013
Tank Office:	PCLP48 - Orange County
SR Task ID:	23271
SR Cleanup Responsible:	RP - RESPONSIBLE PARTY
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Y
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Y
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

SA Task ID:	23272
SA Cleanup Responsible:	RP - RESPONSIBLE PARTY
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	01-17-1997
SA Payment Date:	Not reported
RAP Task ID:	23273
RAP Cleanup Responsible ID:	RP - RESPONSIBLE PARTY
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	23274
RA Cleanup Responsible:	ST - STATE
RA Funding Eligibility Type:	-
RA Years to Complete:	0
RA Actual Cost:	Not reported

Click here for Florida Oculus:

UST:

Facility ID:	8516641
Name:	HANDY WAY FOOD STORE #3333
Address:	170 TUSCAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility Phone:	9043271217
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
Depco:	P
Region:	STATE
Positioning Method:	DPHO
Latitude/Longitude:	28 41 47.9799999 / 81 15 47.0200000

UST:

Tank ID:	1
Tank Capacity:	10000
Tank Location:	UNDERGROUND
Tank Status:	B
Status Date:	03/27/1995
Install Date:	5/1/1982
Substance:	B
Content Description:	Unleaded Gas
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	10563
Owner Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address 2:	ATTN: STORAGE TANK REGIS
Owner City,State,Zip:	CARY, NC 27511
Owner Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone:	9197746700

Tank ID: 2

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 03/27/1995
Install Date: 5/1/1982
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone: 9197746700

Tank ID: 4
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 03/27/1995
Install Date: 5/1/1982
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone: 9197746700

Tank ID: 5
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 07/01/2000
Install Date: 4/1/1995
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Owner Phone: 9197746700

Tank ID: 3
Tank Capacity: 12000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 07/01/2000
Install Date: 4/1/1995
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone: 9197746700

DWM CONTAM:
Name: HANDY WAY FOOD STORE #3333
Address: 170 TUSCAWILLA RD
City,State,Zip: WINTER SPRINGS, FL
Program Site Id: 8516641
Lat DD: 28
Lat MM: 41
Lat SS: 47.98
Long DD: 81
Long MM: 15
Long SS: 47.02
Office/ District: CD
Program Area: STORAGE TANKS
Priority Score: 56
Datum: Not reported
Method: DPHO
Facility Status: CLOSED
Facility Type: Not reported
Score Effective Date: Not reported
Score When Ranked: Not reported
Rank: Not reported
Operator: Not reported
Phone: Not reported
Name Changed: Not reported
Addr Changed: Not reported
Related Party ID: Not reported
Primary RP Role: Not reported
RP Begin Date: Not reported
RP Name: Not reported
RP Address1: Not reported
RP Address2: Not reported
RP City: Not reported

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

RP State: Not reported
RP Zip5: Not reported
RP Zip4: Not reported
Contact: Not reported
RP Phone: Not reported
RP Extension: Not reported
Site Manager: Not reported

Name: HANDY WAY FOOD STORE #3333
Address: 170 TUSCAWILLA RD
City,State,Zip: WINTER SPRINGS, FL
Program Site Id: 8516641
Lat DD: 28
Lat MM: 41
Lat SS: 47.98
Long DD: 81
Long MM: 15
Long SS: 47.02
Office/ District: CD
Program Area: STORAGE TANKS
Priority Score: 56
Datum: Not reported
Method: DPHO
Facility Status: CLOSED
Facility Type: Not reported
Score Effective Date: Not reported
Score When Ranked: Not reported
Rank: Not reported
Operator: Not reported
Phone: Not reported
Name Changed: Not reported
Addr Changed: Not reported
Related Party ID: Not reported
Primary RP Role: Not reported
RP Begin Date: Not reported
RP Name: Not reported
RP Address1: Not reported
RP Address2: Not reported
RP City: Not reported
RP State: Not reported
RP Zip5: Not reported
RP Zip4: Not reported
Contact: Not reported
RP Phone: Not reported
RP Extension: Not reported
Site Manager: Not reported

FL Financial Assurance 3:
Name: HANDY WAY FOOD STORE #3333
Address: 170 TUSCAWILLA RD
City,State,Zip: WINTER SPRINGS, FL 32708
Region: 3
Facility ID: 8516641
Facility Phone: 9043271217
Facility Status: CLOSED
Facility Type: A
Type Description: Retail Station

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	FPLIPA
Effective Date:	04/09/1990
Expire Date:	04/09/1991
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700

Name:	HANDY WAY FOOD STORE #3333
Address:	170 TUSCAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8516641
Facility Phone:	9043271217
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company:	Not reported
Effective Date:	Not reported
Expire Date:	Not reported
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700

15
SSW
1/8-1/4
0.141 mi.
746 ft.

HI FLAVOR MEATS
315 TUSKAWILLA RD
WINTER SPRINGS, FL 32708

RCRA NonGen / NLR **1001487207**
FINDS **FLR000057604**
ECHO

Relative:
Lower

Actual:
40 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20110615
Handler Name:	HI FLAVOR MEATS	
Handler Address:		315 TUSKAWILLA RD
Handler City,State,Zip:		WINTER SPRINGS, FL 32708-3710
EPA ID:		FLR000057604
Contact Name:		ROBBIE ONDICK
Contact Address:		TUSKAWILLA RD
Contact City,State,Zip:		WINTER SPRINGS, FL 32708-3710
Contact Telephone:		407-365-5661
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		OWNER SEC
EPA Region:		04
Land Type:		Private
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		X

HI FLAVOR MEATS (Continued) **1001487207**

Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		FL
State District:		CD
Mailing Address:		TUSKAWILLA RD
Mailing City,State,Zip:		WINTER SPRINGS, FL 32708-3710
Owner Name:	ONDICK	
Owner Type:		Private
Operator Name:	HI FLAVOR MEATS	
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Not reported
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported
202 GPRA Corrective Action Baseline:		No
Corrective Action Workload Universe:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:		No
TSDFs Only Subject to CA under Discretionary Auth Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Operating TSDF Universe:		Not reported
Full Enforcement Universe:		Not reported
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No

HI FLAVOR MEATS (Continued) **1001487207**

Financial Assurance Required:	Not reported
Handler Date of Last Change:	20151230
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: HI FLAVOR MEATS INC	
Legal Status:	Private
Date Became Current:	20000217
Date Ended Current:	Not reported
Owner/Operator Address:	315 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: HI FLAVOR MEATS	
Legal Status:	Private
Date Became Current:	19990629
Date Ended Current:	Not reported
Owner/Operator Address:	315 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-3710
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: ONDICK	
Legal Status:	Private
Date Became Current:	20000217
Date Ended Current:	20000218
Owner/Operator Address:	201 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: HI FLAVOR MEATS	
Legal Status:	Private
Date Became Current:	19990629
Date Ended Current:	Not reported
Owner/Operator Address:	315 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-3710
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported

HI FLAVOR MEATS (Continued) **1001487207**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name: HI FLAVOR MEATS INC	
Legal Status:	Private
Date Became Current:	20000217
Date Ended Current:	Not reported
Owner/Operator Address:	315 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name: ONDICK	
Legal Status:	Private
Date Became Current:	20000217
Date Ended Current:	20000218
Owner/Operator Address:	201 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20110615
Handler Name: HI FLAVOR MEATS	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	FL
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	20000217
Handler Name: HI FLAVOR MEATS	
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
State District Owner:	FL
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	311612

HI FLAVOR MEATS (Continued) **1001487207**

NAICS Description: MEAT PROCESSED FROM CARCASSES

NAICS Code: 42447
NAICS Description: MEAT AND MEAT PRODUCT MERCHANT WHOLESALERS

NAICS Code: 42511
NAICS Description: BUSINESS TO BUSINESS ELECTRONIC MARKETS

NAICS Code: 42512
NAICS Description: WHOLESALE TRADE AGENTS AND BROKERS

NAICS Code: 44521
NAICS Description: MEAT MARKETS

Facility Has Received Notices of Violation:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 19990615
Evaluation Responsible Agency: State

HI FLAVOR MEATS (Continued) **1001487207**

Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	J P
Evaluation Responsible Sub-Organization:	CD
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

FINDS:
Registry ID: 110005657128

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001487207
Registry ID:	110005657128
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005657128
Name:	HI FLAVOR MEATS
Address:	315 TUSKAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708

16
South
1/8-1/4
0.193 mi.
1018 ft.

2950 RAILROAD **BROWNFIELDS S116348626**
2950 RAILROAD AVE **ASBESTOS N/A**
WINTER SPRINGS, FL 32708

Relative:
Lower

Actual:
40 ft.

BROWNFIELDS:

Name:	FORMER CENTRAL FLORIDA DRUM FACILITY
Address:	2950 (M-1 ZONING AREA ONLY) AND 2960 RAILROAD AVENUE
City,State,Zip:	WINTER SPRINGS, FL 32708
Site Id:	BF590702001
Object Id:	56
County Code:	59
Area Id:	BF590702000
Area Name:	Former Central Florida Drum Facility
SRCO Date:	05/03/2019
District:	Central
Acreage:	6.15871099
Remediation:	AWAITING CLEANUP

2950 RAILROAD (Continued) **S116348626**

BSRA Date:	12/27/2007
X Coordinate:	667217.022
Y Coordinate:	523396.5232
Latitude:	28.6896972
Longitude:	-81.2598369
Lat DD:	28
Lat MM:	41
Lat SS:	24.12
Long DD:	-81
Long MM:	15
Long SS:	35.89
Source:	Seminole County
Method:	PAPER
Verification:	DPHO
Date Verification:	01/17/2008
Comment:	aka L.D. Plante, Inc.
User Name:	CLARKE_C
Datestamp:	12/20/2007

BSRA:

Name:	FORMER CENTRAL FLORIDA DRUM FACILITY
Address:	2950 (M-1 ZONING AREA ONLY) AND 2960 RAILROAD AVENUE
City,State,Zip:	WINTER SPRINGS, FL 32708
Area Id:	BF590702000
District:	Central
Acreage:	6.45
Site Id:	BF590702001
Executed Date:	12/27/2007
Issue Date:	05/03/2019
ERIC ID:	ERIC_11104
Conditional or Unconditional Closure:	C
Latitude:	28.6896972
Longitude:	-81.2598369

ASBESTOS:

Name:	2950 RAILROAD
Address:	2950 RAILROAD AVE
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility ID:	AS11701467
Notification ID:	87482
Notification Type:	ORIGINAL
Project Type:	DEMOLITION
Notification Status:	REVIEWED
Site Name:	2950 RAILROAD
Ordered Demolition?:	Not reported
Annual Notification:	Not reported
Owner Name:	STANARD PACIFIC
Contractor Name:	BOYKIN CONSTRUCTION
Start Date:	05/02/2016
Finish Date:	05/31/2016
Cementitious RACM:	Not reported
Cementitious SF:	0
Floor RACM:	Not reported
Floor SF:	0
Pipe RACM:	Not reported
Pipe SF:	0

2950 RAILROAD (Continued) **S116348626**

CF RACM:	0
Roof RACM:	Not reported
Roof SF:	0
Surface Mat RACM:	Not reported
Surface Mat SF:	0
Waste Disposal Site:	KEENE ROAD LANDFILL - CLASS III
Waste Disposal Address:	255 W. KEENE ROAD
Waste Disposal City:	APOPKA
Waste Disposal State:	FL
Waste Disposal Zip:	32703
Transporter Name:	Not reported
Contractor is Transporter:	Y
Waste Disp ID:	22321
Waste Disp Source:	W
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	Not reported
Transporter Zip:	Not reported
Date Receive:	Not reported

C17 **PUBLIX SUPER MARKET #62** **AST** **A100318088**
NNW **1160 E SR 434** **N/A**
1/8-1/4 **WINTER SPRINGS, FL 32708**
0.212 mi.
1121 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
46 ft.

AST:

Facility ID:	9809815
Name:	PUBLIX SUPER MARKET #62
Address:	1160 E SR 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility Phone:	4073279725
Facility Status:	OPEN
Facility Type:	C
Type Description:	Fuel user/Non-retail
Depco:	P
Region:	STATE
Positioning Method:	Not reported
Latitude/Longitude:	Not reported

Tank:

Tank ID:	1
Tank Capacity:	1000
Tank Location:	ABOVEGROUND
Tank Status:	U
Status Date:	11/01/2007
Install Date:	11/1/2007
Substance:	G
Content Description:	Emerg Generator Diesel
Vessel Indicator:	TANK
DEP Contractor:	P

Piping:

Tank ID:	1
Piping Category:	A
Piping Description:	Abv, no soil contact
Tank ID:	1
Piping Category:	I

PUBLIX SUPER MARKET #62 (Continued) **A100318088**

Piping Description: Suction piping system

Monitoring:
Tank ID: 1
Petro Monitoring Category: Q
Monitoring Description: Visual inspection of ASTs

Tank ID: 1
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 1
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Owner:
Owner ID: 25164
Owner Name: PUBLIX SUPER MARKETS INC - ENVIRONMENTAL
Owner Address: PO BOX 407
Owner Address 2: ATTN: ESP STORAGE TANK REGIS
Owner City,State,Zip: LAKELAND, FL 33802
Owner Contact: BRENDA WILLIAMS EXT-55017
Owner Phone: 8636881188

Construction:
Tank ID: 1
Construction Category: C
Construction Description: Steel

Tank ID: 1
Construction Category: I
Construction Description: Double wall

Tank ID: 1
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 1
Construction Category: P
Construction Description: Level gauges/alarms

C18 **PUBLIX SUPER MARKET #62** **RCRA-VSQG** **1027096185**
NNW **1160 E STATE ROAD 434** **FLR000242453**
1/8-1/4 **WINTER SPRINGS, FL 32708**
0.212 mi.
1121 ft. **Site 2 of 2 in cluster C**

Relative:
Higher

Actual:
46 ft.

RCRA-VSQG:
Date Form Received by Agency: 20201221
Handler Name: PUBLIX SUPER MARKET #62
Handler Address: 1160 E STATE ROAD 434
Handler City,State,Zip: WINTER SPRINGS, FL 32708-2715
EPA ID: FLR000242453
Contact Name: BRENDA WILLIAMS

PUBLIX SUPER MARKET #62 (Continued) **1027096185**

Contact Address:	3300 PUBLIX CORPORATE PARKWAY
Contact City,State,Zip:	LAKELAND, FL 33811-3311
Contact Telephone:	863-688-1188
Contact Fax:	Not reported
Contact Email:	BRENDA.WILLIAMS@PUBLIX.COM
Contact Title:	MGR ENVIRONMENTAL COMPLIANCE
EPA Region:	04
Land Type:	Private
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	FL
State District:	CD
Mailing Address:	1160 E STATE ROAD 434
Mailing City,State,Zip:	WINTER SPRINGS, FL 32708-2715
Owner Name:	WINTER SPRINGS STATION LLC
Owner Type:	Private
Operator Name:	PUBLIX SUPER MARKETS INC
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking

PUBLIX SUPER MARKET #62 (Continued) **1027096185**

Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220415
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D010
Waste Description:	SELENIUM
Waste Code:	D016
Waste Description:	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
Waste Code:	D035
Waste Description:	METHYL ETHYL KETONE
Waste Code:	P001
Waste Description:	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
Waste Code:	P075
Waste Description:	NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	PUBLIX SUPER MARKETS INC
Legal Status:	Private

PUBLIX SUPER MARKET #62 (Continued) **1027096185**

Date Became Current: 20021107
Date Ended Current: Not reported
Owner/Operator Address: 3300 PUBLIX CORP PKWY
Owner/Operator City,State,Zip: LAKELAND, FL 33811-0000
Owner/Operator Telephone: 863-688-1188
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: WINTER SPRINGS STATION LLC
Legal Status: Private
Date Became Current: 20171020
Date Ended Current: Not reported
Owner/Operator Address: 11501 NORTHLAKE DR
Owner/Operator City,State,Zip: CINCINNATI, OH 45249-0000
Owner/Operator Telephone: 513-554-1110
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20201221
Handler Name: PUBLIX SUPER MARKET #62
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 445110
NAICS Description: SUPERMARKETS AND OTHER GROCERY RETAILERS (EXCEPT CONVENIENCE RETAILERS)

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

19 SSW 1/4-1/2 0.327 mi. 1724 ft. — **VACANT CHURCH AND WAREHOUSE**, **395 TUSKAWILLA RD. & 2950 RAILROAD AVE.**, **WINTER SPRINGS, FL 32708** — **SWF/LF ASBESTOS** — **S120042590 N/A**

Relative: Higher

Actual: 47 ft.

SWF/LF:

Name:	TUSKAWILLA CROSSINGS DISASTER DEBRIS MANAGEMENT SITE
Address:	395 TUSKAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility ID:	104855
District:	CD
Lat/Long:	28:41:24.79 / 81:15:48.91
Class Type:	910
Classification:	DISASTER DEBRIS MANAGEMENT SITE
Class Status:	INACTIVE (I)
Section:	Not reported
Township:	Not reported
Range:	Not reported
Responsible Authority Name:	Not reported
Responsible Authority Address:	Not reported
Responsible Authority City,St,Zip:	Not reported
Responsible Authority Phone:	Not reported
EMail Address1:	Not reported
EMail Address2:	Not reported
Site Supervisor Name:	Not reported
Site Supervisor Addr:	Not reported
Site Supervisor City/State/Zip:	Not reported
Site Supervisor Telephone:	Not reported
Land Owner Name:	Not reported
Land Owner Address:	Not reported
Land Owner City/State/Zip:	Not reported
Land Owner Telephone:	Not reported

Click here for Florida Oculus:

ASBESTOS:

Name:	VACANT CHURCH AND WAREHOUSE
Address:	395 TUSKAWILLA RD. & 2950 RAILROAD AVE.
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility ID:	AS11701468
Notification ID:	87645
Notification Type:	ORIGINAL
Project Type:	RENOVATION
Notification Status:	REVIEWED
Site Name:	CHURCH AND WAREHOUSE
Ordered Demolition?:	N
Annual Notification:	Not reported
Owner Name:	STANDARD PACIFIC OF FLORIDA
Contractor Name:	CROSS CONSTRUCTION SERVICES, INC.
Start Date:	05/11/2016
Finish Date:	05/17/2016
Cementitious RACM:	Not reported
Cementitious SF:	600
Floor RACM:	Not reported
Floor SF:	250
Pipe RACM:	Not reported
Pipe SF:	Not reported
CF RACM:	Not reported

VACANT CHURCH AND WAREHOUSE (Continued) **S120042590**

Roof RACM:	Not reported
Roof SF:	Not reported
Surface Mat RACM:	Not reported
Surface Mat SF:	1150
Waste Disposal Site:	ACMS CLASS I LANDFILL
Waste Disposal Address:	1032 CR 529A
Waste Disposal City:	LAKE PANASOFFKEE
Waste Disposal State:	FL
Waste Disposal Zip:	33538
Transporter Name:	Not reported
Contractor is Transporter:	Y
Waste Disp ID:	85764
Waste Disp Source:	W
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	FL
Transporter Zip:	Not reported
Date Receive:	Not reported

20
NNW
1/4-1/2
0.401 mi.
2118 ft.

WINTER SPRINGS CITY-CITY HALL **LUST** **U001374552**
1126 E HWY 434 **UST** **N/A**
WINTER SPRINGS, FL 32708 **AST**
DWM CONTAM
Financial Assurance

Relative:
Lower

Actual:
42 ft.

LUST:

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	STATE
Facility Id:	8731664
Facility Status:	OPEN
Facility Type:	H - Local Government
Facility Phone:	(407)327-1800
Facility Cleanup Rank:	6627
District:	Central District
Lat/Long (dms):	28 42 6.6917 / 81 15 56.1041
Section:	36
Township:	20S
Range:	30E
Feature:	Not reported
Method:	DPHO
Datum:	0
Score:	26
Score Effective Date:	2005-02-07 00:00:00
Score When Ranked:	26
Operator:	KIP LOCKCUFF
Name Update:	2009-09-15 00:00:00
Address Update:	2011-07-22 00:00:00

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	CMPL - COMPLETED
Contact:	IAN FLETCHER
Contact Company:	WINTER SPRINGS CITY
Contact Address:	1126 E SR 434
Contact City/State/Zip:	WINTER SPRINGS, FL 32708
Phone:	(407)327-1800
Bad Address Ind:	N

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

State:	FL
Zip:	32708, 2715
Score:	26
Score Effective Date:	2005-02-07 00:00:00
Related Party ID:	24225
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	1987-01-02
RP Zip:	2799
RP Extension:	320

Discharge Cleanup Summary:

Discharge Date:	5/15/2003
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/3/2008
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	I - INELIGIBLE
Site Manager:	SCHMIDT_JD
Site Mgr End Date:	12/10/2008
Tank Office:	PCLP59 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

Contaminated Media:

Discharge Date:	5/15/2003
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/3/2008
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	COMPLIANCE INSPECTION
Elig Indicator:	I - INELIGIBLE
Site Manager:	SCHMIDT_JD
Site Mgr End Date:	12/10/2008
Tank Office:	PCLP59 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	Not reported
Contaminated Monitoring Well:	Yes
Contaminated Soil:	Not reported
Contaminated Surface Water:	Not reported
Contaminated Ground Water:	Not reported
Pollutant:	B - Unleaded Gas
Pollutant Other Description:	DAMAGE TO THE FILL PORT AREA, RECENT CONSTRUCTION
Gallons Discharged:	Not reported

Task Information:

District:	CD
Facility ID:	8731664
Facility Status:	OPEN
Facility Type:	H - Local Government -
County:	SEMINOLE
County ID:	59
Cleanup Eligibility Status:	I
Source Effective Date:	09-19-2008
Discharge Date:	05-15-2003
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Disch Cleanup Status Date:	10-03-2008
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	09-16-2008
SRC Review Date:	09-19-2008
SRC Completion Status:	A - APPROVED
SRC Issue Date:	10-03-2008
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	SCHMIDT_JD
Site Mgr End Date:	12-10-2008
Tank Office:	PCLP59 - Seminole County
SR Task ID:	82753
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	10-22-2003
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Y
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	24
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	82754
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	83785
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	83531
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	0
RA Actual Cost:	Not reported

Click here for Florida Oculus:

UST:

Facility ID:	8731664
Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Type Description:	Local Government
Depco:	P
Region:	STATE
Positioning Method:	DPHO
Latitude/Longitude:	28 42 6.41999999 / 81 15 58.2000000

UST:

Tank ID:	1
Tank Capacity:	10000
Tank Location:	UNDERGROUND
Tank Status:	B
Status Date:	09/17/2007
Install Date:	4/1/1985
Substance:	B
Content Description:	Unleaded Gas
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	24225
Owner Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address 2:	ATTN: STORAGE TANK REGIS
Owner City,State,Zip:	WINTER SPRINGS, FL 32708
Owner Contact:	IAN FLETCHER
Owner Phone:	4073271800

Construction:

Tank ID:	3
Construction Category:	C
Construction Description:	Steel
Tank ID:	3
Construction Category:	M
Construction Description:	Spill containment bucket
Tank ID:	3
Construction Category:	P
Construction Description:	Level gauges/alarms
Tank ID:	3
Construction Category:	R
Construction Description:	Double wall - tank jacket

Piping:

Tank ID:	3
Piping Category:	A
Piping Description:	Abv, no soil contact
Tank ID:	3
Piping Category:	D
Piping Description:	External protective coating
Tank ID:	3
Piping Category:	B
Piping Description:	Steel/galvanized metal

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Tank ID: 3
Piping Category: I
Piping Description: Suction piping system

Monitoring:
Tank ID: 3
Petro Monitoring Category: Q
Monitoring Description: Visual inspection of ASTs

Tank ID: 3
Petro Monitoring Category: R
Monitoring Description: Monitor tank bottom space

Tank ID: 2
Tank Capacity: 1000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 05/01/2009
Install Date: 4/1/1985
Substance: G
Content Description: Emerg Generator Diesel
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 24225
Owner Name: WINTER SPRINGS CITY
Owner Address: 1126 E SR 434
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: WINTER SPRINGS, FL 32708
Owner Contact: IAN FLETCHER
Owner Phone: 4073271800

Construction:
Tank ID: 3
Construction Category: C
Construction Description: Steel

Tank ID: 3
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 3
Construction Category: P
Construction Description: Level gauges/alarms

Tank ID: 3
Construction Category: R
Construction Description: Double wall - tank jacket

Piping:
Tank ID: 3
Piping Category: A
Piping Description: Abv, no soil contact

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Tank ID: 3
Piping Category: D
Piping Description: External protective coating

Tank ID: 3
Piping Category: B
Piping Description: Steel/galvanized metal

Tank ID: 3
Piping Category: I
Piping Description: Suction piping system

Monitoring:
Tank ID: 3
Petro Monitoring Category: Q
Monitoring Description: Visual inspection of ASTs

Tank ID: 3
Petro Monitoring Category: R
Monitoring Description: Monitor tank bottom space

AST:
Facility ID: 8731664
Name: WINTER SPRINGS CITY-CITY HALL
Address: 1126 E HWY 434
City,State,Zip: WINTER SPRINGS, FL 32708
Facility Phone: 4073271800
Facility Status: OPEN
Facility Type: H
Type Description: Local Government
Depco: P
Region: STATE
Positioning Method: DPHO
Latitude/Longitude: 28 42 6.41999999 / 81 15 58.2000000

Tank:
Tank ID: 3
Tank Capacity: 1000
Tank Location: ABOVEGROUND
Tank Status: U
Status Date: 05/01/2009
Install Date: 5/1/2009
Substance: G
Content Description: Emerg Generator Diesel
Vessel Indicator: TANK
DEP Contractor: P

Piping:
Tank ID: 3
Piping Category: A
Piping Description: Abv, no soil contact

Tank ID: 3
Piping Category: D
Piping Description: External protective coating

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Tank ID: 3
Piping Category: B
Piping Description: Steel/galvanized metal

Tank ID: 3
Piping Category: I
Piping Description: Suction piping system

Monitoring:
Tank ID: 3
Petro Monitoring Category: Q
Monitoring Description: Visual inspection of ASTs

Tank ID: 3
Petro Monitoring Category: R
Monitoring Description: Monitor tank bottom space

Owner:
Owner ID: 24225
Owner Name: WINTER SPRINGS CITY
Owner Address: 1126 E SR 434
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: WINTER SPRINGS, FL 32708
Owner Contact: IAN FLETCHER
Owner Phone: 4073271800

Construction:
Tank ID: 3
Construction Category: C
Construction Description: Steel

Tank ID: 3
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 3
Construction Category: P
Construction Description: Level gauges/alarms

Tank ID: 3
Construction Category: R
Construction Description: Double wall - tank jacket

DWM CONTAM:
Name: WINTER SPRINGS CITY-CITY HALL
Address: 1126 E HWY 434
City,State,Zip: WINTER SPRINGS, FL
Program Site Id: 8731664
Lat DD: 28
Lat MM: 42
Lat SS: 6.42
Long DD: 81
Long MM: 15

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Long SS:	58.2
Office/ District:	CD
Program Area:	STORAGE TANKS
Priority Score:	26
Datum:	Not reported
Method:	DPHO
Facility Status:	CLOSED
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported
RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	Not reported

FL Financial Assurance 3:

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2008
Expire Date:	11/09/2009
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2009
Expire Date:	11/09/2010
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2010
Expire Date:	11/09/2011
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2011
Expire Date:	11/09/2011
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2011
Expire Date:	11/09/2012
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2012
Expire Date:	11/09/2013
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2013
Expire Date:	11/09/2014
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2014
Expire Date:	11/09/2015
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2015
Expire Date:	11/09/2016
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY INSURANCE CO
Effective Date:	11/09/2016
Expire Date:	11/09/2017
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY INSURANCE CO
Effective Date:	11/09/2017
Expire Date:	11/09/2018
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY INSURANCE CO
Effective Date:	11/09/2018

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Expire Date:	11/09/2019
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY INSURANCE CO
Effective Date:	11/09/2019
Expire Date:	11/09/2020
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WINTER SPRINGS	S127070084	UPRIGHT RECYCLING/BRUCE G BECK	600 OLD SANDFORD OVIEDO ROAD	32708	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/06/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/19/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 71

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/03/2022
Next Scheduled EDR Contact: 11/21/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/14/2022
Date Data Arrived at EDR: 06/15/2022
Date Made Active in Reports: 06/21/2022
Number of Days to Update: 6

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/15/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

SHWS: Florida's State-Funded Action Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 05/12/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-488-0190
Last EDR Contact: 08/18/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Semi-Annually

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 04/12/2022
Date Made Active in Reports: 07/01/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-922-7121
Last EDR Contact: 07/11/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST: Petroleum Contamination Detail Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/25/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/14/2022
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Listing

The file for Leaking Aboveground Storage Tanks. Please remember STCM does not track the source of the discharge so the agency provides a list of facilities with an aboveground tank and an open discharge split by facilities with aboveground tanks only and facilities with aboveground and underground tanks.

Date of Government Version: 04/25/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/14/2022
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8799
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/28/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 06/02/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 79
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/29/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

FF TANKS: Federal Facilities Listing
A listing of federal facilities with storage tanks.

Date of Government Version: 06/21/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 09/06/2022
Number of Days to Update: 77

Source: Department of Environmental Protection
Telephone: 850-245-8250
Last EDR Contact: 06/21/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Quarterly

UST: Storage Tank Facility Information
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/25/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

AST: Storage Tank Facility Information
Registered Aboveground Storage Tanks.

Date of Government Version: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/25/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 06/02/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 79

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/14/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/07/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/28/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

TANKS: Storage Tank Facility List

This listing includes storage tank facilities that do not have tank information. The tanks have either be closed or removed from the site, but the facilities were still registered at some point in history.

Date of Government Version: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/25/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8841
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENG CONTROLS: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to engineering controls. Engineering Controls encompass a variety of engineered remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. ECs include fences, signs, guards, landfill caps, provision of potable water, slurry walls, sheet pile (vertical caps), pumping and treatment of groundwater, monitoring wells, and vapor extraction systems.

Date of Government Version: 06/17/2022
Date Data Arrived at EDR: 06/27/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

Inst Control: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

Date of Government Version: 06/17/2022
Date Data Arrived at EDR: 06/27/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Sites
Listing of closed and active voluntary cleanup sites.

Date of Government Version: 04/12/2022
Date Data Arrived at EDR: 05/13/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 18

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS AREAS: Brownfields Areas Database
A "brownfield area" means a contiguous area of one or more brownfield sites, some of which may not be contaminated, that has been designated as such by a local government resolution. Such areas may include all or portions of community redevelopment areas, enterprise zones, empowerment zones, other such designated economically deprived communities and areas, and Environmental Protection Agency (EPA) designated brownfield pilot projects. This layer provides a polygon representation of the boundaries of these designated Brownfield Areas in Florida.

Date of Government Version: 12/07/2021
Date Data Arrived at EDR: 06/27/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

BROWNFIELDS: Brownfields Sites Database
Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

Date of Government Version: 01/11/2022
Date Data Arrived at EDR: 03/29/2022
Date Made Active in Reports: 06/23/2022
Number of Days to Update: 86

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 07/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

BSRA: Brownfield Site Rehabilitation Agreements Listing
The BSRA provides DEP and the public assurance that site rehabilitation will be conducted in accordance with Florida Statutes and DEP's Contaminated Site Cleanup Criteria rule. In addition, the BSRA provides limited liability protection for the voluntary responsible party. The BSRA contains various commitments by the voluntary responsible party, including milestones for completion of site rehabilitation tasks and submittal of technical reports and plans. It also contains a commitment by DEP to review technical reports according to an agreed upon schedule. Only those brownfield sites with an executed BSRA are eligible to apply for a voluntary cleanup tax credit incentive pursuant to Section 376.30781, Florida Statutes.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/29/2022
Date Made Active in Reports: 06/23/2022
Number of Days to Update: 86

Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 07/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/09/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Centers

A listing of recycling centers located in the state of Florida.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 84
Source: Department of Environmental Protection
Telephone: 850-245-8718
Last EDR Contact: 07/07/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/12/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 04/30/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/18/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: No Update Planned

PRIORITYCLEANERS: Priority Ranking List

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a drycleaning facility.

Date of Government Version: 04/30/2022
Date Data Arrived at EDR: 05/12/2022
Date Made Active in Reports: 08/04/2022
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 08/08/2022
Next Scheduled EDR Contact: 11/21/2022
Data Release Frequency: Varies

FL SITES: Sites List

This summary status report was developed from a number of lists including the Eckhardt list, the Moffit list, the EPA Hazardous Waste Sites list, EPA's Emergency & Remedial Response information System list (RCRA Section 3012) & existing department lists such as the obsolete uncontrolled Hazardous Waste Sites list. This list is no longer updated.

Date of Government Version: 12/31/1989
Date Data Arrived at EDR: 05/09/1994
Date Made Active in Reports: 08/04/1994
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 03/24/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 04/30/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/18/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

DEP has conducted initial environmental assessments related to the historic and current use of chemicals found in aqueous film forming foam (AFFF) at fire training facilities throughout Florida

Date of Government Version: 02/11/2022
Date Data Arrived at EDR: 02/18/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 850-245-8690
Last EDR Contact: 08/30/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

PFAS: PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid

PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid, respectively. Both are fluorinated organic chemicals, part of a larger family of compounds referred to as perfluoroalkyl substances (PFASs).

Date of Government Version: 07/24/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 08/08/2022
Number of Days to Update: 14

Source: Department of Environmental Protection
Telephone: 850-245-8690
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/21/2022
Date Made Active in Reports: 06/14/2022
Number of Days to Update: 85

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

SPILLS: Oil and Hazardous Materials Incidents

Statewide oil and hazardous materials inland incidents.

Date of Government Version: 07/05/2022
Date Data Arrived at EDR: 07/06/2022
Date Made Active in Reports: 09/16/2022
Number of Days to Update: 72

Source: Department of Environmental Protection
Telephone: 850-245-2010
Last EDR Contact: 07/05/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/04/2013
Number of Days to Update: 60

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 09/01/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/11/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 73

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/03/2022
Next Scheduled EDR Contact: 11/21/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/21/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/29/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/04/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/12/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/18/2022
Date Data Arrived at EDR: 07/18/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 11

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/14/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/10/2022
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 69

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/04/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/23/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 04/14/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 89

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/29/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/24/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/03/2022
Date Data Arrived at EDR: 08/17/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 14

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/14/2022
Date Data Arrived at EDR: 06/15/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 68

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/13/2022
Date Data Arrived at EDR: 05/18/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 13

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/22/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/02/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 07/01/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/07/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 73

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Quarterly

AIRS: Permitted Facilities Listing

A listing of Air Resources Management permits.

Date of Government Version: 04/22/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/20/2022
Number of Days to Update: 85

Source: Department of Environmental Protection
Telephone: 850-921-9558
Last EDR Contact: 07/14/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-717-9086
Last EDR Contact: 08/09/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

CLEANUP SITES: DEP Cleanup Sites - Contamination Locator Map Listing

This listing includes the locations of waste cleanup sites from various programs. The source of the cleanup site data includes Hazardous Waste programs, Site Investigation Section, Compliance and Enforcement Tracking, Drycleaning State Funded Cleanup Program (possibly other state funded cleanup), Storage Tank Contamination Monitoring.

Date of Government Version: 08/22/2022
Date Data Arrived at EDR: 08/22/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 22

Source: Department of Environmental Protection
Telephone: 866-282-0787
Last EDR Contact: 08/22/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

DEDB: Ethylene Dibromide Database Results

Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells. The amount found exceeds the maximum contaminant level as stated in Chapter 62-550 or 520. It is a potential threat to public health when present in drinking water.

Date of Government Version: 06/13/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 06/27/2022
Number of Days to Update: 14

Source: Department of Environmental Protection
Telephone: 850-245-8335
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Facilities

The Drycleaners database, maintained by the Department of Environmental Protection, provides information about permitted dry cleaner facilities.

Date of Government Version: 04/18/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Semi-Annually

DWM CONTAM: DWM CONTAMINATED SITES

A listing of active or known sites. The listing includes sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and drycleaning).

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/21/2022
Number of Days to Update: 76

Source: Department of Environmental Protection
Telephone: 850-245-7503
Last EDR Contact: 07/05/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A list of hazardous waste facilities required to provide financial assurance under RCRA.

Date of Government Version: 04/03/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/14/2022
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8793
Last EDR Contact: 07/25/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Semi-Annually

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities.

Date of Government Version: 04/03/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/14/2022
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8743
Last EDR Contact: 07/25/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Semi-Annually

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for storage tanks sites.

Date of Government Version: 05/03/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 07/20/2022
Number of Days to Update: 76

Source: Department of Environmental Protection
Telephone: 850-245-8853
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

FL Cattle Dip. Vats: Cattle Dipping Vats

From the 1910's through the 1950's, these vats were filled with an arsenic solution for the control and eradication of the cattle fever tick. Other pesticides, such as DDT, were also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard.

Date of Government Version: 09/27/2019
Date Data Arrived at EDR: 01/10/2020
Date Made Active in Reports: 02/11/2020
Number of Days to Update: 32

Source: Department of Environmental Protection
Telephone: 850-245-4444
Last EDR Contact: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: No Update Planned

HW GEN: Hazardous Waste Generators

Small Quantity Hazardous Waste Generators are regulated under the federal Resource Conservation and Recovery Act (RCRA) and applicable state regulations as generators of hazardous wastes in quantities greater than 100 Kg but less than 1,000 Kg in any one calendar month. Large Quantity Generators of Hazardous Waste are tracked in this coverage based on their notification to the Department of Environmental Protection as to their handler status, or based on inspections conducted at their facilities. These facilities are regulated under the federal Resource Conservation and Recovery Act (RCRA) and applicable state regulations as generators of hazardous wastes in quantities equal to or greater than 1,000 Kg in any one calendar month.

Date of Government Version: 08/11/2021
Date Data Arrived at EDR: 12/17/2021
Date Made Active in Reports: 03/08/2022
Number of Days to Update: 81

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 06/24/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Quarterly

RESP PARTY: Responsible Party Sites Listing

Open, inactive and closed responsible party sites

Date of Government Version: 06/27/2022
Date Data Arrived at EDR: 06/27/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

SITE INV SITES: Site Investigation Section Sites Listing

Statewide coverage of Site Investigation Section (SIS) sites. Site Investigation is a Section within the Bureau of Waste Cleanup, Division of Waste Management. SIS provides technical support to FDEP District Waste Cleanup Programs and conducts contamination assessments throughout the state.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8953
Last EDR Contact: 08/15/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Quarterly

TIER 2: Tier 2 Facility Listing

A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 06/08/2022
Date Made Active in Reports: 08/24/2022
Number of Days to Update: 77

Source: Department of Environmental Protection
Telephone: 850-413-9970
Last EDR Contact: 08/29/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

UIC: Underground Injection Wells Database Listing

A listing of Class I wells. Class I wells are used to inject hazardous waste, nonhazardous waste, or municipal waste below the lowermost USDW.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 04/21/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 850-245-8655
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

WASTEWATER: Wastewater Facility Regulation Database
Domestic and industrial wastewater facilities.

Date of Government Version: 05/02/2022
Date Data Arrived at EDR: 05/03/2022
Date Made Active in Reports: 07/20/2022
Number of Days to Update: 78
Source: Department of Environmental Protection
Telephone: 850-245-8600
Last EDR Contact: 08/01/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29
Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55
Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3
Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALACHUA COUNTY:

FACILITY LIST ALACHUA: Facility List
List of all regulated facilities in Alachua County.

Date of Government Version: 09/06/2022
Date Data Arrived at EDR: 09/07/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 6
Source: Alachua County Environmental Protection Department
Telephone: 352-264-6800
Last EDR Contact: 09/06/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Annually

BROWARD COUNTY:

AST BROWARD: Aboveground Storage Tanks
Aboveground storage tank locations in Broward County.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/03/2021
Number of Days to Update: 78
Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

UST BROWARD: Underground Storage Tanks
All known regulated storage tanks within Broward County, including those tanks that have been closed

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/03/2021
Number of Days to Update: 78
Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

HILLSBOROUGH COUNTY:

LF HILLSBOROUGH: Hillsborough County LF
Hillsborough county landfill sites.

Date of Government Version: 04/04/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 06/29/2022
Number of Days to Update: 85
Source: Hillsborough County Environmental Protection Commission
Telephone: 813-627-2600
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

MIAMI-DADE COUNTY:

DADE CO AP: Air Permit Sites
Facilities that release or have a potential to release pollutants.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

DADE CO AW: Agricultural Waste Listing
A listing of agricultural waste sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: Miami-Dade County Division of Environmental Resources Management
Telephone: 305-372-6715
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

DADE CO LF: Miami Dade County Landfill Solid Waste Sites listing.
Miami Dade County Landfill Solid Waste Sites listing.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/19/2022
Number of Days to Update: 84

Source: Miami Dade County Environmental Resources Management
Telephone: 305-372-6789
Last EDR Contact: 08/09/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

DADE CO LW: Liquid Waste Transporter List
The Liquid Waste Transporter permit regulates the transportation of various types of liquid and solid waste, including hazardous waste, waste oil and oily waste waters, septic and grease trap waste, biomedical waste, spent radiator fluid, photo chemical waste, dry sewage sludge, and other types of non-hazardous industrial waste. The Liquid Waste Transporter permits needed to protect the environment and the public from improperly handled and transported waste.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: DERM
Telephone: 305-372-6755
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

DADE MOP: Marine Facilities Operating Permit
What is this permit used for? Miami-Dade County Ordinance 89-104 and Section 24-18 of the Code of Miami-Dade County require the following types of marine facilities to obtain annual operating permits from DERM: All recreational boat docking facilities with ten (10) or more boat slips, moorings, davit spaces, and vessel tie-up spaces. All boat storage facilities contiguous to tidal waters in Miami-Dade County with ten (10) or more dry storage spaces including boatyards and boat manufacturing facilities.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

DADE MRE: Maimi River Enforcement
The Miami River Enforcement database files were created for facilities and in some instances vessels that were inspected by a workgroup within the Department that was identified as the Miami River Enforcement Group. The files do not all necessarily reflect enforcement cases and some were created for locations that were permitted by other Sections within the Department.

Date of Government Version: 06/05/2013
Date Data Arrived at EDR: 06/06/2013
Date Made Active in Reports: 08/06/2013
Number of Days to Update: 61

Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

DADE_IWP: Industrial Waste Permit Sites

Facilities that either generate more than 25,000 of wastewater per day to sanitary sewers or are pre-defined by EPA.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

ENF: Enforcement Case Tracking System Sites

Enforcement cases monitored by the Dade County Department of Environmental Resources Management.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

SPILLS DADE: Fuel Spills Cases

DERM documents fuel spills of sites that are not in a state program.

Date of Government Version: 01/08/2009
Date Data Arrived at EDR: 01/13/2009
Date Made Active in Reports: 02/05/2009
Number of Days to Update: 23

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

UST DADE: Storage Tanks

A listing of aboveground and underground storage tank site locations.

Date of Government Version: 05/10/2020
Date Data Arrived at EDR: 08/19/2021
Date Made Active in Reports: 11/12/2021
Number of Days to Update: 85

Source: Department of Environmental Resource Management
Telephone: 305-372-6700
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

PALM BEACH COUNTY:

LF PALM BEACH: Palm Beach County LF

Palm Beach County Inventory of Solid Waste Sites.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/20/2011
Date Made Active in Reports: 10/10/2011
Number of Days to Update: 20

Source: Palm Beach County Solid Waste Authority
Telephone: 561-640-4000
Last EDR Contact: 09/09/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/08/2022
Date Data Arrived at EDR: 05/09/2022
Date Made Active in Reports: 07/28/2022
Number of Days to Update: 80

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/08/2022
Next Scheduled EDR Contact: 11/21/2022
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/29/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/06/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/10/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 08/29/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Department of Children & Families
Source: Provider Information
Telephone: 850-488-4900

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SUTTON CROSSING
TUSKAWILLA RD & FL 434
WINTER SPRINGS, FL 32708

TARGET PROPERTY COORDINATES

Latitude (North):	28.695011 - 28ˆ 41’ 42.04’’
Longitude (West):	81.262068 - 81ˆ 15’ 43.44’’
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	474399.5
UTM Y (Meters):	3174049.8
Elevation:	43 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	11610138 CASSELBERRY, FL
Version Date:	2018
East Map:	11610186 OVIEDO, FL
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

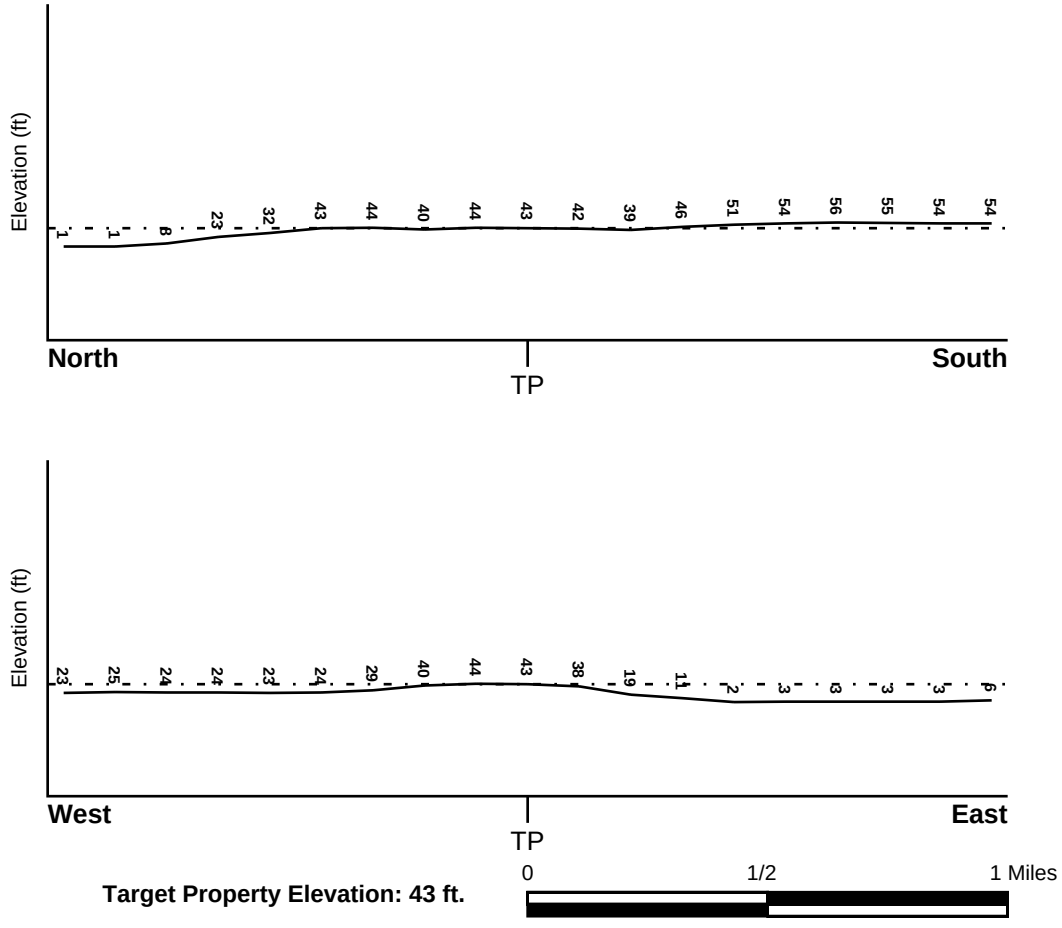
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 43 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
12117C0160F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
12117C0180F	FEMA FIRM Flood data
12117C0170F	FEMA FIRM Flood data
12117C0190F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CASSELBERRY	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Holocene
Code:	Qh *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	FLORIDANA
Soil Surface Texture:	mucky - fine sand
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	Very poorly. Soils are wet to the surface most of the time. Depth to water table is less than 1 foot, or is ponded.

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	21 inches	mucky - fine sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 8.40 Min: 4.50
2	21 inches	25 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 8.40 Min: 4.50
3	25 inches	80 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 0.20 Min: 0.00	Max: 8.40 Min: 4.50

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: muck
fine sand
loamy sand

Surficial Soil Types: muck
fine sand
loamy sand

Shallow Soil Types: fine sand
sand
loamy sand
sandy clay loam

Deeper Soil Types: sand
fine sand
fine sandy loam
sandy clay

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	FL3594152	0 - 1/8 Mile WSW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	FLSA12000019916	0 - 1/8 Mile WNW
A2	FLSA12000007433	0 - 1/8 Mile NNW
B4	FLSA12000075922	1/8 - 1/4 Mile SW
C5	FLSA12000073049	1/8 - 1/4 Mile West
6	FLSA12000019972	1/8 - 1/4 Mile SSW
B7	FLSA12000075919	1/8 - 1/4 Mile West
B8	FLSA12000075920	1/8 - 1/4 Mile West
C9	FLSA12000075908	1/8 - 1/4 Mile WNW
C10	FLSA12000075909	1/8 - 1/4 Mile WNW
B11	FLSA12000075914	1/8 - 1/4 Mile WSW
B12	FLSA12000075915	1/8 - 1/4 Mile WSW
C13	FLSA12000075918	1/8 - 1/4 Mile West
D14	FLSA12000019919	1/8 - 1/4 Mile NW
E15	FLSA12000075910	1/4 - 1/2 Mile West
E16	FLSA12000075911	1/4 - 1/2 Mile West
17	FLSA12000019915	1/4 - 1/2 Mile North
E18	FLSA12000077323	1/4 - 1/2 Mile West
D19	FLSA12000019917	1/4 - 1/2 Mile NW
F20	FLSA12000075917	1/4 - 1/2 Mile West
F21	FLSA12000075916	1/4 - 1/2 Mile West

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E22	FLSA12000075913	1/4 - 1/2 Mile West
E23	FLSA12000075912	1/4 - 1/2 Mile West
D24	FLSA12000019918	1/4 - 1/2 Mile NW
G25	FLSJ12000008319	1/4 - 1/2 Mile SSE
G26	FLSJ12000002943	1/4 - 1/2 Mile SSE
27	FLSA12000070803	1/4 - 1/2 Mile SSW
G28	FLSA12000072526	1/4 - 1/2 Mile SSE
G29	FLSJ12000040794	1/4 - 1/2 Mile SSE
G30	FLSJ12000043733	1/4 - 1/2 Mile SSE
31	FLSA12000004734	1/4 - 1/2 Mile North
H32	FLSJ12000037721	1/4 - 1/2 Mile SSE
H33	FLSJ12000037783	1/4 - 1/2 Mile SSE
H34	FLSJ12000008652	1/4 - 1/2 Mile SSE
35	FLSA12000064025	1/4 - 1/2 Mile South
I36	FLSJ12000056986	1/2 - 1 Mile NW
I37	FLSJ12000064726	1/2 - 1 Mile NW
I38	FLSJ12000010560	1/2 - 1 Mile NW
I39	FLSJ12000031469	1/2 - 1 Mile NW
I40	FLSA12000004733	1/2 - 1 Mile NW
I41	FLSA12000000495	1/2 - 1 Mile NW
I42	FLSJ12000030056	1/2 - 1 Mile NW
I43	FLSJ12000067394	1/2 - 1 Mile NW
J44	FLSJ12000011406	1/2 - 1 Mile South
J45	FLSJ12000022387	1/2 - 1 Mile South
46	FLSA12000064030	1/2 - 1 Mile NNE
47	FLSJ12000027123	1/2 - 1 Mile NW
K48	FLSJ12000013757	1/2 - 1 Mile South
K49	FLSJ12000004844	1/2 - 1 Mile South
K50	FLSJ12000023531	1/2 - 1 Mile South
K51	FLSJ12000043780	1/2 - 1 Mile South
K52	FLSJ12000036643	1/2 - 1 Mile South
K53	FLSJ12000039018	1/2 - 1 Mile South
54	FLSJ12000055297	1/2 - 1 Mile South
K55	FLPUB1000007995	1/2 - 1 Mile South
K56	FLSA12000000489	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 7123398.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells
- Sink holes

SITE NAME:	Sutton Crossing	CLIENT:	Native Geoscience, Inc.
ADDRESS:	Tuskawilla Rd & FL 434 Winter Springs FL 32708	CONTACT:	Clinton Wilhelm
		INQUIRY #:	7123398.2s
LAT/LONG:	28.695011 / 81.262068	DATE:	September 20, 2022 1:05 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
WNW
0 - 1/8 Mile
Higher

FL WELLS **FLSA12000019916**

Database:	Super Act Program Well Data	Well Name:	LAKE JESSUP ANIMAL HOSPITAL
Permit #:	0	Well Status:	ACTIVE
Well Type:	Limited Use PWS	Casing Material:	Black Steel
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported		

A2
NNW
0 - 1/8 Mile
Higher

FL WELLS **FLSA12000007433**

Database:	Super Act Program Well Data	Well Name:	PINCH A PENNY
Permit #:	0	Well Status:	INACTIVE
Well Type:	Limited Use PWS	Casing Material:	Black Steel
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported		

A3
WSW
0 - 1/8 Mile
Higher

FRDS PWS **FL3594152**

Epa region:	04	State:	FL
Pwsid:	FL3594152	Pwsname:	HANDY WAY #3333/CASSELBERRY
Cityserved:	Not Reported	Stateserved:	FL
Zipserved:	Not Reported	Fipscounty:	12117
Status:	Closed	Retpopsrvd:	26
Pwssvcconn:	1	Psource longname:	Groundwater
Pwstype:	TNCWS	Owner:	Private
Contact:	Not Reported	Contactorgname:	Not Reported
Contactphone:	407-327-1217	Contactaddress1:	CNR OF TUSKAWILLA & 434
Contactaddress2:	Not Reported	Contactcity:	WINTER SPRINGS
Contactstate:	FL	Contactzip:	32708
Pwsactivitycode:	I		

PWS ID:	FL3594152	PWS type:	System Owner/Responsible Party
PWS name:	MILLER ENTERPRISES, INC.	PWS address:	Not Reported
PWS city:	CRESCENT CITY	PWS state:	FL
PWS zip:	32112	PWS ID:	FL3594152
Activity status:	Active	Date system activated:	Not Reported
Date system deactivated:	Not Reported	Retail population:	00000026
System name:	HANDY WAY # 3333	System address:	Not Reported
System address:	CNR OF TUSKAWILLA & 434	System city:	WINTER SPRINGS
System state:	FL	System zip:	32708

Population served:	Under 101 Persons	Treatment:	Treated
Latitude:	284140	Longitude:	0811550
Latitude:	284140	Longitude:	0811550

B4
SW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075922**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

C5
West
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000073049**

Database:	Super Act Program Well Data	Well Name:	DONAHOE
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	BLACK STEEL
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

6
SSW
1/8 - 1/4 Mile
Lower

FL WELLS **FLSA12000019972**

Database:	Super Act Program Well Data	Well Name:	HI- FLAVOR MEATS [FORMERLY
Permit #:	0	Well Status:	ABANDONED
Well Type:	Non-Community PWS	Casing Material:	Galvanized
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

B7
West
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075919**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE

Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

B8
West
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075920**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320248401
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

C9
WNW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075908**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

C10
WNW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075909**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320247801
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B11
WSW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075914**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	RETAGGED
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320248101
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

B12
WSW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075915**

Database:	Super Act Program Well Data	Well Name:	LOFROOS
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	GALVANIZED
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

C13
West
1/8 - 1/4 Mile
Lower

FL WELLS **FLSA12000075918**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

D14
NW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000019919**

Database:	Super Act Program Well Data	Well Name:	CARL ROBERTS
Permit #:	0	Well Status:	INACTIVE
Well Type:	Private	Casing Material:	Galvanized
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE

Resident Type: Not Reported

E15
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075910**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320247901
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

E16
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075911**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

17
North
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000019915**

Database:	Super Act Program Well Data	Well Name:	VERN KINGSBURY
Permit #:	0	Well Status:	ABANDONED
Well Type:	Private	Casing Material:	Black Steel
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

E18
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000077323**

Database:	Super Act Program Well Data	Well Name:	RODENBURG
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	BLACK STEEL
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes

Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

D19
NW
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000019917**

Database:	Super Act Program Well Data	Well Name:	TERRY HILL
Permit #:	0	Well Status:	ABANDONED
Well Type:	Private	Casing Material:	Galvanized
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

F20
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075917**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320248201
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

F21
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075916**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

E22
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075913**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported

Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320248001
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

E23
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075912**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

D24
NW
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000019918**

Database:	Super Act Program Well Data	Well Name:	MARK RICE
Permit #:	0	Well Status:	ABANDONED
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

G25
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSJ12000008319**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	67835	Official Permit ID:	8300
Permit Seq #:	3	Station Name:	1
Station Type:	Production Well	Monitoring:	N
Site ID:	25099	Site Name:	L. D. PLANTE INC.
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	L. D. Plante Inc.	Date Received:	06-SEP-00
Decision Made:	06-OCT-00	Permit Expiration:	Not Reported
Recommendation:	No Permit Required	Permit Status:	Never Issued
Project Acres:	136	Casing Diameter (in):	4
Casing Depth (ft):	102	Total Well Depth (ft):	160
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	25
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G26
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSJ12000002943**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3741	Official Permit ID:	8300
Permit Seq #:	2	Station Name:	1
Station Type:	Production Well	Monitoring:	N
Site ID:	4038	Site Name:	L. D. PLANTE INC.
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	L. D. Plante Inc.	Date Received:	14-APR-93
Decision Made:	07-SEP-93	Permit Expiration:	07-SEP-00
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	82	Casing Diameter (in):	4
Casing Depth (ft):	102	Total Well Depth (ft):	160
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	25
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

27
SSW
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000070803**

Database:	Super Act Program Well Data	Well Name:	LORD OF LIFE CHURCH
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

G28
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000072526**

Database:	Super Act Program Well Data	Well Name:	PLANTE
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	BLACK STEEL
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	590088401
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	OWNER		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G29
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSJ12000040794**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	67835	Official Permit ID:	8300
Permit Seq #:	3	Station Name:	2
Station Type:	Production Well	Monitoring:	N
Site ID:	25099	Site Name:	L. D. PLANTE INC.
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	L. D. Plante Inc.	Date Received:	06-SEP-00
Decision Made:	06-OCT-00	Permit Expiration:	Not Reported
Recommendation:	No Permit Required	Permit Status:	Never Issued
Project Acres:	136	Casing Diameter (in):	8
Casing Depth (ft):	84	Total Well Depth (ft):	374
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	1200
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

G30
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSJ12000043733**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3741	Official Permit ID:	8300
Permit Seq #:	2	Station Name:	2
Station Type:	Production Well	Monitoring:	N
Site ID:	4038	Site Name:	L. D. PLANTE INC.
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	L. D. Plante Inc.	Date Received:	14-APR-93
Decision Made:	07-SEP-93	Permit Expiration:	07-SEP-00
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	82	Casing Diameter (in):	8
Casing Depth (ft):	84	Total Well Depth (ft):	374
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	1200
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

31
North
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000004734**

Database:	Super Act Program Well Data	Well Name:	JUANITA BLUMBERG
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	Black Steel
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE

Resident Type: Not Reported

H32
SSE **FL WELLS** **FLSJ12000037721**
1/4 - 1/2 Mile
Lower

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3741	Official Permit ID:	8300
Permit Seq #:	2	Station Name:	C
Station Type:	Production Well	Monitoring:	N
Site ID:	4038	Site Name:	L. D. PLANTE INC.
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	L. D. Plante Inc.	Date Received:	14-APR-93
Decision Made:	07-SEP-93	Permit Expiration:	07-SEP-00
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	82	Casing Diameter (in):	4
Casing Depth (ft):	0	Total Well Depth (ft):	0
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Inactive	Pump Capacity (gpm):	0
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

H33
SSE **FL WELLS** **FLSJ12000037783**
1/4 - 1/2 Mile
Lower

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	67835	Official Permit ID:	8300
Permit Seq #:	3	Station Name:	C
Station Type:	Production Well	Monitoring:	N
Site ID:	25099	Site Name:	L. D. PLANTE INC.
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	L. D. Plante Inc.	Date Received:	06-SEP-00
Decision Made:	06-OCT-00	Permit Expiration:	Not Reported
Recommendation:	No Permit Required	Permit Status:	Never Issued
Project Acres:	136	Casing Diameter (in):	4
Casing Depth (ft):	0	Total Well Depth (ft):	0
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Inactive	Pump Capacity (gpm):	0
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

H34
SSE **FL WELLS** **FLSJ12000008652**
1/4 - 1/2 Mile
Lower

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3741	Official Permit ID:	8300
Permit Seq #:	2	Station Name:	D
Station Type:	Production Well	Monitoring:	N
Site ID:	4038	Site Name:	L. D. PLANTE INC.

Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	L. D. Plante Inc.	Date Received:	14-APR-93
Decision Made:	07-SEP-93	Permit Expiration:	07-SEP-00
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	82	Casing Diameter (in):	4
Casing Depth (ft):	0	Total Well Depth (ft):	0
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	0
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

35
South
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000064025**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ERROR
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	590032601
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

I36
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000056986**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8368	Official Permit ID:	8369
Permit Seq #:	2	Station Name:	A
Station Type:	Production Well	Monitoring:	N
Site ID:	8628	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	06-APR-92	Decision Made:	13-OCT-92
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	4	Casing Depth (ft):	88
Total Well Depth (ft):	150	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Inactive	Pump Capacity (gpm):	100
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

I37
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000064726**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8369	Official Permit ID:	8369
Permit Seq #:	1	Station Name:	A

Station Type:	Production Well	Monitoring:	N
Site ID:	8629	Site Name:	Incian Creek Inc
Permit Type:	Initial Sequence	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Indian Creek Inc	Date Received:	17-DEC-84
Decision Made:	08-APR-85	Permit Expiration:	08-APR-92
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	1280	Casing Diameter (in):	4
Casing Depth (ft):	88	Total Well Depth (ft):	150
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Inactive	Pump Capacity (gpm):	100
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

I38
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000010560**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	62700	Official Permit ID:	8369
Permit Seq #:	4	Station Name:	A
Station Type:	Production Well	Monitoring:	N
Site ID:	20957	Site Name:	Tuscawilla Trails
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	Tuscawilla Trails	Date Received:	13-OCT-99
Decision Made:	16-NOV-00	Permit Expiration:	16-NOV-20
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	50	Casing Diameter (in):	4
Casing Depth (ft):	88	Total Well Depth (ft):	150
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Inactive	Pump Capacity (gpm):	100
Compliance Status:	Out Of Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

I39
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000031469**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	12071	Official Permit ID:	8369
Permit Seq #:	3	Station Name:	A
Station Type:	Production Well	Monitoring:	N
Site ID:	11986	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Transfer of Ownership	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	10-OCT-96	Decision Made:	10-OCT-96
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	4	Casing Depth (ft):	88
Total Well Depth (ft):	150	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Inactive	Pump Capacity (gpm):	100
Compliance Status:	Out Of Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

I40
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSA12000004733**

Database:	Super Act Program Well Data	Well Name:	TUSKAWILLA TRAILS
Permit #:	3694026	Well Status:	RETAGGED
Well Type:	Irrigation	Casing Material:	Black Steel
Well Depth (ft):	460	Casing Length (ft):	322
Casing Diameter (in):	10	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

I41
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSA12000000495**

Database:	Super Act Program Well Data	Well Name:	TUSKAWILLA TRAILS
Permit #:	3594026	Well Status:	INACTIVE
Well Type:	Irrigation	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

I42
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000030056**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	12071	Official Permit ID:	8369
Permit Seq #:	3	Station Name:	B
Station Type:	Production Well	Monitoring:	N
Site ID:	11986	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Transfer of Ownership	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	10-OCT-96	Decision Made:	10-OCT-96
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	10	Casing Depth (ft):	322
Total Well Depth (ft):	460	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Abandoned	Pump Capacity (gpm):	750
Compliance Status:	Out Of Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

I43
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000067394**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8368	Official Permit ID:	8369
Permit Seq #:	2	Station Name:	B
Station Type:	Production Well	Monitoring:	N
Site ID:	8628	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	06-APR-92	Decision Made:	13-OCT-92
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	10	Casing Depth (ft):	322
Total Well Depth (ft):	460	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Abandoned	Pump Capacity (gpm):	750
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

J44
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000011406**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	70241	Official Permit ID:	8420
Permit Seq #:	3	Station Name:	1
Station Type:	Production Well	Monitoring:	N
Site ID:	27468	Site Name:	Keeth Elementary
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	Keeth Elementary	Date Received:	02-MAR-01
Decision Made:	19-OCT-01	Permit Expiration:	19-OCT-21
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	5.79	Casing Diameter (in):	6
Casing Depth (ft):	132	Total Well Depth (ft):	204
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	100
Compliance Status:	Undetermined	Permit App Process Status:	CLOS
Project Use:	Landscape/Recreation/Aesthetic		

J45
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000022387**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3794	Official Permit ID:	8420
Permit Seq #:	2	Station Name:	1
Station Type:	Production Well	Monitoring:	N
Site ID:	4091	Site Name:	KEETH ELEMENTARY
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)

Permit Project Name:	Keeth Elementary	Date Received:	08-OCT-93
Decision Made:	08-FEB-94	Permit Expiration:	08-FEB-01
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	12.3	Casing Diameter (in):	6
Casing Depth (ft):	132	Total Well Depth (ft):	204
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	100
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Landscape/Recreation/Aesthetic		

46
NNE
1/2 - 1 Mile
Lower

FL WELLS **FLSA12000064030**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	590033101
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

47
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000027123**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	12071	Official Permit ID:	8369
Permit Seq #:	3	Station Name:	C
Station Type:	Production Well	Monitoring:	N
Site ID:	11986	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Transfer of Ownership	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	10-OCT-96	Decision Made:	10-OCT-96
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	12	Casing Depth (ft):	88
Total Well Depth (ft):	500	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Proposed	Pump Capacity (gpm):	1200
Compliance Status:	Out Of Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

K48
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000013757**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	107737	Official Permit ID:	8238
Permit Seq #:	6	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	306959	Site Name:	WTP 1

Permit Type:	Renewal	Permit Stage:	Compliance
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	26-SEP-06
Decision Made:	25-JAN-10	Permit Expiration:	25-JAN-30
Recommendation:	Approval	Permit Status:	Issued
Project Acres:	0	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	Undetermined	Permit App Process Status:	COMP
Project Use:	Public Supply		

K49
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000004844**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8240	Official Permit ID:	8238
Permit Seq #:	3	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	8500	Site Name:	CITY OF WINTER SPRINGS
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	01-MAY-95
Decision Made:	07-NOV-95	Permit Expiration:	07-NOV-02
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	3400	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

K50
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000023531**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3715	Official Permit ID:	8238
Permit Seq #:	4	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	4012	Site Name:	CITY OF WINTER SPRINGS
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	06-MAR-96
Decision Made:	08-OCT-96	Permit Expiration:	08-OCT-06
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	7000	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

K51
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000043780**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8239	Official Permit ID:	8238
Permit Seq #:	2	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	8499	Site Name:	CITY OF WINTER SPRINGS
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	04-DEC-85
Decision Made:	09-MAY-88	Permit Expiration:	09-MAY-95
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	3400	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

K52
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000036643**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	87750	Official Permit ID:	8238
Permit Seq #:	5	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	93278	Site Name:	WTP No 1
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	28-FEB-03
Decision Made:	13-MAY-03	Permit Expiration:	08-OCT-06
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	9	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	Undetermined	Permit App Process Status:	CLOS
Project Use:	Public Supply		

K53
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000039018**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	107737	Official Permit ID:	8238
Permit Seq #:	6	Station Name:	MW-V1
Station Type:	Monitoring Well	Monitoring:	Y
Site ID:	306410	Site Name:	City of Winter Springs
Permit Type:	Renewal	Permit Stage:	Compliance
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)

Permit Project Name:	City of Winter Springs	Date Received:	26-SEP-06
Decision Made:	25-JAN-10	Permit Expiration:	25-JAN-30
Recommendation:	Approval	Permit Status:	Issued
Project Acres:	0	Casing Diameter (in):	4
Casing Depth (ft):	471	Total Well Depth (ft):	501
Water Source:	Not Reported	Station Status:	Active
Pump Capacity (gpm):	0	Compliance Status:	Undetermined
Permit App Process Status:	COMP	Project Use:	Public Supply

54
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000055297**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	107737	Official Permit ID:	8238
Permit Seq #:	6	Station Name:	4EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	306959	Site Name:	WTP 1
Permit Type:	Renewal	Permit Stage:	Compliance
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	26-SEP-06
Decision Made:	25-JAN-10	Permit Expiration:	25-JAN-30
Recommendation:	Approval	Permit Status:	Issued
Project Acres:	0	Casing Diameter (in):	12
Casing Depth (ft):	130	Total Well Depth (ft):	350
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	1200
Compliance Status:	Undetermined	Permit App Process Status:	COMP
Project Use:	Public Supply		

K55
South
1/2 - 1 Mile
Higher

FL WELLS **FLPUB1000007995**

Database:	Public Water System (PWS) Wells (Non-Federal)		
PWS Status:	ACTIVE	PWS Name:	WINTER SPRINGS, CITY OF (3 WPS)
PWS Type:	COMMUNITY	PWS Operator:	KYLE LANHAM
PWS Population Served:	34657	PWS Last San Survey:	19-SEP-19
PWS Design Capacity:	13912000	PWS Primary Service Area:	MUNICIPAL/CITY
Well ID:	2	Well Name:	WELL #2 TUSKAWILLA
Well Status:	ACTIVE	FLUW ID:	AAC3126
Height Above Elipsoid (m):	0	Well Plant ID:	3
Year Drilled:	1978	Depth (ft):	290
Availability Usage:	PERMANENT	Aquifer:	Floridan Aquifer

K56
South
1/2 - 1 Mile
Higher

FL WELLS **FLSA12000000489**

Database:	Super Act Program Well Data	Well Name:	WINTER SPRINGS EAST(TUSKAWILLA)
Permit #:	3591394	Well Status:	INACTIVE
Well Type:	Large (>150,00 gpd) Community PWS	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0

Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	1	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: FL Radon

Radon Test Results

Zip	Total Buildings	% of sites>4pCi/L	Data Source
32708	280	0.0	Certified Residential Database
32708	27	0.0	Mandatory Non-Residential Database
32708	1	0.0	Mandatory Residential Database

Federal EPA Radon Zone for SEMINOLE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SEMINOLE COUNTY, FL

Number of sites tested: 82

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.630 pCi/L	100%	0%	0%
Basement	1.450 pCi/L	75%	25%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Public Water System (PWS) Wells (Non-Federal)
Department of Environmental Protection
Telephone: 850-245-8629
Statewide coverage of PWS Wells, excluding Federally owned facilities.

Well Construction Permitting Database
Source: Northwest Florida Water Management District
Telephone: 850-539-5999

Consumptive Use Permit Well Database
Source: St. Johns River Water Management District
Telephone: 386-329-4841

DEP GWIS - Generalized Water Information System Well Data
Source: Department of Environmental Protection
Telephone: 850-245-8507
Data collected for the Watershed Monitoring Section of the Department of Environmental Protection.

DOH and DEP Historic Study of Private Wells
Source: Department of Environmental Protection
Telephone: 850-559-0901
Historic database for private supply wells.

Permitted Well Location Database
Source: South Florida Water Management District
Telephone: 561-682-6877

Super Act Program Well Data
Source: Department of Health
Telephone: 850-245-4250
This table consists of data relating to all privately and publicly owned potable wells investigated as part of the SUPER Act program. The Florida Department of Health's SUPER Act Program (per Chapter 376.3071(4)(g), Florida Statutes), was given authority to provide field and laboratory services, toxicological risk assessments, investigations of drinking water contamination complaints and education of the public.

Water Well Location Information
Source: Suwannee River Water Management District
Telephone: 386-796-7211

Water Well Permit Database
Source: Southwest Water Management District
Telephone: 352-796-7211

Oil and Gas Permit Database
Source: Department of Environmental Protection
Telephone: 850-245-3194
Locations of all permitted wells in the state of Florida.

Florida Sinkholes

PHYSICAL SETTING SOURCE RECORDS SEARCHED

RADON

State Database: FL Radon
Source: Department of Health
Telephone: 850-245-4288
Zip Code Based Radon Data

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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Appendix iv

NATIVE GEOSCIENCE

2014 Edgewater Drive, Suite 246
Orlando, Florida 32804
(321) 442-3056
cwilhelm@nativegeo.com

CLINTON H. WILHELM

EXPERIENCE

Mr. Wilhelm has worked in the environmental and geotechnical industry for over seven years. He is familiar with stormwater system design methodologies, field testing for soil and groundwater parameters for stormwater system design, groundwater modeling, environmental assessment of soil and groundwater contamination, as well as environmental remediation technologies. Mr. Wilhelm has performed and reviewed numerous geotechnical and environmental reports in the State of Florida. He is certified in Hazardous Waste Operations and Emergency Response (HAZWOPER) per 29 CFR 1910.120(e). He has conducted numerous site assessments including soil and groundwater screening, sampling and analysis and has overseen soil and groundwater remediation projects.

Mr. Wilhelm has participated in the performance of environmental site assessments that include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the process used to develop opinions regarding conditions indicative of releases of hazardous substances and or petroleum products.

EDUCATION

FLORIDA ATLANTIC UNIVERSITY, BOCA RATON, FLORIDA – BACHELORS OF SCIENCE IN GEOLOGY

NATIVE GEOSCIENCE

2014 Edgewater Drive, Suite 246
Orlando, Florida 32804
(407) 342-1443
cdiehl@nativegeo.com

JOHN (CAIN) DIEHL, JR, P.G.

EXPERIENCE

Mr. Diehl has worked in the environmental industry for over 15 years and is currently a Professional Geologist in the State of Florida (P.G. # 2460). He is familiar with environmental remediation technologies such as In-Situ Chemical Oxidation, Bioremediation, Air Sparging and Soil Vapor Recovery, Permeable Reactive Barriers, etc. Mr. Diehl has performed and reviewed numerous Phase I Environmental Site Assessments in the State of Florida as well as Georgia, Alabama, New Hampshire, Maine, Utah, and California. He is certified in Hazardous Waste Operations and Emergency Response (HAZWOPER) per 29 CFR 1910.120(e). He has conducted numerous site assessments including soil and groundwater screening, sampling and analysis and has overseen soil and groundwater remediation projects.

Mr. Diehl has participated in the performance of environmental site assessments that include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions and for which professional judgment was used to develop opinions regarding conditions indicative of releases of hazardous substances and or petroleum products.

EDUCATION

UNIVERSITY OF FLORIDA, GAINESVILLE, FLORIDA – BACHELORS OF SCIENCE IN GEOLOGY

With Honors

UNIVERSITY OF MONTANA, MISSOULA, MONTANA – MASTERS OF SCIENCE IN HYDROGEOLOGY

PROPOSED SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED

ACE HARDWARE

LOCATION OF SITE

E. SR. 434 & MICHAEL BLAKE BLVD.

WINTER SPRINGS, FL 32708

SECTION 38, TOWNSHIP 21 SOUTH, RANGE 31 EAST

REFERENCES AND CONTACTS

REFERENCES

- BOUNDARY & TOPOGRAPHIC SURVEY:
  REPUBLIC NATIONAL
  480 NEEDLES TRAIL
  LONGWOOD, FL 32779
  DATED: 10/08/24 (REV. 4)
  JOB # /SURVEY JOB #: 220336
  ELEVATIONS: NAVD 1988
- GEOTECHNICAL INVESTIGATION REPORT:
  YOVAISH ENGINEERING SERVICES
  953 SUNSHINE LANE
  ALTAMONTE SPRINGS, FL 32714
  DATED: 10/12/23
- ARCHITECTURAL PLAN:
  STUDIO1+
  9100 CONROY WINDERMERE ROAD,
  SUITE 200 PMB 374
  WINDERMERE, FL 34786
  DATED: 08/20/24

GOVERNING AGENCIES

- PLANNING, ZONING COMMITTEE
  CITY OF WINTER SPRINGS
  1126 E STATE RD. 434
  WINTER SPRINGS, FL 32708
  PHONE: (407) 327-5963
- BUILDING DEPARTMENT
  CITY OF WINTER SPRINGS BUILDING DEPT.
  1126 E STATE RD. 434
  WINTER SPRINGS, FL 32708
  PHONE: (407) 327-5963
- FIRE DEPARTMENT
  SEMINOLE COUNTY FIRE DEPT.
  150 ESLINGER WAY
  SANFORD, FL 32773
  PHONE: (407) 665-5042
- FDOT DISTRICT 5
  719 SOUTH WOODLAND BLVD.
  DELAND, FL 32720
  PHONE: (800) 780-7120
- SJRWMD
  19561 SE HWY. 42
  UMATILLA, FL 32784
  PHONE: (832) 821-1043

ROW JURISDICTION

- TRAFFIC, STORMWATER, WATER & SEWER
  CITY OF WINTER SPRINGS PUBLIC WORKS
  1126 E. SR. 434
  WINTER SPRINGS, FL 32708
  PHONE: (407) 327-5989

UTILITIES

- TELEPHONE
  AT&T
  PHONE: (407) 778-9140
- CABLE/INTERNET/FIBER
  SPECTRUM
  CONTACT: HELENE HERNANDEZ
  PHONE: (407) 332-8092
- ELECTRIC
  DUKE ENERGY
  2801 WEST STATE ROAD 426
  OVIEDO, FL 32765
  PHONE: (407) 359-4447
- GAS
  FLORIDA PUBLIC UTILITIES
  405 S. HWY 17-92
  DEBARY, FL 33713
  CONTACT: DAVID JOHNSON
  PHONE: (352) 636-7057
- WATER AND SEWER
  CITY OF WINTER SPRINGS
  1126 E. S.R. 434
  WINTER SPRINGS, FL 32708
  CONTACT: DILLON THOMAS
  PHONE: (407) 327-1800 EXT. 588

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.

LEGAL DESCRIPTION

THE LAND IS DESCRIBED AS FOLLOWS:
THAT PART OF LOT 8 BLOCK "A", OF TUSKAWILLA, ACCORDING TO THE PLAT OF MITCHELL'S SURVEY OF THE LEVY GRANT AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWESTERN MOST CORNER OF LOT 31 ST. JOHNS LANDING AS RECORDED IN PLAT BOOK 53, PAGES 45 THRU 49 OF SAID PUBLIC RECORDS, SAID POINT BEING A RECOVERED CONCRETE MONUMENT ON THE EASTERLY RIGHT OF WAY LINE OF TUSKAWILLA ROAD (FORMERLY BRANTLEY AS RECORDED IN OFFICIAL RECORDS BOOK 3225, PAGE 1829 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 59°31'38" WEST ALONG THE WESTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 31 FOR A DISTANCE OF 15.00 FEET; THENCE RUN SOUTH 30°04'55" WEST ALONG SAID EASTERLY RIGHT OF WAY LINE FOR A DISTANCE OF 5.00 FEET; THENCE CONTINUE SOUTH 30°04'55" WEST A DISTANCE OF 35.00 FEET; THENCE SOUTH 59°31'38" EAST, A DISTANCE OF 1132.34 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT HAVING A RADIUS OF 150.00 FEET; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE AT 60°36'00" FOR AN ARC DISTANCE OF 158.65 FEET TO THE POINT OF TANGENCY; THENCE SOUTH 01°04'22" WEST A DISTANCE OF 146.91 FEET; THENCE SOUTH 24°59'41" WEST, A DISTANCE OF 318.72 FEET; THENCE SOUTH 00°00'00" EAST A DISTANCE OF 115.48 FEET; THENCE SOUTH 36°55'21" EAST A DISTANCE OF 217.54 FEET; THENCE SOUTH 15°19'53" EAST A DISTANCE OF 140.49 FEET; THENCE SOUTH 02°23'00" WEST A DISTANCE OF 556.34 FEET; THENCE SOUTH 07°25'15" WEST A DISTANCE OF 272.61 FEET; THENCE SOUTH 29°30'05" WEST A DISTANCE OF 231.32; THENCE SOUTH 50°31'58" WEST A DISTANCE OF 1475.69 FEET TO THE NORTHEASTERLY RIGHT OF WAY LINE OF STATE ROAD 434 ACCORDING TO FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 77070-2516; THENCE CONTINUE SOUTH 50°31'58" WEST FOR A DISTANCE OF 143.34 FEET TO A FOUND 1/2" IRON ROD & CAP (LB ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF SAID STATE ROAD 434; THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY NORTH 39°47'08" WEST, 741.99 FEET TO THE POINT OF BEGINNING; THENCE DEPARTING SAID SOUTHWESTERLY RIGHT OF WAY SOUTH 50°22'25" WEST, 153.21 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071); THENCE SOUTH 49°13'20" WEST, 22.84 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 21°33'57", AND A CHORD BEARING AND DISTANCE OF SOUTH 68°52'35" WEST, 63.61 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 63.99 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON THE WESTERLY RIGHT OF WAY OF C.S.X TRANSPORTATION., INC "LAKE CHARM BRANCH" RAIL CORRIDOR; SAID POINT BEING ON A NON-TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°28'47", AND A CHORD BEARING AND DISTANCE OF SOUTH 01°55'26" EAST, 31.04 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AND SAID WESTERLY RIGHT OF WAY, A DISTANCE OF 31.04 FEET TO A FOUND 4"X4" CONCRETE MONUMENT (LB 220) ON THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 17 OF SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID WESTERLY RIGHT OF WAY, ALONG SAID EASTERLY EXTENSION OF NORTH LINE, NORTH 87°52'13" WEST, 143.10 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID EASTERLY EXTENSION OF THE NORTH LINE, ALONG SAID EASTERLY RIGHT OF WAY, NORTH 02°44'06" EAST, 510.43 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R MITCHELL'S SURVEY OF LEVY GRANT, THENCE DEPARTING SAID EASTERLY RIGHT OF WAY, ALONG SAID NORTHERLY RIGHT OF WAY, NORTH 87°56'41" WEST, 21.83 FEET TO THE EASTERLY BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2152, PAGE 533 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE DEPARTING SAID NORTHERLY RIGHT OF WAY, ALONG SAID EASTERLY BOUNDARY, NORTH 02°03'02" EAST, 65.81 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT OF WAY OF AFORESAID STATE ROAD 434; THENCE DEPARTING SAID EASTERLY BOUNDARY, ALONG THE SAID SOUTHWESTERLY RIGHT OF WAY THE FOLLOWS THREE (3) COURSES: 1) THENCE SOUTH40°37'45" EAST, 224.63 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EASTERLY, ; HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°18'00", AND A CHORD BEARING AND DISTANCE OF SOUTH 06°37'29" WEST, 19.42 FEET; 2) THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 19.42 FEET TO THE END OF SAID CURVE; 3) THENCE S.39°47'08"E., 293.27 FEET TO THE POINT OF BEGINNING.

LESS (OFFICIAL RECORDS BOOK 8943, PAGE 877)

A PORTION LOT 8, BLOOK A, DR MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, LYING IN SECTION 6, TOWNSHIP 21 SOUTH, RANGE 31 EAST BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE RESERVE AT TUSCAWILLA PHASE II, AS RECORDED IN PLAT BOOK 50, PAGES 3 THROUGH 9 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE RUN SOUTH 00°46'33" EAST ALONG THE WESTERLY LINE OF SAID RESERVE AT TUSCAWILLA, PHASE II, ALSO BEING THE EAST LINE OF BLOCK A, GARDENIA FARMS TOWN SITES, AS RECORDED IN PLAT BOOK 6, PAGE 39, OF THE SAID PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, FOR A DISTANCE OF 810.29 FEET TO A POINT ON THE NORTHEASTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS AS RECORDED IN OFFICIAL RECORDS BOOK 3177, PAGE 632 OF SAID PUBLIC RECORDS; THENCE DEPARTING SAID WEST LINE AND SAID EAST LINE, RUN NORTH 55°28'13" WEST ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 593.50 FEET TO THE SOUTHEAST CORNER OF BLOCK C, OF SAID GARDENIA FARMS TOWN SITES; THENCE CONTINUE NORTH 55°28'13" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 800.00 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1815.35 FEET, A CHORD BEARING OF NORTH 39°53'20" WEST AND A CHORD DISTANCE OF 974.43 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 31°08'12" FOR AN ARC DISTANCE OF 986.53 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 2148.74 FEET, A CHORD BEARING OF NORTH 22°10'08" WEST AND A CHORD DISTANCE OF 162.34 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 04°19'47" FOR AN ARC DISTANCE OF 162.58 FEET TO A POINT ON THE NORTHWESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, AS RECORDED IN OFFICIAL RECORDS BOOK 3988, PAGE 1075 OF THE AFORESAID PUBLIC RECORDS OF SEMINOLE COUNTY; THENCE RUN NORTH 49°31'30" EAST, ALONG SAID NORTHWESTERLY RIGHT OF WAY LINE, NON-TANGENT TO SAID CURVE, FOR A DISTANCE OF 250.50 FEET; THENCE RUN NORTH 39°49'55" WEST, DEPARTING SAID NORTHWESTERLY RIGHT OF WAY LINE FOR A DISTANCE OF 659.48 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, ACCORDING TO THE AFORESAID OFFICIAL RECORDS BOOK 3177, PAGE 632, LYING ON A NON-TANGENT CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 4008.02 FEET, A CHORD BEARING OF NORTH 01°01'14" WEST AND A CHORD DISTANCE OF 96.30 FEET; THENCE RON NORTHERLY ALONG SAID WESTERLY RIGHT OF WAY LINE AND ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 01°22'36" FOR AN ARC DISTANCE OF 96.30 FEET TO A NON-TANGENT POINT AND THE POINT OF BEGINNING; THENCE RUN NORTH 87°58'38" WEST, ALONG THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 17 OF TUSKAWILLA, ACCORDING TO THE PLAT OF D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, NON-RADIAL WITH SAID CURVE AND DEPARTING SAID WESTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 142.83 FEET TO THE EASTERLY LINE OF THAT CERTAIN THIRTY FOOT (30) WIDE UNNAMED RIGHT OF WAY ACCORDING TO THE AFORESAID PLAT OF D.R. MITCHELL'S SURVEY OF THE LEVY GRANT; THENCE RUN NORTH 02°41'39" EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 27.00 FEET; THENCE RUN SOUTH 87°58'38" EAST, DEPARTING SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 99.57 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 151.67 FEET, A CHORD BEARING OF NORTH 83°10'19" EAST AND A CHORD DISTANCE OF 41.09 FEET; THENCE RUN NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 15°34'11" FOR AN ARC DISTANCE OF 41.22 FEET TO A POINT ON THE AFORESAID WESTERLY. RIGHT OF WAY LINE OF RAILS TO TRAILS, LYING ON A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 4008.02 FEET, A CHORD BEARING OF SOUTH 02°05'36" EAST AND A CHORD DISTANCE OF 33.41 FEET; THENCE RUN SOUTHERLY ALONG SAID WESTERLY RIGHT OF WAY LINE AND ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 00°28'39" FOR AN ARC DISTANCE OF 33.41 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH:

LOTS 1 AND 2 AND THAT PART OF LOTS 3 AND 4 EAST OF GOLDENROD ROAD, TUSKAWILLA, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGE 5, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

TOGETHER WITH: THE NORTH HALF (1/2) OF THE VACATED RIGHT-OF-WAY ADJACENT ON THE SOUTH, AS DESCRIBED IN RESOLUTION RECORDED IN O.R. BOOK 1050, PAGE 401, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

LESS AND EXCEPT: THOSE PORTIONS TAKEN IN WARRANTY DEED RECORDED IN O.R. BOOK 2440, PAGE 489, AND ORDER OF TAKING RECORDED IN O.R. BOOK 3326, PAGE 1162, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.



LOCATION MAP
SCALE: 1" = 1,000'
SOURCE: MICROSOFT

APPLICANT/CONTACT

BLUE ORANGE HOLDINGS, LLC
WESS MCMILLAN
PHONE: (407) 509-7098
EMAIL: WESSMCMILLAN@GMAIL.COM

PREPARED BY

BOHLER

CONTACT: FL-PERMITS@BOHLERENG.COM

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SURVEY NOTE

A BOUNDARY AND TOPOGRAPHY SURVEY HAS BEEN PREPARED BY REPUBLIC NATIONAL. ALL EXISTING INFORMATION SHOWN IS BASED ON SAID SURVEY UNLESS OTHERWISE NOTED. PARCEL BOUNDARY LINES SHOWN THESE PLANS ARE BASED ON THE SURVEY PREPARED BY REPUBLIC NATIONAL DATED 5-4-2022. FUTURE/PROPOSED INTERNAL LOT LINES ARE APPROXIMATE AND WILL BE PROPOSED UNDER A FUTURE REPLAT OF THE PROJECT SITE, PREPARED BY THE PROJECT SURVEYOR.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND PLANNING
PERMITTING SERVICES
TRANSPORTATION SERVICES
THE INFORMATION, DESIGN AND CONCEPTS SET FORTH IN THIS DRAWING ARE THE PROPERTY OF BOHLER AND SHALL NOT BE ALTERED OR USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE EXPRESS WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED, SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

811 Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS
FOR
SUTTON CROSSINGS
PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, OID.0.9.2342.19200300.100.1.1=AMERICAS2982738226, C=US
Date: 2025.02.11 15:55:35-05'00'
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MOREL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-CNDS-FLA240162.00-0A-----1A\LYOUT: C-101 - COVER SHEET
KK

GENERAL NOTES

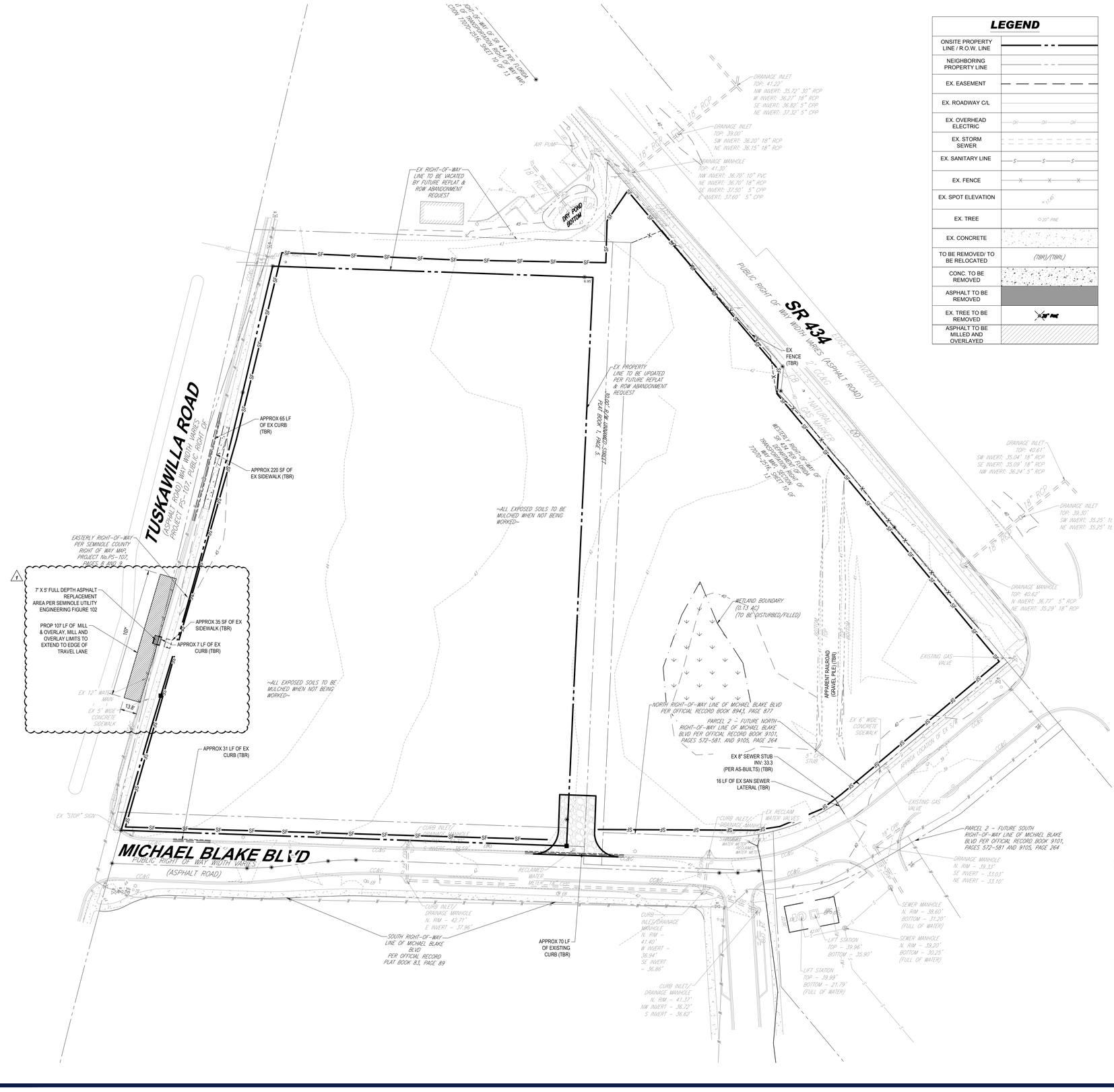
(Rev. 1/2023)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING FL, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE PROFESSIONAL OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER, IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS. THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND CONTINUING RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BE UNDERTAKEN UNTIL THOROUGHLY REVIEWING AND UNDERSTANDING THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK PERFORMED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING PROFESSIONAL OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) PROFESSIONAL OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. PROFESSIONAL OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIAL, HAZARDOUS SUBSTANCES OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, EXISTING CONTIGUOUS STRUCTURES AND PROPERTIES. IN NO WAY IS THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.
14. THE CONTRACTOR IS TO EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND FOR THIRD PARTIES, PEDESTRIANS AND ANYONE ELSE WHO MAY BE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
17. THE CONTRACTOR SHALL REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY CORRESPONDING ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
18. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING THE PROFESSIONAL OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
20. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO, AND MUST JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD BOHLER AND THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT PROFESSIONAL OF RECORD AND BOHLER SUFFER AND ANY AND ALL COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME.
21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE BOHLER ENDORSED TO NAME BOHLER, AND ALL OF BOHLER'S PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AS ADDITIONAL INSUREDS ON THEIR POLICIES (CONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREINAFTER COLLECTIVELY, THE "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ANY AND ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY BODY HAVING JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE MEANS, METHODS OR TECHNIQUES OF CONSTRUCTION OR ANY SAFETY PRECAUTIONS OR SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE. THESE NOTES OR ANY PLAN SET THEREIN SHALL NOT BE CONSTRUED THAT THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
22. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
23. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN PROFESSIONAL OF RECORD'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR MUST, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
24. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY.
25. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE PROFESSIONAL OF RECORD AND BOHLER'S (AS APPROVED PLANS) AND DESIGN AND, FURTHER, OWNER IS SOLELY RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
26. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
27. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. PROFESSIONAL OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
28. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS, INSTALLATION CRITERIA AND SPECIFICATIONS. IN THE CONTRACTOR AND OWNER'S FAILURE TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND COSTS THAT PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE.
29. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
30. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

DEMOLITION NOTES

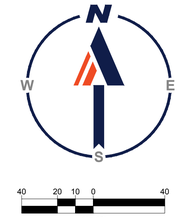
(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION OR DEMOLITION ACTIVITY WITH RESPECT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY AND/OR REQUIRED TO COMPLETE THE WORK SHOWN THEREIN.
   B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK MUST BE IN CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL STRUCTURES AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES DISTURBED BY THE PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER IN ACCORDANCE WITH ALL OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEIGHBORING THE SITE.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM ANY DIMENSIONAL HAZARDS AND/OR CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME DURING THE DEMOLITION AREA.
8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS, AND/OR THE CONTRACTOR'S PROPOSED METHODS AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT. ANY SUCH CONCERNS MUST BE CONVEYED TO THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, AND ALL DEMOLITION ACTIVITIES MUST BE SUSPENDED UNTIL SUCH TIME AS THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.
9. THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL CONFIRMATIONS OF UTILITY DISCONNECTIONS AND DISCONTINUANCES AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED, REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL APPLICABLE CODES AND STANDARDS PRIOR TO COMMENCING DEMOLITION.
10. PRIOR TO COMMENCING ANY DEMOLITION, THE CONTRACTOR MUST:
    A. OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE PROFESSIONAL OF RECORD AND ALL PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK.
    B. NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISD



LEGEND

ONSITE PROPERTY LINE / R.O.W. LINE	
NEIGHBORING PROPERTY LINE	
EX. EASEMENT	
EX. ROADWAY C/L	
EX. OVERHEAD ELECTRIC	OH OH OH
EX. STORM SEWER	
EX. SANITARY LINE	S S S
EX. FENCE	X X X
EX. SPOT ELEVATION	x 0.00'
EX. TREE	0.20" PINE
EX. CONCRETE	
TO BE REMOVED/ TO BE RELOCATED	(TBR)/(TBRL)
CONC. TO BE REMOVED	
ASPHALT TO BE REMOVED	
EX. TREE TO BE REMOVED	30" PINE
ASPHALT TO BE MILLED AND OVERLAYED	



DEMOLITION ABBREVIATIONS

ABBREVIATION	DESCRIPTION
(TBA)	TO BE ABANDONED
(TBR)	TO BE REMOVED
(TBV)	TO BE VACATED
(RELO)	TO BE RELOCATED

DEMOLITION NOTES:

1. BOHLER FL, LLC IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
2. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE, AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO BOHLER FL, LLC IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.
3. PERMITS FOR DEVIATIONS SHALL BE APPLIED FOR AND APPROVED BY THE CITY OF WINTER SPRINGS PRIOR TO THE COMMENCEMENT OF DEVIATION.
4. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO:
   A. PRE -CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE CITY OF WINTER SPRINGS PRIOR TO CONSTRUCTION ACTIVITY.
   B. NO CONSTRUCTION SHALL COMMENCE WITHOUT AN INSPECTED AND APPROVED SITE WORK PERMIT FROM THE CITY OF WINTER SPRINGS.
   C. CONSTRUCTION FENCE WITH MESH SHALL BE FULLY INSTALLED, INSPECTED, AND APPROVED PRIOR TO CONSTRUCTION ACTIVITIES.
   D. NO CONSTRUCTION SHALL COMMENCE WITHOUT AN INSPECTED AND APPROVED SITE WORK PERMIT FROM THE CITY OF WINTER SPRINGS.
   E. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE FULLY INSTALLED, INSPECTED, AND APPROVED BY THE CITY OF WINTER SPRINGS PRIOR TO CONSTRUCTION ACTIVITY.
   F. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATE ONE CALL LOCATION CERTIFICATION PRIOR TO ANY EXCAVATION OR DEMOLITION. THE NUMBER IS 1-800-432-4770.
   G. ENSURING COPIES OF ALL PERMITS AND APPROVALS MUST BE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW.
   H. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
   I. LOCATE/CAP ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC, WITHIN THE LIMITS OF DISTURBANCE.
   J. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
   K. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND BEING RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
   L. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.
   M. OPERATION OF ANY MECHANICALLY POWERED TOOLS OR EQUIPMENT USED IN CONSTRUCTION, DRILLING, OR DEMOLITION WORK BETWEEN THE HOURS OF 10:00 P.M. AND 7:00 A.M. THE FOLLOWING DAY IS PROHIBITED PER SECTION 13-31(D); CITY OF WINTER SPRINGS.
   N. A COMPLETE INSPECTION OF CONTAMINANTS BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED. SAME SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. ANY/ALL CONTAMINANTS SHALL BE REMOVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK INCLUDING HAZARDOUS MATERIAL, SOILS, ASBESTOS, OR OTHER REFERENCED OR IMPLIED HEREIN IS THE SOLE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL CONSULTANT.
4. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.
5. IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
6. EXPLOSIVES SHALL NOT BE USED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
7. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH: THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT - OF - WAY.
8. CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITIES.
9. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
10. USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
11. WRITTEN NOTICE INDICATING PROPERTIES DEEMED TO BE RETURNED TO "PRE-DEMOLITION" CONDITION SHALL BE SENT TO THE CITY OF WINTER SPRINGS. THE LETTER SHALL INCLUDE PROPERTY LOCATIONS, DATE OF DEMOLITION COMPLETION, DATE OF WORK TO COMMENCEMENT, AND NAME AND CONTACT INFORMATION OF CONTRACTOR.
12. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
13. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
14. DEBRIS SHALL NOT BE BURIED OR BURNED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS AND APPLICABLE CODES. BURNING OF ANY ORGANIC OR INORGANIC MATERIAL ON SITE SHALL BE PROHIBITED.
15. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
16. ALL EXISTING UTILITIES BEING REMOVED SHALL BE DONE SO BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
17. THERE ARE NO KNOWN WATER COURSES, WATER BODIES, FLOODPLAINS, XERIC UPLANDS, WETLANDS, CUTTHROAT GRASS SEEPS, HISTORICAL, AND ARCHAEOLOGICAL RESOURCES, OR CONES OF INFLUENCE FOR POTABLE WELLS, AQUIFER RECHARGE AREAS, SOIL TYPES, AND VEGETATIVE COVER LOCATED WITHIN PROJECT LIMITS.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

UTILITY NOTE:

1. CONTRACTOR SHALL FIELD VERIFY EXISTING ON-SITE UTILITIES AND UTILITIES WITHIN THE RIGHT-OF-WAY PRIOR TO START OF WORK.

GEOTECHNICAL NOTE:

1. CONTRACTOR SHALL FOLLOW THE GUIDANCE AND RECOMMENDATIONS AS SPECIFIED IN THE SUBSOIL AND GROUNDWATER LEVEL INVESTIGATION GEOTECHNICAL ENGINEERING REPORT PREPARED BY YOVAISH ENGINEERING SERVICES DATED OCTOBER 12, 2023.
2. PER THE GEOTECHNICAL REPORT PERFORMED BY YOVAISH ENGINEERING SERVICES ON 10/12/2023, THE MAJORITY OF THE SITE IS COVERED WITH ONE TO TWO FEET OF ORGANIC TOP SOIL. ALL ORGANIC TOP SOIL SHOULD BE REMOVED BY THE CONTRACTOR AND REPLACED WITH FDOT APPROVED CLEAN FINE SAND. 1

DUST AND DEBRIS CONTROL:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL WITHIN THE CONSTRUCTION LIMITS AS WELL AS ALONG HAUL ROUTES AND ROADWAYS USED BY THE EQUIPMENT AND VEHICLES. THE CONTRACTOR SHALL ENSURE EXCESSIVE DUST IS NOT TRANSPORTED BEYOND THE LIMITS OF CONSTRUCTION IN POPULATED AREAS. THE CONTRACTOR MAY CONTROL DUST FOR EMBANKMENTS OR OTHER CLEARED OR UNSURFACED AREAS BY APPLYING WATER. INSTALL MULCH, SEED, SOD, OR TEMPORARY PAVING AS EARLY AS PRACTICAL. CONTROL DUST DURING STORAGE AND HANDLING OF DUSTY MATERIALS BY WETTING, COVERING, OR OTHER MEANS AS APPROVED BY THE ENGINEER. DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THE PROJECT SITE.

THIS PLAN TO BE UTILIZED FOR DEMOLITION PURPOSES ONLY

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-EXDM

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MA52040&2867382&, C=US
Date: 2025.02.11 15:56:22-05'00'
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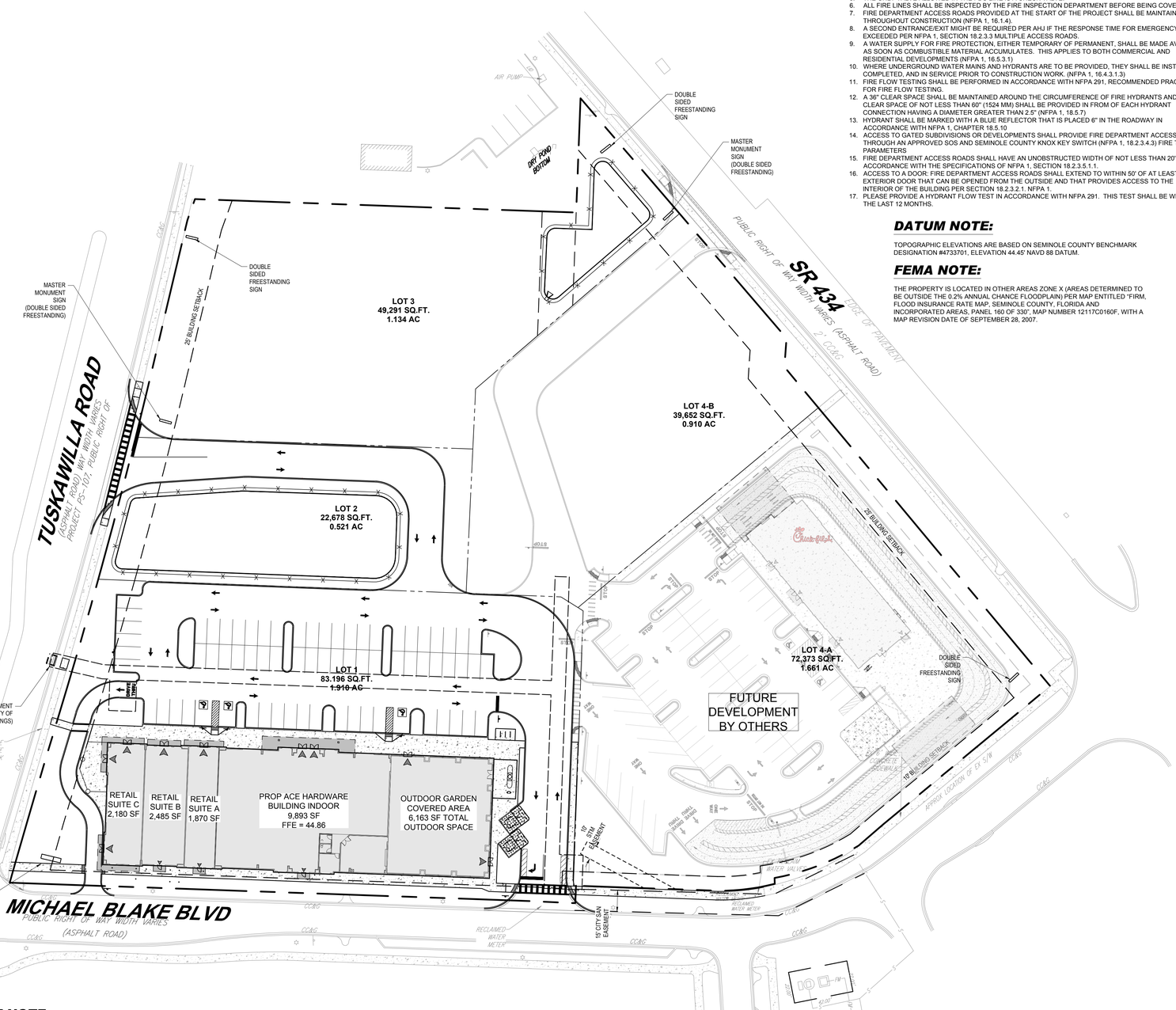
EXISTING CONDITIONS/ DEMOLITION PLAN

SHEET NUMBER:

C-201

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-EXDM-FLA240162.00-0A.----\LAYOUT: C-201 - EXISTING CONDITIONS & DEMO
KK



WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.(NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

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N
W E
S

40 20 10 0 40
1"= 40'

LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE, SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
13. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN.
14. FDEP WATER AND WASTEWATER PERMITS MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

RIGHT-OF-WAY NOTES:

1. A RIGHT-OF-WAY USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
2. ALL AREAS WITHIN THE COUNTY OR F.D.O.T. RIGHT-OF-WAY DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.
3. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO PROTECT ALL COUNTY OR F.D.O.T. OWNED AND/OR MAINTAINED INFRASTRUCTURE. ANY/ALL COSTS ASSOCIATED WITH ALTERATIONS, RELOCATIONS, OR REPAIRS MADE NECESSARY BY THIS DEVELOPMENT SHALL BE BORNE BY EITHER THE OWNER, DEVELOPER, AND/OR CONTRACTOR. SPLICES IN THE FIBER OPTIC CABLE, SIGNALIZATION OR ROADWAY LIGHTING CONDUCTORS, OR THE ADDITION OF ADDITIONAL PULL/JUNCTION BOXES WILL NOT BE PERMITTED. IN THE EVENT A CABLE IS CUT, DAMAGED, OR REQUIRES RELOCATION, THE CABLE(S) SHALL BE RESTORED BACK TO THE ORIGINAL CONFIGURATION. ORIGINAL CONFIGURATION IS DEFINED AS SYSTEM STATUS, LAYOUT, AND DESIGN PRIOR TO ANY WORK COMMENCING.
4. FOR UTILITIES TO BE RELOCATED BY THE UTILITY PROVIDER, CONTRACTOR SHALL COORDINATE DEMOLITION SCHEDULE WITH UTILITY PROVIDERS. DEMOLITION OF SIDEWALKS AND DRIVEWAYS SHALL OCCUR PRIOR TO UTILITY RELOCATIONS.
5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (R/W) SHOULD BE THERMOPLASTIC.
6. SIGNS WITHIN THE STATE RIGHT-OF-WAY (R/W) NEEDS TO BE MOUNTED TO ROUND ALUMINUM COLUMN (POST).

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE ROW OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

FDOT NOTES:

1. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL

STORMWATER MANAGEMENT:

STORMWATER RUNOFF FROM THE SITE IMPROVEMENTS PROPOSED ONSITE SHALL BE MANAGED THROUGH A COMBINATION OF PROPOSED DRY DETENTION PONDS AND UNDERGROUND STORMTECH CHAMBERS LOCATED UNDER THE PAVEMENT AREAS AS SHOWN. THE STORMWATER MANAGEMENT SYSTEM HAS BEEN DESIGNED IN PART WITH "POND 1" WITHIN TUSKAWILLA CROSSINGS SUBDIVISION.

SITE SIGNAGE:

PERMANENT SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

LANDSCAPING:

ALL LANDSCAPING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

SIDEWALK NOTE:

ANY BROKEN OR NON ADA COMPLIANT SIDEWALK IN THE PUBLIC RIGHT-OF-WAY FRONTING THE PROJECT SITE SHALL BE REPLACED AS PART OF THIS PROJECT.

UTILITY CONFLICT NOTE:
CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION THIS SHALL INCLUDE CALLING UTILITY LOCATE, POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\S-P-CIVL-SITE-FLA240162.00-SA-----1A.LAYOUT, C-301 - OVERALL SITE PLAN
KK

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PROP. SITE PLAN DOCUMENTS

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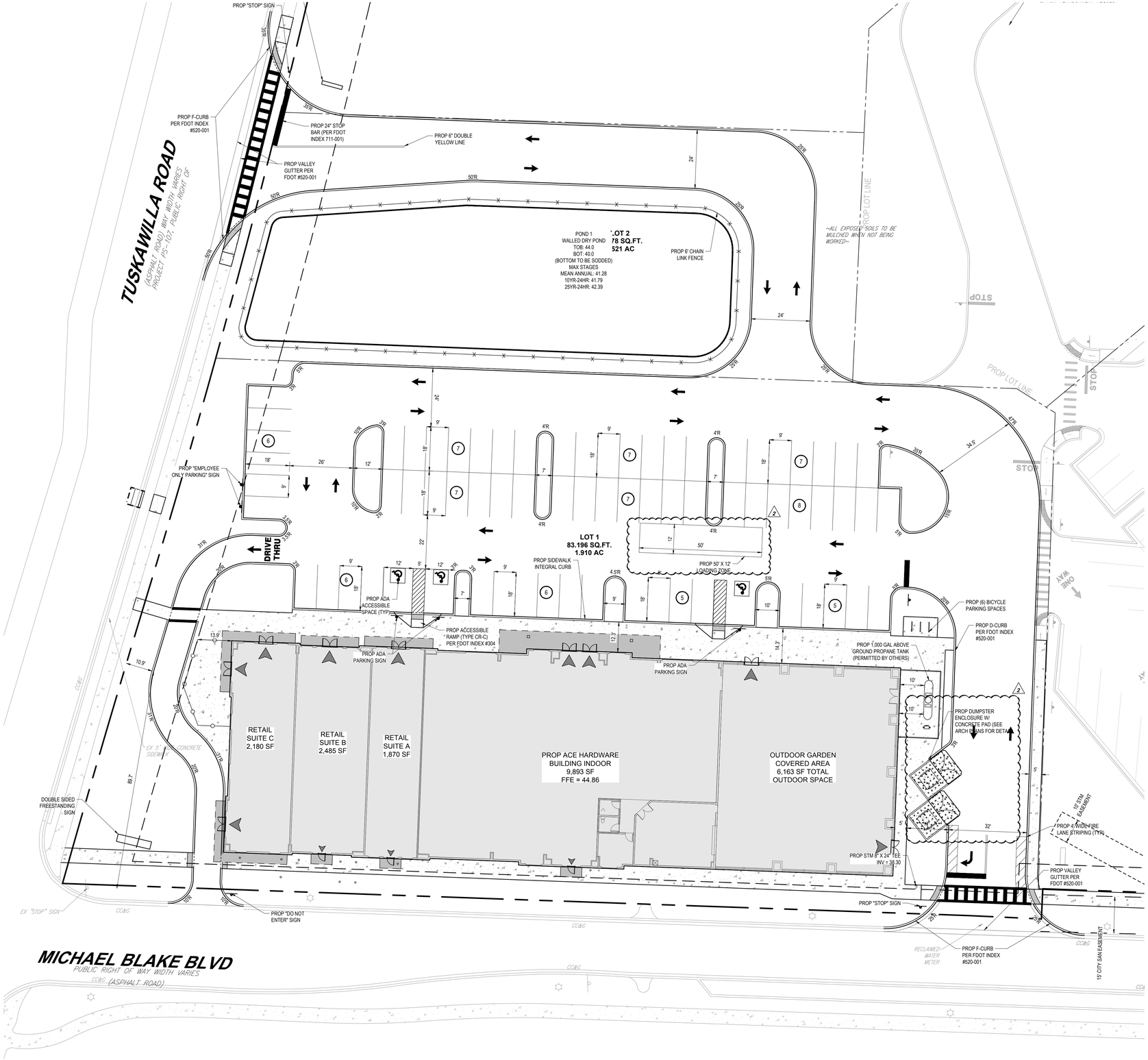
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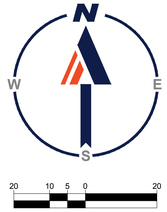
OVERALL SITE PLAN

SHEET NUMBER:

C-301

REVISION 2 - 01/28/2025





LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE DATA TABLE

TAX PARCEL NUMBER(S):	01-21-30-501-0000-0010 & 26-20-30-5AR-0A00-008D/H
PROJECT ADDRESS:	UNDEVELOPED LAND EAST OF TUSKAWILLA RD WINTER SPRINGS, FL
PARCEL AREA:	6.14 AC
EXISTING ZONING:	T-5 URBAN CENTER ZONE
PROPOSED ZONING:	T-5 URBAN CENTER ZONE
EXISTING LAND USE:	VACANT - WOODED
FUTURE LAND USE:	COMMERCIAL
PROPOSED USE:	COMMERCIAL
MAX. BUILDING HEIGHT:	75 FEET

BUILDING SETBACKS

FRONT:	25' MIN. (TUSKAWILLA RD)
SIDE:	10' MIN. (NORTH)
SIDE:	10' MIN. (MICHAEL BLAKE BLVD)
REAR:	25' MIN. (SR 434)
INTERNAL LOT:	0'

IMPERVIOUS CALCULATIONS

MAXIMUM ALLOWABLE IMPERVIOUS AREA = 100% (6.14 AC)	
MCMILLIAN LOT 1 (1.91 AC)	
BUILDING AREA:	23,517 SF = 0.54 AC
PAVEMENT (IMPERVIOUS):	42,125 SF = 0.96 AC
CONCRETE:	9,475 SF = 0.21 AC
TOTAL IMPERVIOUS AREA:	56,042 SF = 1.71 AC
85% ASSUMED IMPERVIOUS AREA FOR FUTURE DEVELOPMENT	

PARKING CALCULATIONS

PARKING:	72 SPACES (INCLUDING 2 ADA SPACES)

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Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAC2D40B67B26, OU=FL
Date: 2025.02.11 15:57:06-05'00'

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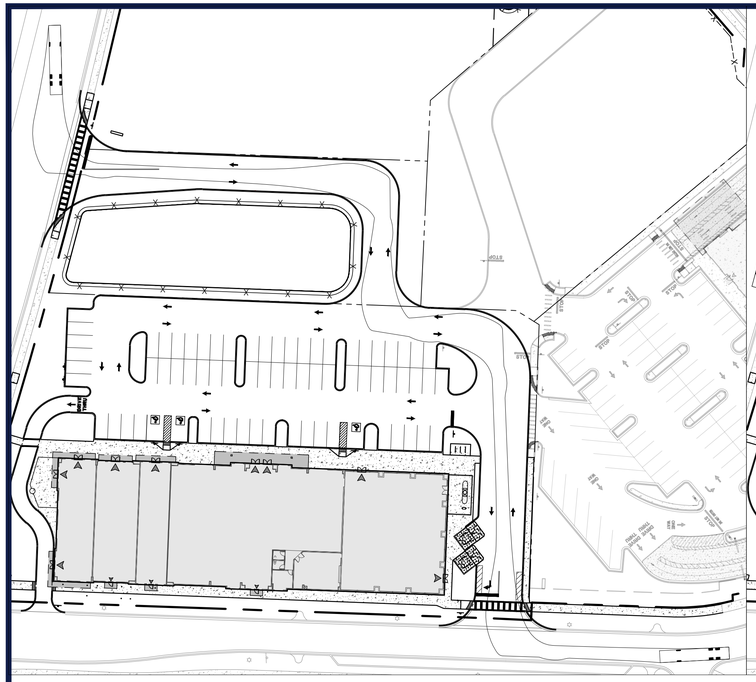
SITE PLAN

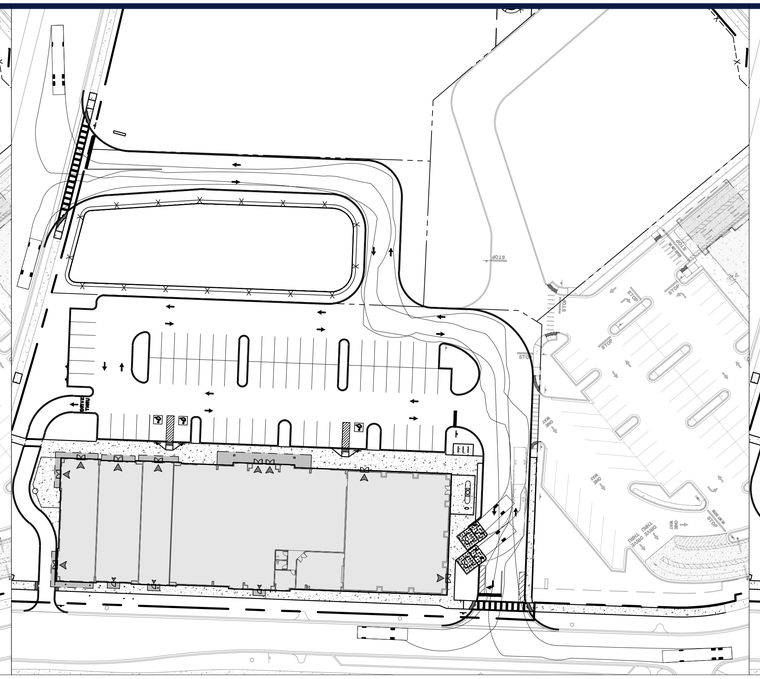
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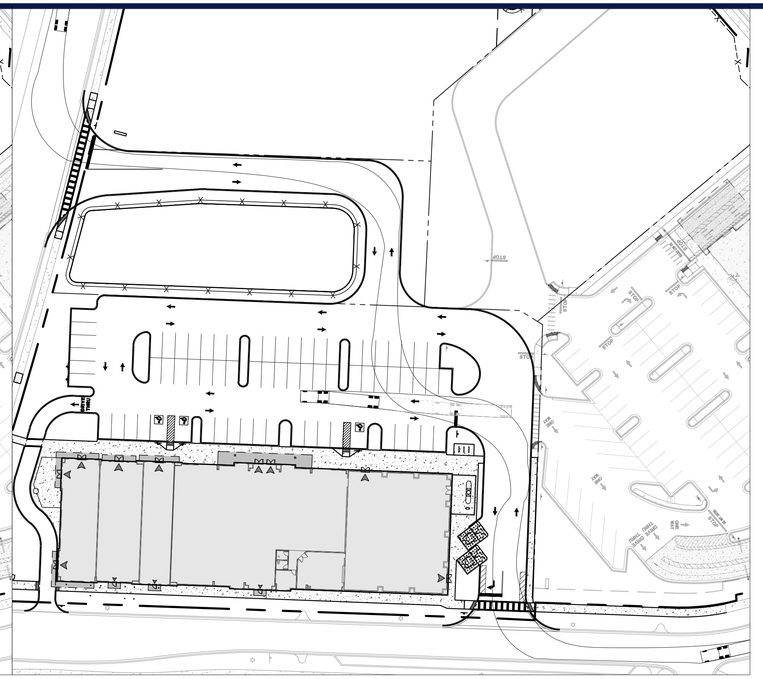
C-302

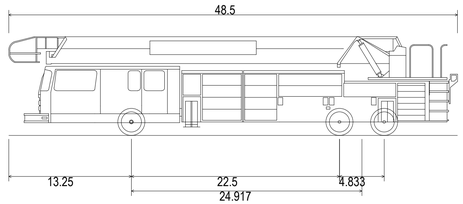
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KK



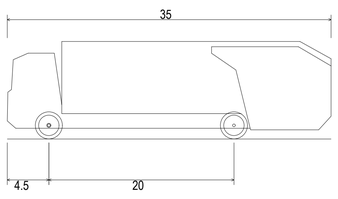






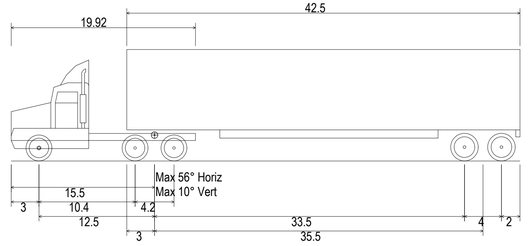
FIRE TRUCK - WINTER SPRINGS, FL

Overall Length	48.500ft
Overall Width	8.333ft
Overall Body Height	10.685ft
Min Body Ground Clearance	0.920ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Wall to Wall Turning Radius	48.420ft



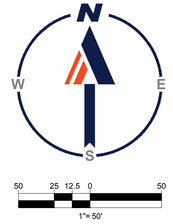
Rear-Load Garbage Truck

Overall Length	35.000ft
Overall Width	8.375ft
Overall Body Height	10.546ft
Min Body Ground Clearance	1.000ft
Track Width	8.375ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	29.300ft



WB-50 - Intermediate Semi-Trailer

Overall Length	55.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	45.000ft



UTILITY CONFLICT NOTE:

CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION THIS SHALL INCLUDE CALLING UTILITY LOCATE, POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

Feb 11, 2025
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KK

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ELECTRICAL ENGINEERING
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
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2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LSPD / KK/KM

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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER

E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER

600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O=BOHLER ENGINEERING FL, LLC, L=Boca Raton, S=Florida, SERIALNUMBER=MAD2024080807382E, C=US
Date: 2025.02.13 15:57:21 -05'00'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MOREL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:

TRUCK TURNING PLAN

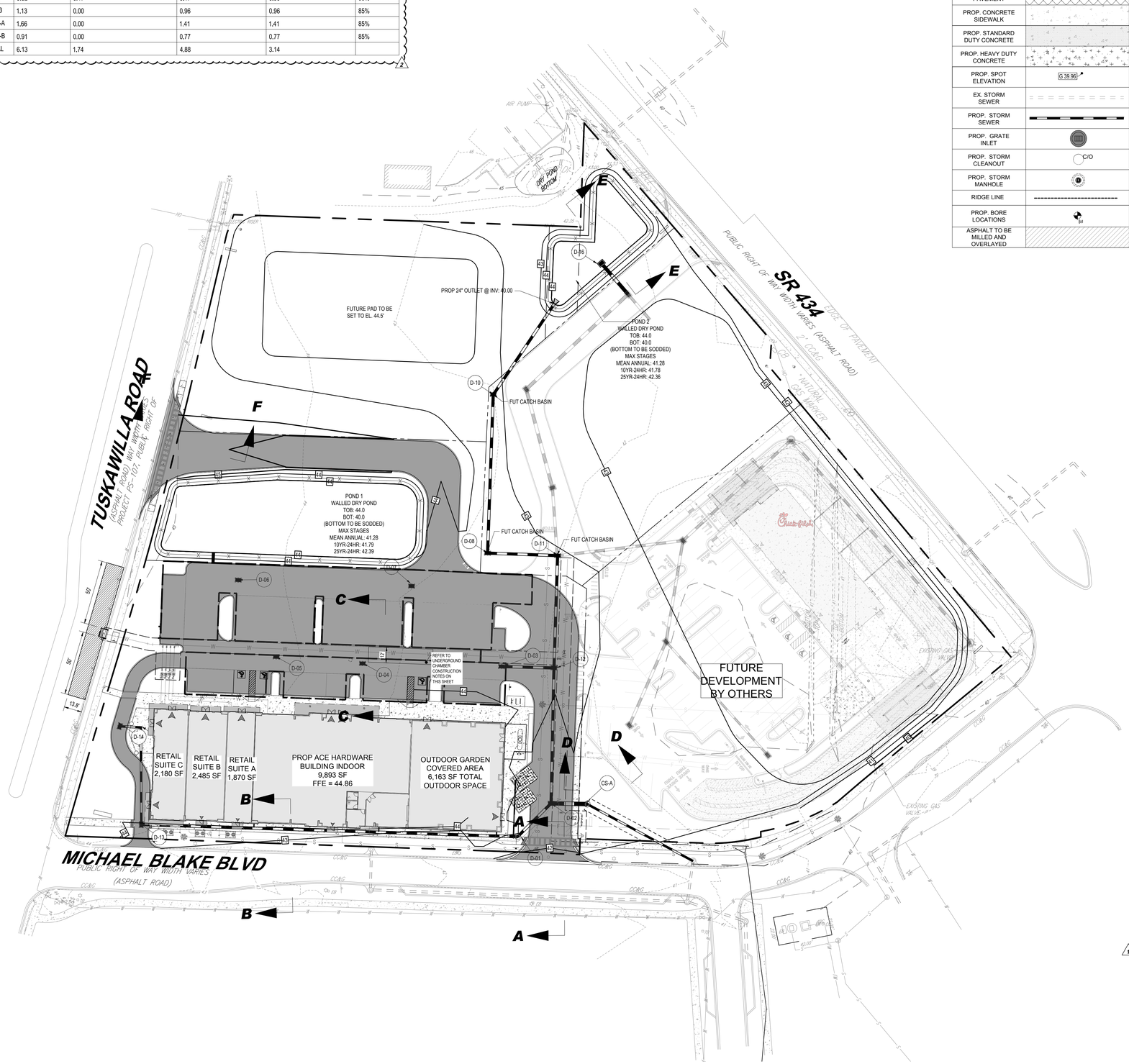
SHEET NUMBER:

C-303

REVISION 2 - 01/28/2025

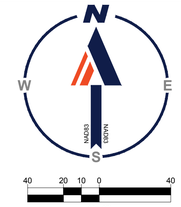
LOT	AREA (AC)	PROPOSED IMPERVIOUS AREA (AC)	TOTAL ALLOWABLE IMPERVIOUS (AC)	TOTAL REMIAINING IMPERVIOUS (AC)	%
LOT 1	1.91	1.57	1.57	0.00	82%
LOT 2	0.52	0.17	0.17	0.00	33%
LOT 3	1.13	0.00	0.96	0.96	85%
LOT 4-A	1.66	0.00	1.41	1.41	85%
LOT 4-B	0.91	0.00	0.77	0.77	85%
TOTAL	6.13	1.74	4.88	3.14	

2



LEGEND

PROPERTY LINE	
PROP. ASPHALT PAVING	
PROP. PERVIOUS PAVEMENT	
PROP. CONCRETE SIDEWALK	
PROP. STANDARD DUTY CONCRETE	
PROP. HEAVY DUTY CONCRETE	
PROP. SPOT ELEVATION	G 39.96
EX. STORM SEWER	
PROP. STORM SEWER	
PROP. GRATE INLET	
PROP. STORM CLEANOUT	C/O
PROP. STORM MANHOLE	
RIDGE LINE	
PROP. BORE LOCATIONS	B4
ASPHALT TO BE MILLED AND OVERLAYED	



GENERAL NOTES:

1. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CASTING STRUCTURES.
3. COORDINATE ALL UTILITY LEADS AND BUILDING CONNECTIONS WITH THE ARCHITECTURAL PLANS.
4. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
5. ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY WILL NEED TO BE SODDED.

PAVING AND GRADING NOTES:

A. GENERAL:
1. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE SURVEYOR'S BENCHMARKS AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUNDBREAK.
2. ALL GRADES SHOWN REFERENCE PROPOSED ELEVATIONS AT EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. "TC" = TOP OF CURB ELEVATION; "G" = FINISHED GRADE; "MEG" = PROPOSED GRADE TO MATCH EXISTING GRADE; T/W = TOP OF RETAINING WALL ELEVATION; B/W = BOTTOM OF RETAINING WALL ELEVATION.
3. THE ALTA/ACSM LAND TITLE SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
4. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
5. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF LIMEROCK BASE.
6. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
7. WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAWCUT TO ENSURE A PROPER JOINT.
8. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.

B. MATERIALS:
1. BASE COURSE SHALL BE ABC-3 PER F.D.O.T. SPECIFICATIONS OR EQUIVALENT LIMEROCK THICKNESS W/ MINIMUM LBR-100 (MAX. 6" LIFTS).
2. ASPHALT SURFACES SHALL BE TYPE S-III ASPHALTIC CONCRETE, UNLESS OTHERWISE SPECIFIED ON THE PLANS, SHALL BE A MINIMUM OF 1-1/2" THICK, AND SHALL BE CONSTRUCTED IN TWO 3/4" LIFTS, WITH TACKCOAT BETWEEN LIFTS.
3. REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" x 6" NO. 6 GAUGE WIRE MESH.

C. INSTALLATION:
1. SUBGRADE FOR ROADWAY SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY (AASHTO T-180), SHALL BE A MINIMUM 12", AND SHALL HAVE A MINIMUM LBR 40.
2. BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 6" PLACED IN ONE LIFT. ADDITIONALLY, BASE COURSE MATERIAL SHALL HAVE A MINIMUM MARSHALL STABILITY OF 1000, UNLESS OTHERWISE INDICATED (OR LBR-100).
3. BASE COURSE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
4. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM TO THE REQUIREMENTS OF THE D.O.T. STANDARD SPECIFICATIONS FOR TYPE S-III ASPHALTIC CONCRETE OR THE LATEST REVISION.

D. TESTING
1. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
2. DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.
3. ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE CONTRACTOR.
4. DENSITY TESTS ON THE STABILIZED SUBGRADE SHALL BE SUPPLIED TO AND APPROVED BY THE ENGINEER OF RECORD AND GEOTECHNICAL ENGINEER BEFORE ANY BASE IS CONSTRUCTED.
5. DENSITY TESTS AND "AS-BUILTS" ON THE FINISHED BASE SHALL BE SUPPLIED TO AND APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE ANY ASPHALT PAVEMENT IS CONSTRUCTED.

STORM DRAINAGE NOTES:

A. GENERAL:
1. DISTANCES AND LENGTHS OF PIPE SHOWN ON PLANS ARE REFERENCED TO THE CENTER OF STRUCTURES.

B. MATERIALS:
1. REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM C-76, CLASS III, WALL THICKNESS "B", LATEST REVISION. RUBBER GASKETS OR OTHER MANUFACTURER SUPPLIED JOINT SEALER SHALL BE USED.
2. ALL PVC DRAINAGE PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 35, WITH PUSH-ON RUBBER GASKET JOINTS.
3. ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.

C. INSTALLATION:
1. PIPE SHALL BE PLACED ON A MINIMUM OF 8" STABLE GRANULAR MATERIAL FREE OF ROCK FORMATION AND OTHER FOREIGN FORMATIONS, AND CONSTRUCTED TO A UNIFORM GRADE AND LINE.
2. BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6" TO A HEIGHT OF 12" ABOVE PIPE AS SHOWN ON THE PLANS.
3. PROVIDE A MINIMUM PROTECTIVE COVER OF 18" OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.

D. CONNECTIONS TO EXISTING STORM STRUCTURES:
1. THE HOLE INTO THE EXISTING STRUCTURE SHALL BE SAW CUT OR CORE DRILLED.
2. USE NON-SHRINKING GROUT TO FILL ALL GAPS AROUND THE JOINT.
3. AFTER PIPE IS CONNECTED WITH THE INLET, THE END OF THE PIPE MUST BE CUT FLUSH WITH THE INSIDE SURFACE OF THE INLET.
4. REFER TO F.D.O.T. STANDARD PLAN INDEX 425-001 FOR FILTER FABRIC WRAP ON GROUTED PIPE TO STRUCTURE JOINT DETAIL.

GRADING NOTES:

1. STRUCTURAL FILL REQUIRED TO ATTAIN FINAL GRADES SHALL BE COMPRISED OF CLEAN SAND WITH NO MORE THAN 10 PERCENT PASSING THE U.S. NO. 200 SIEVE. THE FILL SHALL BE PLACED IN MAXIMUM 12-INCH THICK LIFTS AND COMPACTED TO A MINIMUM DENSITY EQUIVALENT TO 95 PERCENT OF THE SOILS MAX. MODIFIED PROCTOR DENSITY VALUE (ASTM D-1557) HAS BEEN ACHIEVED.
2. CONTRACTOR SHALL FOLLOW THE GUIDANCE AND RECOMMENDATIONS AS SPECIFIED IN THE SUBSOIL AND GROUNDWATER LEVEL INVESTIGATION GEOTECHNICAL ENGINEERING REPORT PREPARED BY YOVAISH ENGINEERING SERVICES DATED OCTOBER 12, 2023.

DRAINAGE NOTES:

1. ALL STORM PIPE MATERIAL SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER SPRINGS STANDARDS AND SPECIFICATIONS.
2. FINAL RIM OR TOP OF CATCH BASIN ELEVATIONS FOR FUTURE CATCH BASINS SHOULD NOT BE FINALIZED UNTIL PAVEMENT AREAS OF FUTURE DEVELOPMENTS ARE DESIGNED.
3. ALL POND AREAS SHALL BE VEGETATED.
4. ANY BARE SOIL AREAS NOT COVERED BY IMPERVIOUS SURFACES SHALL BE STABILIZED (HYDROSEEDING OR EQUIVALENT).
5. ALL INLETS FROM STORMTECH CHAMBER SYSTEM SHALL BE INSTALLED WITH SEDIMENT SUMP.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

DEWATERING NOTE:

CONTRACTOR SHALL SUBMIT DEWATERING PLAN TO THE DISTRICT, 14 DAYS PRIOR TO COMMENCEMENT. SUBJECT PLANS SHALL BE REVISED AS NECESSARY.

ENGINEER'S CERTIFICATION NOTE:

"I, KYLE MOREL, P.E. HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE ALL EXISTING UTILITIES HAVE BEEN FIELD LOCATED AND THE LOCATION AND ELEVATION DEPICTED ON THESE PLANS IS BASED ON ACTUAL SURVEY, GROUND PENETRATING RADAR, SOFT DIG EXCAVATIONS, AND OTHER INDUSTRY METHODS. I FURTHER CERTIFY THAT ALL MEASURES HAVE BEEN TAKEN WITH REGARD TO UTILITY PROVIDERS' NOTIFICATION TO MARK UTILITIES IN ACCORDANCE WITH CHAPTER 556 F.S., SUNSHINE STATE ONE CALL".

1

UNDERGROUND CHAMBER CONSTRUCTION NOTES:

1. EXCAVATE BELOW UNDERGROUND CHAMBER BOTTOM PASSED FIRST LAYER OF CLAY LAYER AND REPLACE WITH CLEAN FILL, MINIMUM PERMEABILITY OF 20 FT / DAY HORZ & 10 FT / DAY VERT.
2. PRIOR TO CERTIFICATION, CONTRACTOR TO PROVIDE SUPPORTING GEOTECHNICAL DATA (DRI TEST OR SIMILAR) TO CONFIRM PERMEABILITY RATES. SHOULD TESTING NOT MEET THESE REQUIREMENTS, REMEDIATION EFFORTS WILL BE REQUIRED. PLEASE CONTACT EOR IMMEDIATELY.
3. CONTRACTOR TO MAINTAIN BEST MANAGEMENT SWPPP PRACTICES DURING CONSTRUCTION AND SHALL ENSURE NO CLAYS OR OTHER UNSUITABLE MATERIAL IS MIXED WITHIN THE VICINITY OF THE PROPOSED STORMWATER POND.

THIS PLAN TO BE UTILIZED FOR GRADING, DRAINAGE AND UTILITIES PURPOSES ONLY

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SITE CIVIL AND CONSULTING ENGINEERING
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-GRDR

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MA52024082807382 6, OID.
Date: 2025.02.11 15:57:34-05'00'
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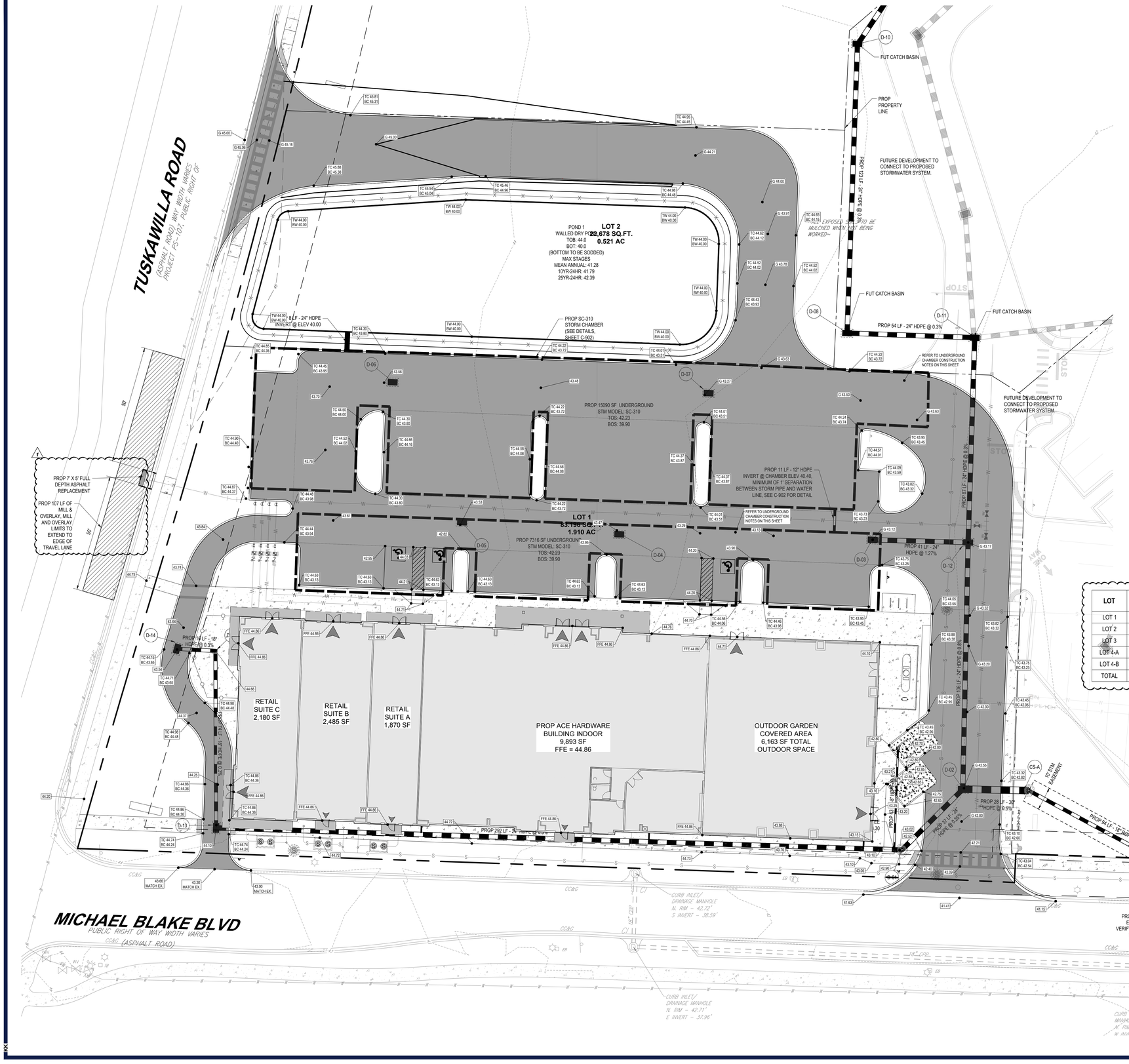
OVERALL PAVING GRADING AND DRAINAGE PLAN

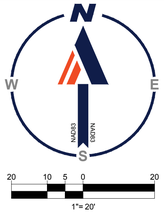
SHEET NUMBER:

C-401

REVISION 2 - 01/28/2025

Feb 11, 2025
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KK1





LEGEND

PROPERTY LINE	
PROP. ASPHALT PAVING	
PROP. PERVIOUS PAVEMENT	
PROP. CONCRETE SIDEWALK	
PROP. STANDARD DUTY CONCRETE	
PROP. HEAVY DUTY CONCRETE	
PROP. SPOT ELEVATION	G 39.96
EX. STORM SEWER	
PROP. STORM SEWER	
PROP. GRATE INLET	
PROP. STORM CLEANOUT	C/O
PROP. STORM MANHOLE	
RIDGE LINE	
PROP. BORE LOCATIONS	24
ASPHALT TO BE MILLED AND OVERLAYED	

DOWNSPOUT NOTE:

CONNECT ALL ROOF DOWNSPOUTS TO 6-INCH HDPE LATERALS. LATERALS SHALL BE CONNECTED TO 12-INCH HDPE TRUNK LINES EXTENDING TO STRUCTURES WITH MIN. 0.5% SLOPE.

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
CS-A	STORM MANHOLE CONTROL STRUCTURE PER FDOT INDEX #425-001 RIM = 43.50 WEIR ELEV. = 41.20 W INV IN=38.00 (30" HDPE) SE INV OUT = 38.00 (18" RCP)
D-01	STORM MANHOLE PER FDOT INDEX #425-001 RIM = 43.00 N INV IN = 38.27 (24" HDPE) W INV IN = 38.27 (24" HDPE)
D-02	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 42.55 E INV IN = 38.14 (30" HDPE) S INV OUT = 38.14 (24" HDPE) N INV OUT = 38.14 (24" HDPE)
D-03	TYPE "D" INLET RIM = 43.12 E INV OUT = 39.50 (24" HDPE)
D-04	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.47 W INV IN = 40.40 (12" HDPE) E INV OUT = 40.40 (12" HDPE)
D-05	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.53 E INV OUT = 40.04 (12" HDPE)
D-06	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.56 E INV OUT = 40.33 (12" HDPE)
D-07	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.27 W INV IN = 38.89 (12" HDPE)
D-08	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 43.85 E INV IN = 39.41 (24" HDPE) N INV OUT = 39.41 (24" HDPE)
D-10	TYPE "D" INLET RIM = 43.06 S INV IN = 39.66 (24" HDPE) NE INV IN = 39.66 (24" HDPE)
D-11	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 43.40 S INV IN = 39.24 (24" HDPE) W INV OUT = 39.24 (24" HDPE)
D-12	TYPE "D" INLET RIM = 43.17 S INV IN = 38.98 (24" HDPE) W INV IN = 38.98 (24" HDPE) N INV OUT = 38.98 (24" HDPE)
D-13	TYPE "D" INLET RIM = 44.10 N INV IN = 39.16 (18" HDPE) E INV OUT = 39.16 (24" HDPE)
D-14	TYPE "D" INLET RIM = 43.54 E INV OUT = 39.58 (18" HDPE)
D-15	STORM DRAIN RIM = 44.66 W INV OUT = 39.53 (18" HDPE) S INV OUT = 39.53 (18" HDPE)
D-16	TYPE "C" BUBBLE STRUCTURE RIM: 40.00 30" INV: 35.25 (W/ WEEP HOLE PER FDOT INDEX #425-001)

LOT	AREA (AC)	PROPOSED IMPERVIOUS AREA (AC)	TOTAL ALLOWABLE IMPERVIOUS (AC)	TOTAL REMIAINING IMPERVIOUS (AC)	%
LOT 1	1.91	1.57	1.57	0.00	82%
LOT 2	0.52	0.17	0.17	0.00	33%
LOT 3	1.13	0.00	0.96	0.96	85%
LOT 4-A	1.66	0.00	1.41	1.41	85%
LOT 4-B	0.91	0.00	0.77	0.77	85%
TOTAL	6.13	1.74	4.88	3.14	

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2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-GRDR

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O=BOHLER ENGINEERING FL, LLC, L=Bonita Rattan, S=Florida, C=US, UN=MBE:5146-6443-2024092907382 6, GN=Kyle, SN=Morel
Date: 2025.02.11 15:57:50-05'00'

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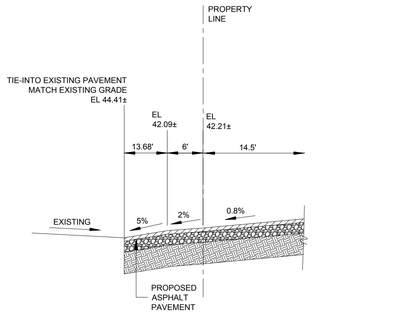
PAVING GRADING AND DRAINAGE PLAN

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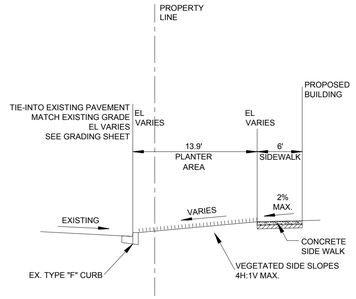
C-402

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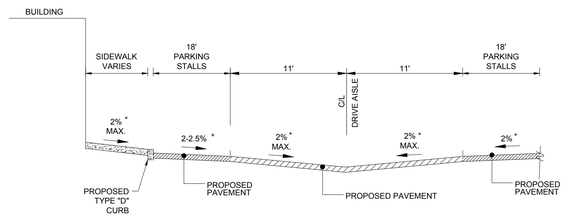
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H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-GRDR-FLA240162.00-0A-----LAYOUT: C-402 - PAVING GRADING & DRAINAGE
KK



MICHAEL BLAKE ENTRANCE SECTION A-A
N.T.S.

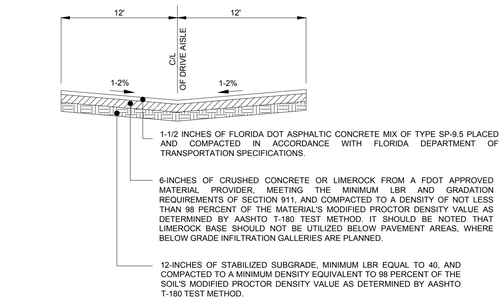


MICHAEL BLAKE PARKING SECTION B-B
N.T.S.

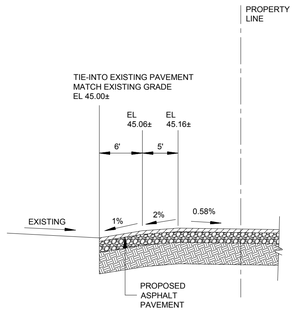


DRIVE AISLE SECTION C-C
N.T.S.

*CROSS-SLOPES OF PARKING STALLS & DRIVE AISLE SHALL BE AS NOTED ON SECTION DETAIL, UNLESS OTHERWISE NOTED FROM SPOT ELEVATIONS ON SHEET C5.1.

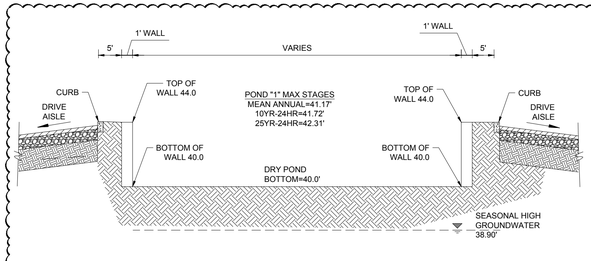


TYPICAL DRIVE AISLE PAVEMENT SECTION
N.T.S.

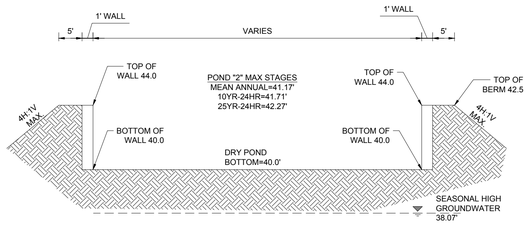


TUSKAWILLA ENTRANCE SECTION F-F
N.T.S.

2



POND 1
SECTION D-D
N.T.S.



POND 2
SECTION E-E
N.T.S.

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PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
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CITY OF WINTER SPRINGS

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KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
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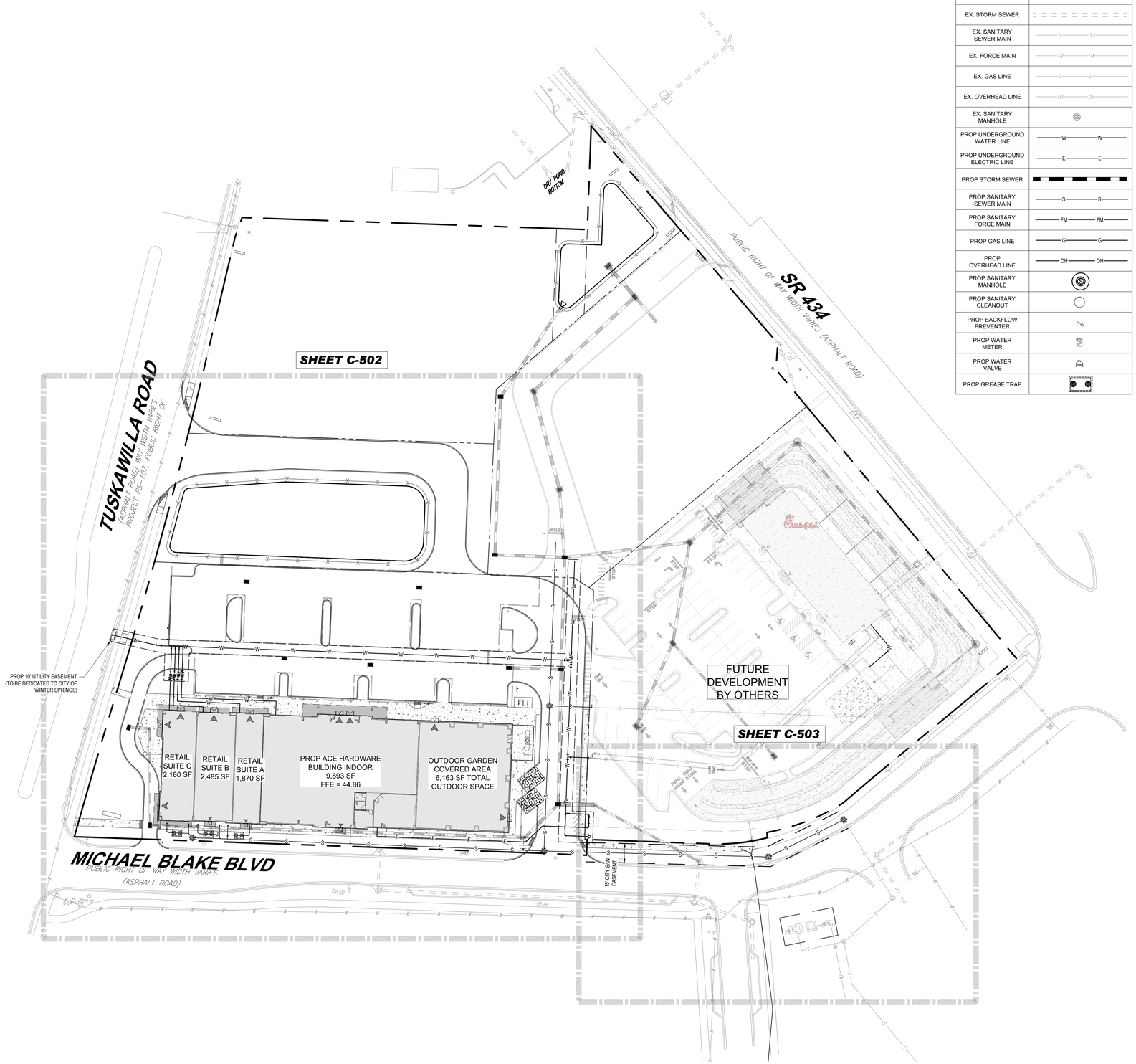
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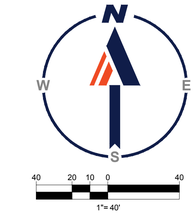
C-403

REVISION 2 - 01/28/2025



LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	



GENERAL NOTE:

ALL ONSITE WATER AND SEWER DISTRIBUTION/COLLECTION LINES/MAINS TO BE PRIVATELY OWNED & MAINTAINED UNLESS OR UNTIL A UTILITY EASEMENT IS DESCRIBED & APPROVED BY ALL INVOLVED PARTIES.

SANITARY SEWER NOTES:

A. GENERAL:

1. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.
2. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR TO TELEVISE EXISTING SANITARY SEWER LINE FROM POINT OF CONNECTION THROUGH THE NEXT SEQUENTIAL DOWNSTREAM RUN OF PIPE. ADDITIONALLY, PRIOR TO COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL TELEVISE THE NEWLY INSTALLED SANITARY SEWER MAIN TO ENSURE NO DIPS OR DEBRIS WITHIN LINE.
3. EXISTING SERVICES WITHIN MANHOLES SHALL BE RELOCATED TO NEW SEWER.
4. BYPASS PUMPING MAY BE REQUIRED AND SANITARY SERVICE MAINTAINED WHILE EXISTING SEWER IS BEING REPLACED.
5. CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH CITY WITH MAKING CONNECTION TO PUMP STATION / MANHOLE.
6. CONTRACTOR MUST COORDINATE WITH CITY AND SHOPPING CENTER AND PROVIDE AT LEAST 48-HOURS NOTICE PRIOR TO REPLACING SERVICES.

B. MATERIALS:

1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.
2. ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
3. ALL SANITARY CLEANOUTS WITHIN PAVEMENT SHALL HAVE A LID THAT IS H20 LOADING.

C. INSTALLATION:

1. PIPE AND FITTINGS:
   a. SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, AND THE UNI-BELL PLASTICS PIPE ASSOCIATION'S 'RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE.'
   b. BEDDING AND INITIAL BACKFILL (12") OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. PEA ROCK OR 3/4 " WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.
2. CLEANOUTS:
   a. CLEANOUTS SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM CLEAN SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
   b. ALL OPENINGS AND JOINTS SHALL BE SEALED WATER-TIGHT.
3. SERVICE:
   a. MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE 1.00%.
   b. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED PLUG.
   c. CONNECTION OF SERVICES TO BUILDING'S PLUMBING SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

D. TESTING:

1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER.
3. SEWER PIPE LEAKAGE ALLOWABLE SHALL NOT EXCEED 150 GALLONS PER DAY PER INCH DIAMETER PER MILE IN A TWO HOUR TEST PERIOD FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED.
4. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO THE CERTIFICATION TO ANY AGENCY.
5. GENERAL CONTRACTOR SHALL EMPLOY AN INDEPENDENT INSPECTOR FOR 1-⅛ CONTINUOUS INSPECTION OF THE BEDDING AND BACKFILL OPERATION. COMPACTION TEST SHALL BE TAKEN AT THE BOTTOM OF TRENCH AND AT EACH LIFT OF BACKFILL.
6. GENERAL CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR AS-BUILT TOP OF PIPE ELEVATIONS TAKEN WHEN BEDDING OPERATIONS IS 75% COMPLETE. THESE ELEVATIONS SHALL BE TAKEN AT POINTS OF CONNECTION, CHANGES IN DIRECTION AND AT MINIMUM 20' INTERVALS ALONG THE LENGTH OF THE PIPE. THESE ELEVATIONS SHALL BE RECORDED AS AS-BUILT DIMENSIONS ON SITE PLAN REVIEW BY PROJECT ENGINEER.
7. ALL SANITARY LINES ARE TO BE FLUSHED PRIOR TO CONTRACTOR TURNOVER OF THE FACILITY.

WATER DISTRIBUTION NOTES:

1. CONTRACTOR SHALL FOLLOW GUIDELINES AND PROCEDURES OUTLINED BY UTILITY PROVIDER, AND HAVE UTILITY PROVIDER'S MANUAL ON-SITE AT ALL TIMES. THIS POLICY MANUAL SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS AS IT PERTAINS TO APPROVED MATERIALS, INSTALLATION METHODS, INSPECTION NOTIFICATION, AND AS-BUILT/PROJECT CLOSEOUT REQUIREMENTS.
2. ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.
3. CONTRACTOR TO COORDINATE WITH COUNTY AND ADJACENT PROPERTY OWNERS AND BUSINESSES FOR ANY ANTICIPATED WATER INTERRUPTIONS FOR CONNECTION TO EXISTING WATER LINE.
4. CONTRACTOR TO DEFLECT OR BEND WATER LINES AS NECESSARY TO MAINTAIN 12" VERTICAL SEPARATION FROM STORM SEWER PER FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SANITARY SEWER GRAVITY NOTES:

1. IF REQUIRED, THE CONTRACTOR SHALL RECONSTRUCT THE BENCH IN THE EXISTING MANHOLE TO ACCOMMODATE THE NEW FLOW DIRECTION.
2. WASTEWATER FLOW IN THE EXISTING SEWER MUST BE MAINTAINED DURING THE INSTALLATION OF THE LATERAL. IF A BY-PASS IS REQUIRED, THE CONTRACTOR MUST SUBMIT DETAILS OF THE SYSTEM FOR REVIEW AND APPROVAL TO THE CITY OF WINTER SPRINGS PUBLIC WORKS DEPARTMENT PRIOR TO STARTING CONSTRUCTION.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

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PROJECT:

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FOR

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E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

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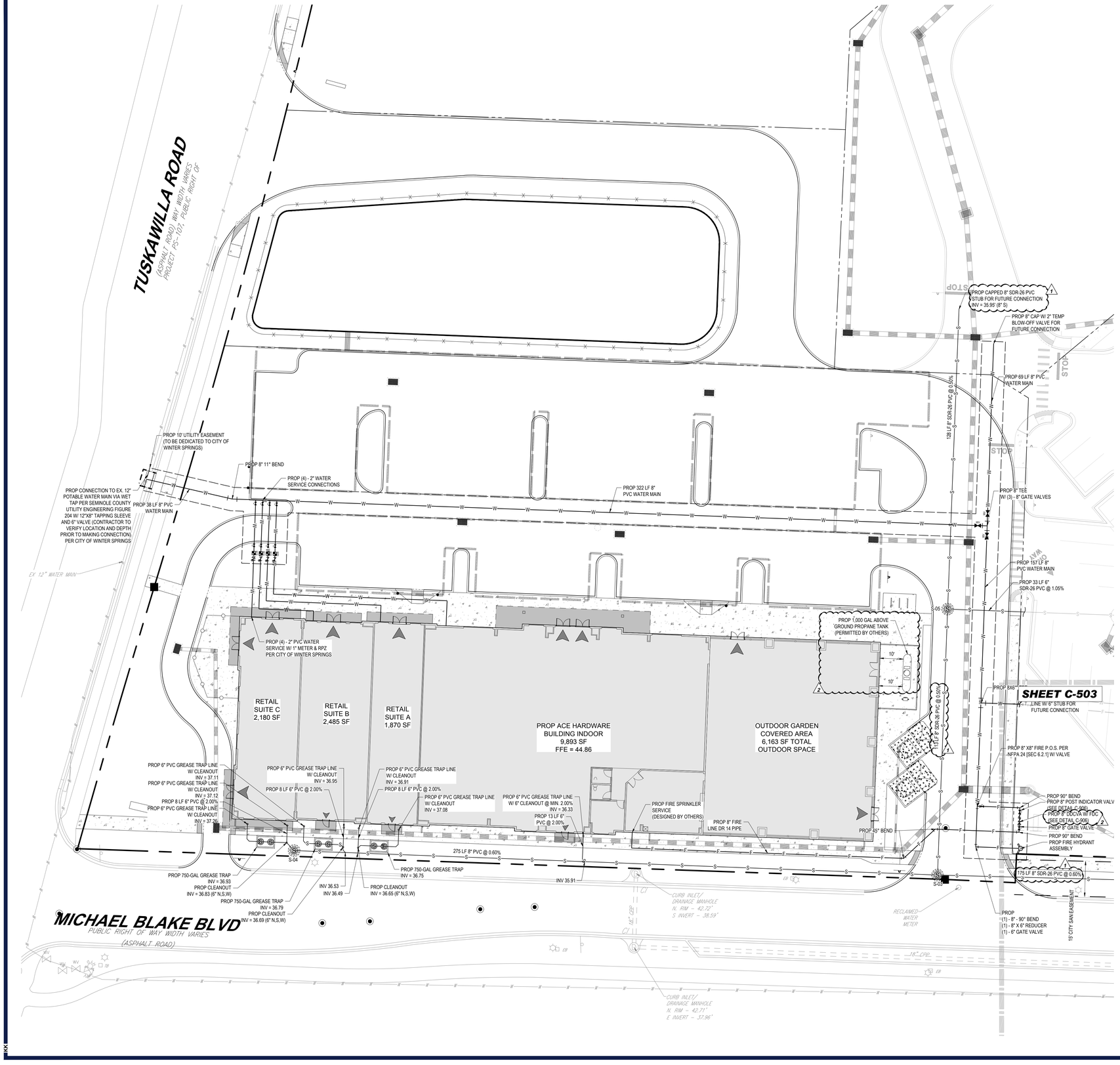
OVERALL UTILITY PLAN

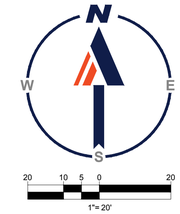
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C-501

REVISION 2 - 01/28/2025

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KK





FIRE NOTES:

1. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1, 16.1.4).
2. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
3. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1).
4. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3).
5. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
6. A 36 IN. CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 21/2 IN. NFPA 1, 18.5.7.
7. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10.
8. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH. NFPA 1, 18.2.2.2.

FIRE SPRINKLER NOTES

A) AT MINIMUM, A CLASS FIVE CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1-FOOT ABOVE THE FINISHED FLOOR.

B). THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.

C). NO OTHER WATER CONNECTION SHALL BE OFF OF THE FIRE LINE

D). THE FIRE DEPARTMENT CONNECTION SHALL BE WITH-IN 100 FEET OF THE FIRE HYDRANT IF STANDPIPE SYSTEM IS PROVIDED.

E). THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.

F). ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPT. BEFORE BEING COVERED.

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE NAME:	**DETAILS:**
S-01	SANITARY MANHOLE RIM = 40.23 PROP INV IN (SW)= 33.03 (8" PVC) EX. INV: 32.93
S-02	SANITARY MANHOLE RIM = 41.00 W INV IN = 33.78 (8" PVC) NE INV OUT = 33.68 (8" PVC)
S-03	SANITARY MANHOLE RIM = 42.01 W INV IN = 34.93 (8" PVC) E INV OUT = 34.83 (8" PVC) N INV IN = 34.93 (8" PVC)
S-04	SANITARY MANHOLE RIM = 43.32 E INV OUT = 36.58 (8" PVC)
S-05	SANITARY MANHOLE RIM = S INV OUT = 35.50 (8" PVC) E INV IN = 35.60 (6" PVC) N INV IN = 35.60 (8" PVC)

WATER DEMAND	
TENANT:	**TOTAL WATER USAGE (GPD):**
ACE HARDWARE	219 GPD
RETAIL A	411 GPD
RETAIL B	376 GPD
RETAIL C	300 GPD

FIRE FLOW REQUIREMENTS

FIRE FLOW CALCULATION BASED ON NFPA-17TH EDITION CHAPTER 18 TABLE 18.4.5.2.1

BUILDING TYPE: VB
AREA PER IBC: 22,591 SF (1-STORY)
SPRINKLER SYSTEM: SPRINKLED
REQUIRED FLOW PER NFPA-17TH 18.4.5.3.2: 1,000 GPM @ 2 HOUR DURATIONS (75% REDUCTION)
REQUIRED SPRINKLER DEMAND: 600 GPM @ 40 PSI
PROVIDED FLOW: 2,273 GPM @ 20 PSI
PEAK DOMESTIC DEMAND: 4 GPM

RECLAIM WATER DEMAND

IRRIGATION SYSTEM

3 SPRAY ZONES @ 114 GPM X (20 MINUTES PER CYCLE) = 2,280 GALLONS PER CYCLE
7 DRIP ZONES @ 154.2 GPM X (30 MINUTES PER CYCLE) = 4,626 GALLONS PER CYCLE
2 BUBBLER ZONES @ 27 GPM X (20 MINUTES PER CYCLE) = 540 GALLONS PER CYCLE
TOTAL GALLONS = 7,446 GALLONS PER CYCLE

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY

LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND FIRE LINE	F F
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	

PROVIDE SIGNAGE FOR ALL PROPOSED FIRE DEPARTMENT CONNECTIONS (F.D.C.) INDICATING ITS LOCATION AND THE BUILDING IT SERVICES.

NEW AND EXISTING FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF SECTION 18.5 OF NFPA 1.

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-UTIL

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlerengineering.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAC0A0828673826, C=US
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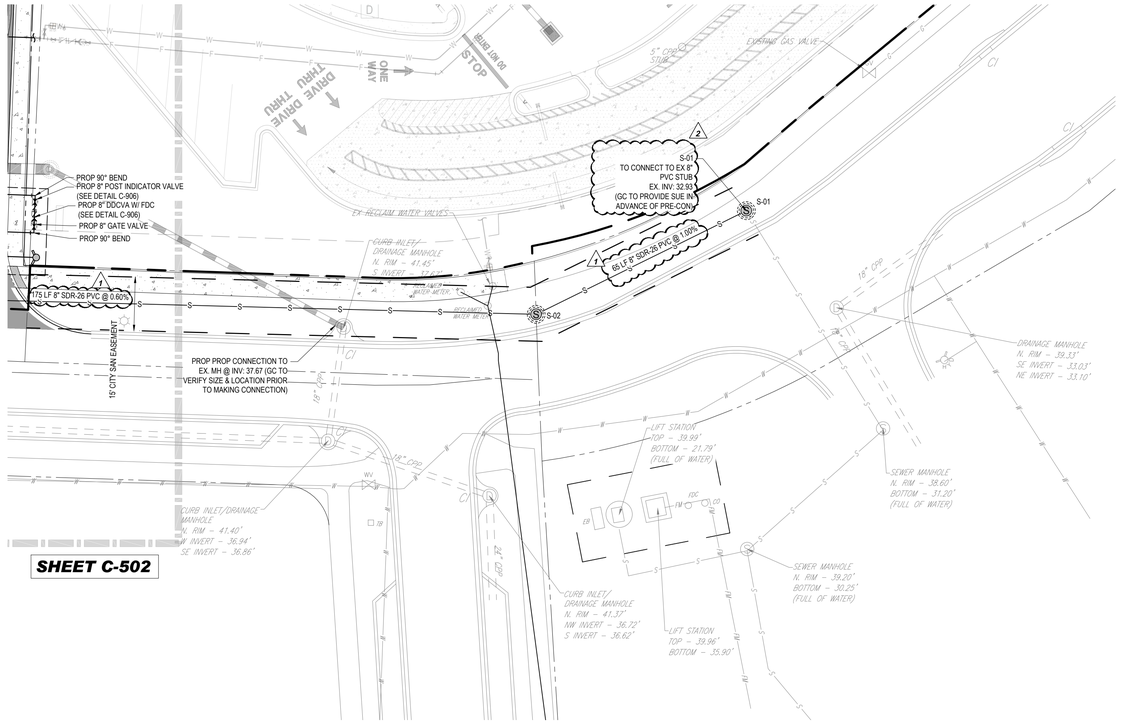
UTILITY PLAN

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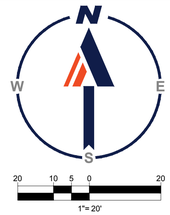
C-502

REVISION 2 - 01/28/2025

Feb 11, 2025
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KK



SHEET C-502



LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND FIRE LINE	F F
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	

FIRE NOTES:

1. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1, 16.1.4).
2. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
3. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1).
4. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3).
5. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
6. A 36 IN. CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 21/2 IN. NFPA 1, 18.5.7.
7. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10.
8. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH. NFPA 1, 18.2.2.2.

FIRE SPRINKLER NOTES

A) AT MINIMUM, A CLASS FIVE CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1-FOOT ABOVE THE FINISHED FLOOR.

B). THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.

C). NO OTHER WATER CONNECTION SHALL BE OFF OF THE FIRE LINE

D). THE FIRE DEPARTMENT CONNECTION SHALL BE WITH-IN 100 FEET OF THE FIRE HYDRANT IF STANDPIPE SYSTEM IS PROVIDED.

E). THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.

F). ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPT. BEFORE BEING COVERED.

PROVIDE SIGNAGE FOR ALL PROPOSED FIRE DEPARTMENT CONNECTIONS (F.D.C.) INDICATING ITS LOCATION AND THE BUILDING IT SERVICES.

NEW AND EXISTING FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF SECTION 18.5 OF NFPA 1.

SANITARY SEWER STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
S-01	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 40.23 PROP INV IN (SW)= 33.03 (8" PVC) EX. INV: 32.93
S-02	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 41.00 W INV IN = 33.78 (8" PVC) NE INV OUT = 33.68 (8" PVC)
S-03	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 42.01 W INV IN = 34.93 (8" PVC) E INV OUT = 34.83 (8" PVC) N INV OUT = 34.93 (8" PVC)
S-04	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 43.32 E INV OUT = 36.58 (8" PVC)

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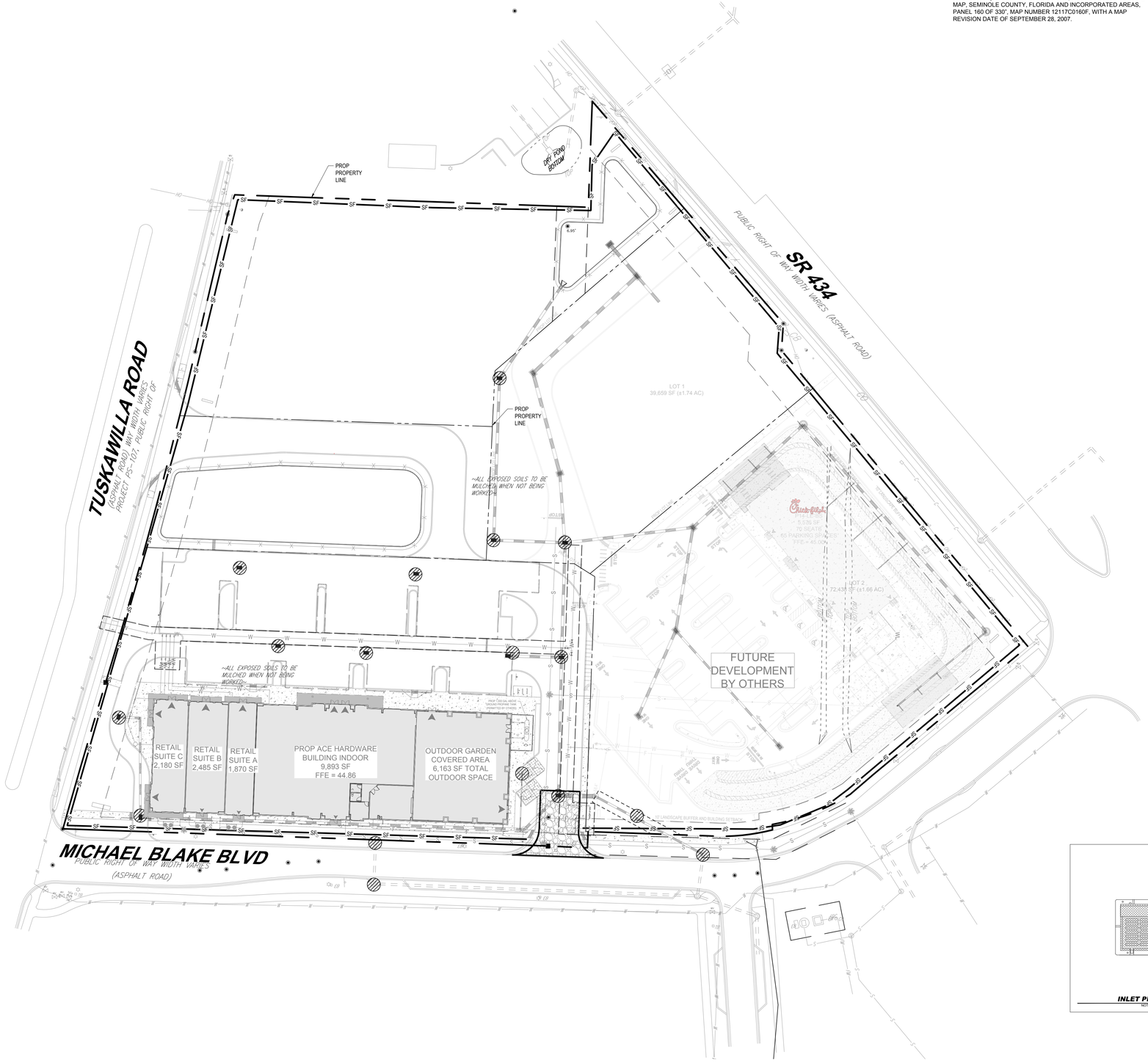
UTILITY PLAN

SHEET NUMBER:

C-503

REVISION 2 - 01/28/2025

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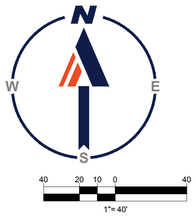


DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.



LEGEND

ONSITE PROPERTY LINE / R.O.W. LINE	
ADJACENT PROPERTY LINE	
EX. OVERHEAD WIRE	OH OH OH
EX. SPOT ELEVATION	126.03 +
PROP. STORM PIPE	
PROP.RIDGE LINE	
PROP.SILT FENCE	SF SF
PROP. INLET PROTECTION	

KEYNOTES:

- (IP) INLET PROTECTION
- (SCE) STABILIZED CONSTRUCTION ENTRANCE
- (SCE) CONSTRUCTION ENTRANCE

POLLUTION PREVENTION NOTES:

1. EROSION AND SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THESE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS. BMP'S SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH FEDERAL, STATE, AND LOCAL REGULATIONS. [THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]
2. OFF SITE SURFACE WATER DISCHARGES, DISCHARGES TO ONSITE WETLANDS, OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU'S) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.
3. THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4)(C)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.
4. FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
5. IF CONTAMINATED SOIL AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE AND WATER RESOURCES SHALL BE CONTACTED.
6. PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.
7. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:
   - A. NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT IN ACCORDANCE WITH RULE 62-621.300(4)(a), F.A.C.
   - B. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(A) PART III.C.2, F.A.C.
   - C. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE PROVIDED TO WATER RESOURCES IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART III.D.1, F.A.C.
   - D. THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART V.D.6, F.A.C.
   - E. A COPY OF THE SWPPP, AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE; AND SHALL BE READILY AVAILABLE TO COUNTY OR STATE INSPECTORS.
8. THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

MAINTENANCE NOTES:

N.P.D.E.S. PERMIT COMPLIANCE REQUIRES INSPECTIONS EVERY 7 CALENDAR DAYS BY A NPDES QUALIFIED INSPECTOR AND PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL EVENT OF 0.5" OR GREATER. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS FURTHER MAINTENANCE AS OUTLINED BELOW. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE N.P.D.E.S. COMPLIANCE.

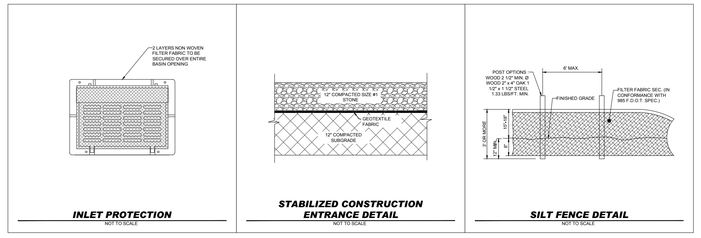
1. INSPECTIONS BY CONTRACTOR MUST OCCUR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM EVENT 0.5" OR GREATER.
2. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
3. CATCH BASIN INLET AND CONCRETE FLUME FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. WEEKLY INSPECTIONS WILL BE PERFORMED EVERY 7 CALENDAR DAYS. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT BY CONTRACTOR.
4. CONSTRUCTION ACCESS AND TRACKING MAT MUST BE MAINTAINED BY CONTRACTOR. REPLENISH CRUSHED AGGREGATE IF PRESENT LAYER IS FILLED WITH SEDIMENT, POOLING WATER, OR HAS RUTS. A NEW LAYER MAY BE ADDED IF OLD LAYERS BECOME COMPACTED.
5. SILT FENCE IS TO BE INSPECTED DAILY BY CONTRACTOR AND EVERY 7 CALENDAR DAYS BY N.P.D.E.S. QUALIFIED INSPECTOR. IF REPAIRS OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED IMMEDIATELY. THE SILT FENCE SHOULD BE TRENCHED IN, BACK-FILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT. WHEN THE SEDIMENT ACCUMULATES TO 1/3 OF THE HEIGHT OF THE FENCE, CONTRACTOR MAY HAVE TO REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL THE FENCE IF IT FAILS. IT WOULD ALSO BE NECESSARY TO REINSTALL IF ANY PORTION OF THE FENCING WAS DAMAGED BY CONSTRUCTION MACHINERY.
6. SEEDING OR RESEEDING MAY BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
7. THE CONTRACTOR SHALL CONTINUOUSLY ENSURE THAT THE PERIMETER OF THE SITE, INCLUDING CONSTRUCTION ENTRANCES, IS SECURED FROM ALLOWING DEBRIS TO LEAVE THE SITE DUE TO CONSTRUCTION ACTIVITY OR RAINFALL EVENTS. A WEEKLY LOG SHALL BE UPDATED AND KEPT ON-SITE IN ACCORDANCE WITH THE N.P.D.E.S. PERMIT. BY BIDDING DOCUMENTS CONTRACTOR ACKNOWLEDGES HE/SHE IS AWARE OF N.P.D.E.S. GUIDELINES AND POLICIES AS WELL AS BEST MANAGEMENT PRACTICES AND ASSUMES SOLE RESPONSIBILITY FOR FINES IMPOSED BY GOVERNMENTAL AGENCIES DUE TO VIOLATIONS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER,PARKING, LAYDOWN, PORTABLE RESTROOMS, WHEELED WASTE DISPOSAL DUMPSTER(S), WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC. IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN THEIR LOCATIONS ON THE SITE MAP.

PHASE 1
1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND INSTALL SILT FENCE.
2. INSTALL INLET PROTECTION AT EXISTING INLET(S).
3. PREPARE CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
4. INSTALL STORMWATER CONVEYANCE STRUCTURES AND CULVERTS, ENSURE THAT NEW INLETS ARE PROTECTED PRIOR TO MAKING THE OUTFALL CONNECTION.

PHASE 2
1. PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
2. START CONSTRUCTION OF THE PROPOSED BUILDING PAD AND STRUCTURES.
3. TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT THE CONSTRUCTION DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY THE GENERIC PERMIT.



THIS PLAN TO BE UTILIZED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY

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PROP. SITE PLAN DOCUMENTS

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Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: C=US, E=kmorel@bohlereng.com, CN=Kyle Morel, O=BOHLER ENGINEERING FL, LLC, L=Brandon, S=Florida, SERIALNUMBER=MA52024082967382 6, OID.2.5.4.65=A01410D000001819C6A1E4E00 02CA8E
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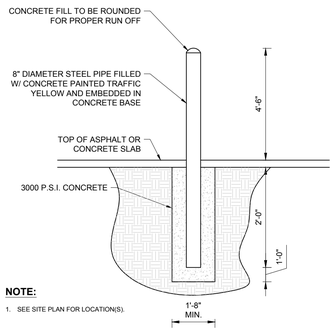
SOIL EROSION CONTROL PHASE II PLAN

SHEET NUMBER:

C-801

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\SP-CIVL-EROS-FLA240162.00-0A.----\LAYOUT: C-801 - EROSION CONTROL PLAN
KK

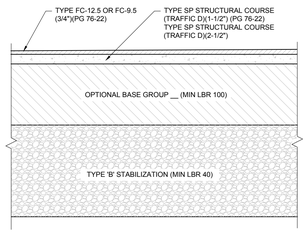


NOTE:

1. SEE SITE PLAN FOR LOCATION(S).

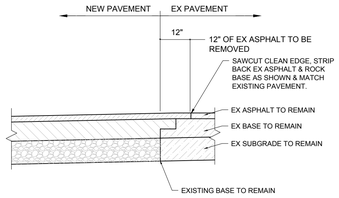
PIPE BOLLARD

NOT TO SCALE (MS-S070101 - 06/2023)



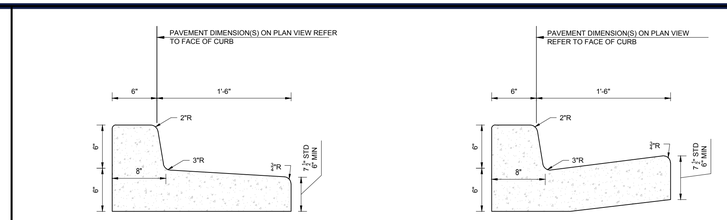
TYPICAL PAVEMENT SECTION FOR FDOT R/W

NOT TO SCALE (FL-S010102 - 09/2024)



ASPHALT SAWCUT

NOT TO SCALE (FL-S010103 - 09/2024)

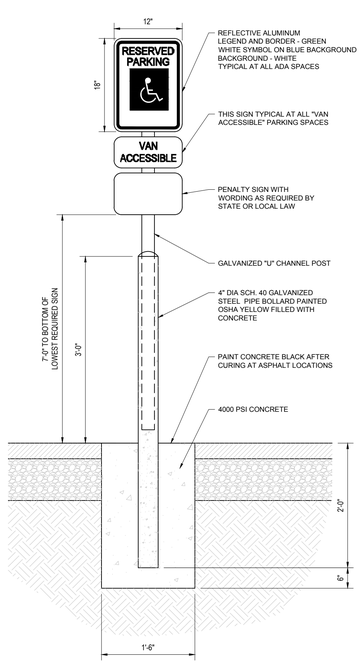


NOTES:

1. CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. @ 28 DAYS.
2. CONSTRUCTION STAKING FOR CURB INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
3. AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
4. CONTRACTION JOINTS SHALL BE PLACED @ 10'-0" O.C. TOOLED 1/4" (±1/16") WIDE, 1" DEEP. EXPANSION JOINTS SHALL BE PLACED @ 40'-0" INTERVALS, MAXIMUM, AND ALL P.C.'S.
5. GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.
6. GUTTER TYPE TO MATCH PAVEMENT SLOPE DIRECTION. CONTRACTOR TO FIELD ADJUST AS NECESSARY.
7. REFER TO FDOT STANDARD PLANS INDEX 522-001 FOR CURB SPECIFICATIONS

FDOT INDEX 520-001 - TYPE F CURB AND GUTTER

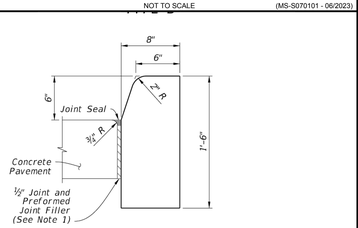
NOT TO SCALE (FL-S020201 - 09/2024)



NOTES:
ONE AT EACH ADA SPACE, WHERE ADA SPACES FACE EACH OTHER WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH SIDES

BOLLARD MOUNTED ADA PARKING SIGN

NOT TO SCALE (FL-S060101 - 09/2024)

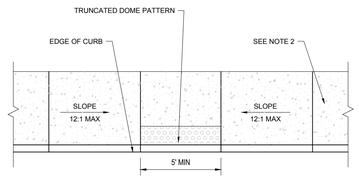


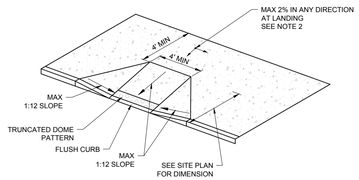
NOTE: *For use adjacent to concrete or flexible pavement, concrete shown.*

TYPE D

NOTES:

1. *For Type A, Type B, and Type D Curb: Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see Sheet 3.*
2. *For Type E, Type F, Drop Curb, and Valley Gutter: When used on high side of roadways, match the cross slope of the gutter to the cross slope of the adjacent pavement. The thickness of the lip is 6", unless otherwise shown on Plans.*
3. *For Type RA, rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.*
4. *For details depicting usage of Type A Curb adjacent to flexible pavement see Sheet 3.*



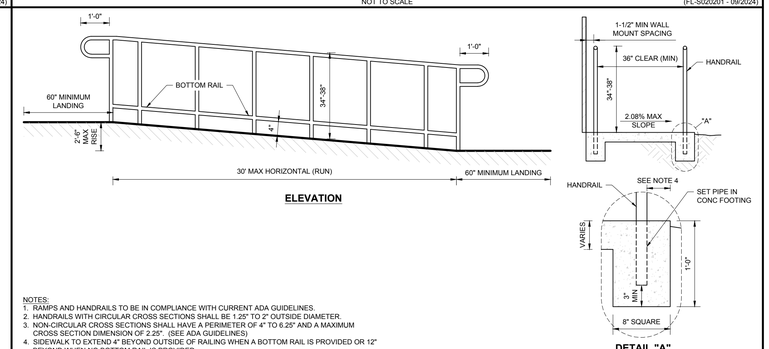


NOTES:

1. ADA ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO CURRENT ADA ACCESSIBLE GUIDELINES.
2. LEVEL LANDING AT TOP OF RAMP TO BE 4' DEEP IF NO CHANGE IN DIRECTION, OR 5'X5' MINIMUM IF A CHANGE IN DIRECTION OCCURS.

FDOT INDEX 522-022 - ADA ACCESSIBLE RAMP

NOT TO SCALE (BE-X010101 - MM/YYYY)

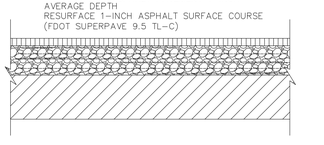


NOTES:

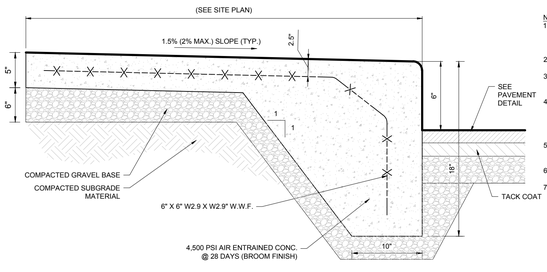
1. RAMPS AND HANDRAILS TO BE IN COMPLIANCE WITH CURRENT ADA GUIDELINES.
2. HANDRAILS WITH CIRCULAR CROSS SECTIONS SHALL BE 1.25" TO 2" OUTSIDE DIAMETER.
3. NON-CIRCULAR CROSS SECTIONS SHALL HAVE A PERIMETER OF 4" TO 6.25" AND A MAXIMUM CROSS SECTION DIMENSION OF 2.25". (SEE ADA GUIDELINES)
4. SIDEWALK TO EXTEND 4" BEYOND OUTSIDE OF RAILING WHEN A BOTTOM RAIL IS PROVIDED OR 12" BEYOND WHEN NO BOTTOM RAIL IS PROVIDED.

TYPICAL ADA RAMP AND HANDRAIL

NOT TO SCALE (FL-S030501 - 09/2024)



TYP. MILL & RESURFACE SECTION
N.T.S.



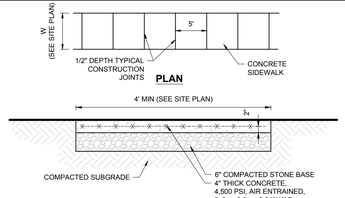
NOTES:

1. ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH ADDITIONAL GRAVEL BASE.
2. DUMMY JOINTS (FORMED) SHALL BE INSTALLED MIDWAY BETWEEN EXPANSION JOINTS.
3. THE 6" CURB REVEAL IS TYPICAL. CONTRACTOR TO REVIEW GRADING PLAN FOR AREAS WHERE REVEAL IS TO BE MODIFIED.
4. PROVIDE CONTROL JOINTS 5'-0" O.C. MIN. & EXPANSION JOINTS SHALL BE RECESSED ½" FROM THE FRONT FACE AND TOP OF THE CURB. REFER TO SIDEWALK CONSTRUCTION JOINT DETAILS.
5. PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED ADJACENT TO AND AROUND EXISTING STRUCTURES.
6. MIN CROSS SLOPE 1/4" PER FOOT PITCHED AWAY FROM BUILDING.
7. PROVIDE 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT AT INTERFACE WITH BUILDING. REFER TO ARCH PLANS AT DOOR LOCATIONS.

MONOLITHIC CURB AND SIDEWALK

NOT TO SCALE (BE-S030201 - 06/2024)

REPLACEMENT ASPHALT PAVEMENT SECTION
NTS

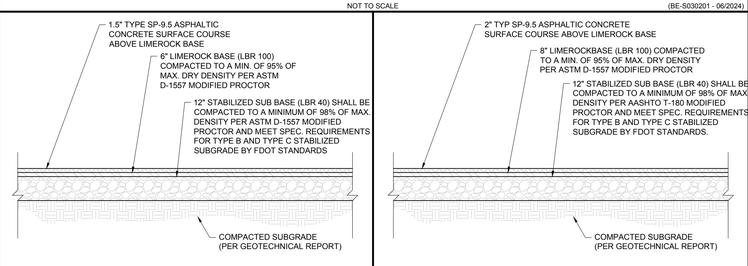


NOTE:

1. CROSS SLOPE 1/4" PER FOOT PITCHED TOWARD ROADWAY, DRIVEWAY, OR PARKING AREA IN NON ACCESSIBLE ROUTES.
2. FOR ACCESSIBLE ROUTES THE CROSS SLOPE, LONGITUDINAL (RUNNING) SLOPE AND WIDTH SHALL COMPLY WITH FEDERAL, LOCAL AND STATE ACCESSIBILITY REQUIREMENTS. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL ADA INSTRUCTIONS.
3. PROVIDE CONTROL JOINTS 5'-0" O.C. MIN. & EXPANSION JOINTS 20'-0" O.C. MIN. REFER TO SIDEWALK CONSTRUCTION JOINT DETAILS.
4. PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED ADJACENT TO AND AROUND EXISTING STRUCTURES.
5. MIN CROSS SLOPE 1/4" PER FOOT PITCHED AWAY FROM BUILDING.
6. PROVIDE 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT AT INTERFACE WITH BUILDING. REFER TO ARCH PLANS AT DOOR LOCATIONS.

CONCRETE SIDEWALK

NOT TO SCALE (BE-S030202 - 06/2024)

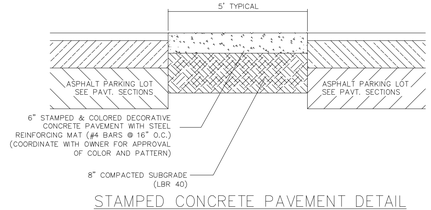


LIGHT DUTY ASPHALT PAVEMENT

NOT TO SCALE (FL-S010101 - 09/2024)

HEAVY DUTY ASPHALT PAVEMENT

NOT TO SCALE (FL-S010101 - 09/2024)



STAMPED CONCRETE PAVEMENT DETAIL
NTS (OPTION FOR DECORATIVE WALKWAY)

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
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2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: cn=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAC2D4082967382E, Date: 2025.02.11 10:59:41-05'00'

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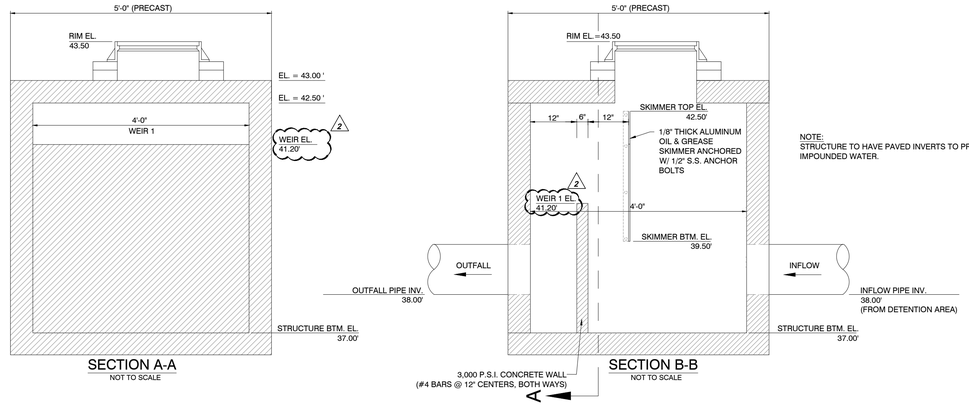
CONSTRUCTION DETAILS

SHEET NUMBER:

C-901

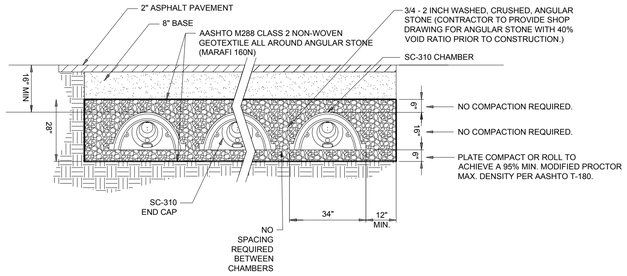
REVISION 2 - 01/28/2025

Feb 11, 2025
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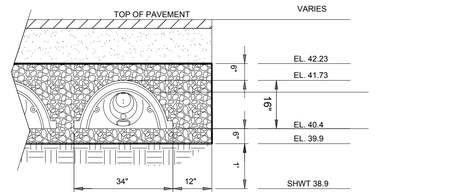


CONTROL STRUCTURE DETAIL CS-A
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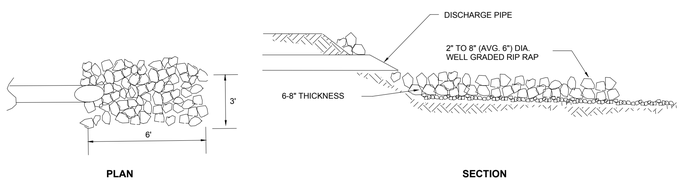
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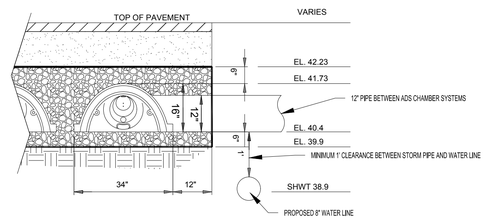
STORMTECH SC-310 CHAMBER DETAIL
N.T.S.



STORMTECH CHAMBER
AREA 'A'
N.T.S.



CULVERT OUTFALL ROCK PAD
N.T.S.



WATER LINE CLEARANCE DETAIL
N.T.S.

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FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL, PE, No. 77085, STATE OF FLORIDA, PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Tampa, S=Florida, SERIALNUMBER=MA52204082867382600, C=US
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C-902

REVISION 2 - 01/28/2025

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KK

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

Advanced Drainage Systems, Inc.

SiteAssist™ FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

SUTTON CROSSINGS

WINTER SPRINGS, FL, USA

SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/% , THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONE/SHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

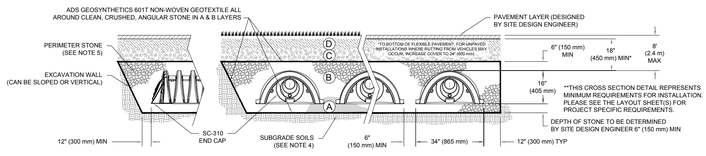
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETES	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETES	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.2,3

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

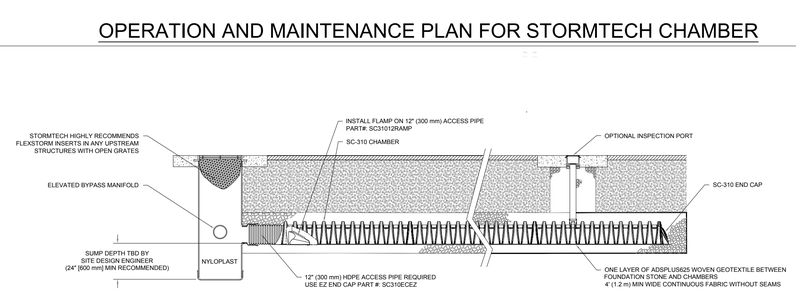
SUTTON CROSSINGS — WINTER SPRINGS, FL, USA — DRAWN: EH — CHECKED: N/A — DATE: — PROJECT #: — DATE | BY | CHK | DESCRIPTION

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SHEET 5 OF 8

OPERATION AND MAINTENANCE PLAN FOR STORMTECH CHAMBER



SC-310 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.*

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

*INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM. THIS INCLUDES SEDIMENT SUMPS FOR EACH INLET TO THE SYSTEM. INSPECTION SHOULD BE DONE EVERY 6 MONTHS FOR THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON THE PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.

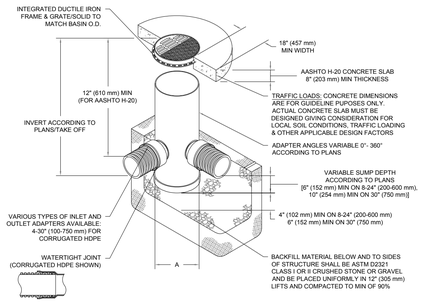
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SHEET 6 OF 8

NYLOPLAST DRAIN BASIN
NTS

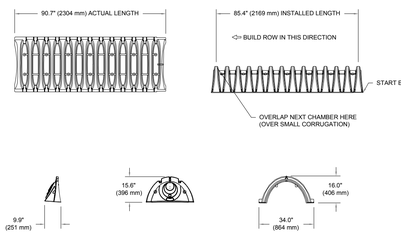


NOTES

1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: WWW.NYLOPLAST-US.COM
6. TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

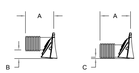
SC-310 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4" (864 mm X 406 mm X 2169 mm)	
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 9" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "SR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310ECEZ*	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310ECEZ THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

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SHEET 8 OF 8

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Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-OCDS-FLA240162.00-0A---LAYOUT, C-903 - DRAINAGE DETAILS
KK1

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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It's fast. It's free. It's the law.

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER

600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: C=US, E=kmorel@bohlereng.com, CN=Kyle C Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MA52324082907382DL
Date: 2025.02.11 16:00:08-05'00'

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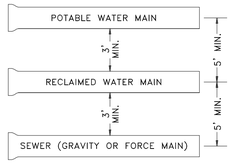
SHEET TITLE:

DRAINAGE DEATILS

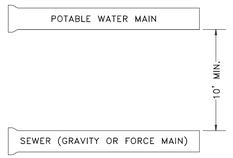
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REVISION 2 - 01/28/2025

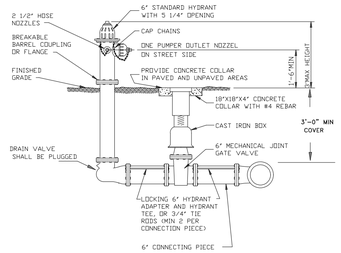


A MINIMUM HORIZONTAL SEPARATION OF 5' (CENTER TO CENTER) OR 3' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWER COLLECTION LINES.



A MINIMUM HORIZONTAL SEPARATION OF 10' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN SEWER COLLECTION LINES AND POTABLE WATER MAINS.

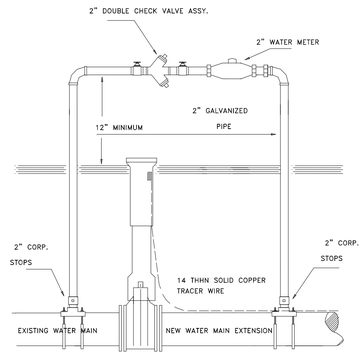
MINIMUM HORIZONTAL SEPARATION REQUIREMENTS FOR POTABLE, RECLAIMED, AND SEWER LINES



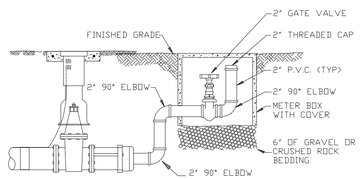
NOTES:

1. THE HYDRANTS ACCEPTABLE TO THE CITY OF WINTER SPRINGS SHALL BE EITHER THE CLOW # 42 MEDALION AMERICAN DARLING B84B, OR THE MUELLER A-423.
2. THE BARREL SHALL BE PAINTED YELLOW AND TOP WHITE
3. GRIP RING OR MEGA LUG RESTRAINTS MAY USED IN PLACE OF ALL THREAD RODS

FIRE HYDRANT ASSEMBLY



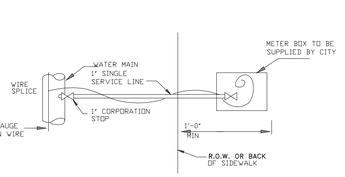
TEMPORARY BYPASS



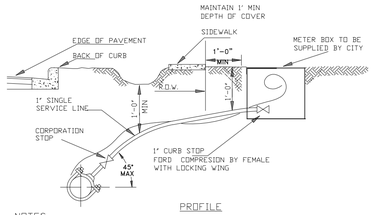
NOTE:

ALL PIPE AND FITTINGS MUST BE GALVANIZED IRON PIPE OR SCHEDULE 80 P.V.C.

BLOWOFF VALVE



PLAN

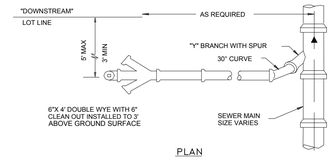


PROFILE

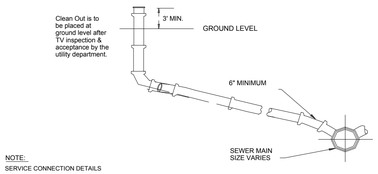
NOTES:

1. METER BOX INSTALLED BY THE CITY OF WINTER SPRINGS
2. METER PURCHASED FROM AND INSTALLED BY THE CITY OF WINTER SPRINGS

POTABLE WATER SERVICE SINGLE



PLAN

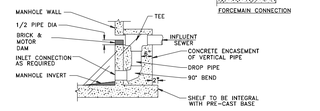


NOTE:
SERVICE CONNECTION DETAILS SHOWN IS FOR A DOUBLE PVC SERVICE A SINGLE WYE WOULD BE USED FOR A SINGLE SERVICE

PROFILE

SEWER LATERAL DETAIL

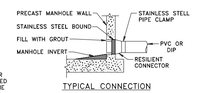




DROP CONNECTION

NOTES:

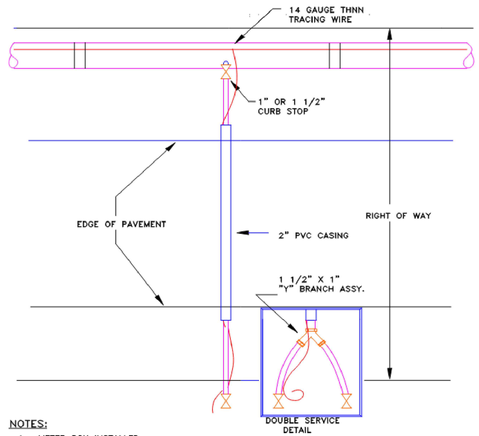
1. PENETRATION TO EXISTING MANHOLES SHALL BE CORE BORED
2. OUTSIDE DROP CONNECTION SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO FEET OR MORE ABOVE THE MAIN INVERT CHANNEL



TYPICAL CONNECTION

W.S. Detail 6-9-00

TYPICAL MANHOLE CONNECTIONS



NOTES:

1. METER BOX INSTALLED BY THE CITY OF WINTER SPRINGS
2. DOUBLE SERVICE LINES SHALL BE 1 1/2" PURPLE P.E TUBING WITH 1 1/2" X 1" Y BRANCH
3. ALL LINES UNDER PAVEMENT SHALL BE ENCASED IN 2" PVC PIPE

1" RECLAIMED WATER CURB STOP TO BE INSTALLED BY CONTRACTOR ON ALL RECLAIMED SERVICE LINES



RECLAIMED WATER SERVICE CONNECTION

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
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2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LSP/D / KK/KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVIL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL, No. 77085, STATE OF FLORIDA, PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL LLC", L=Tampa, S=Florida, SERIALNUMBER=MA0J2240628673826, C=US
Date: 2025.02.13 08:00:22-05'00'

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SHEET TITLE:

CITY OF WINTER SPRINGS UTILITY DETAILS

SHEET NUMBER:

C-904

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVIL-OCDS-FLA240162.00-0A-----LAYOUT: C-904 - UTILITY DETAILS
KM

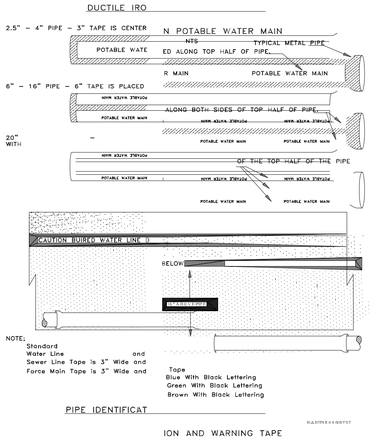
SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

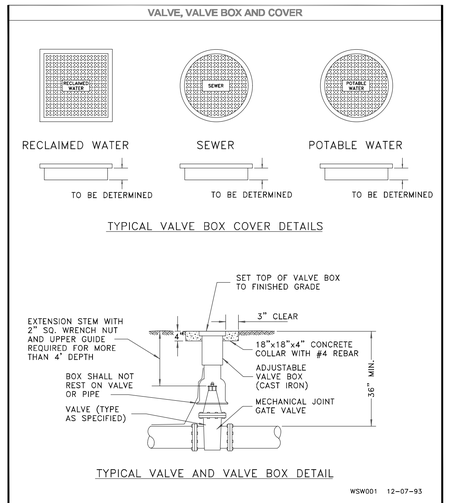
PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER		WASTEWATER (GRAVITY & FM)		STORM SEWER	
	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT
POTABLE WATER	3' NOTE 1	12"	3' NOTE 1 & 3	12" NOTE 3	6' NOTE 3	12" NOTE 3	3' NOTE 1 & 3	12"/18" NOTE 2 & 3
RECLAIMED WATER	3' NOTE 1 & 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12"/18" NOTE 2
WASTEWATER (GRAVITY AND FM)	6' NOTE 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12"/18" NOTE 2
RIGHT OF WAY	3' NOTE 1	N/A	3' NOTE 1	N/A	3' NOTE 1	N/A	N/A	N/A

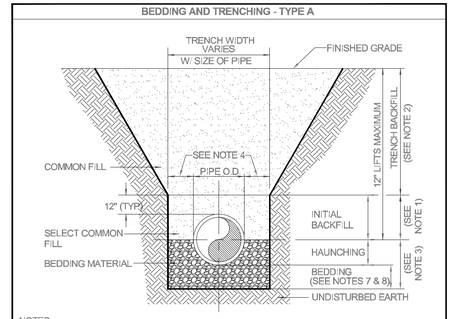
NOTES:

1. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTHS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
2. THE 18-INCH SEPARATION REQUIREMENT APPLIES WHEN THE STORM PIPE CROSSES ABOVE THE OCU MAIN, AND WHEN THE STORM PIPE HAS A DIAMETER EQUAL TO OR GREATER THAN 24 INCHES. OTHERWISE, THE REQUIRED SEPARATION IS 12 INCHES.
3. THIS SEPARATION REQUIREMENT COMPLIES WITH MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND OCU.
4. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.

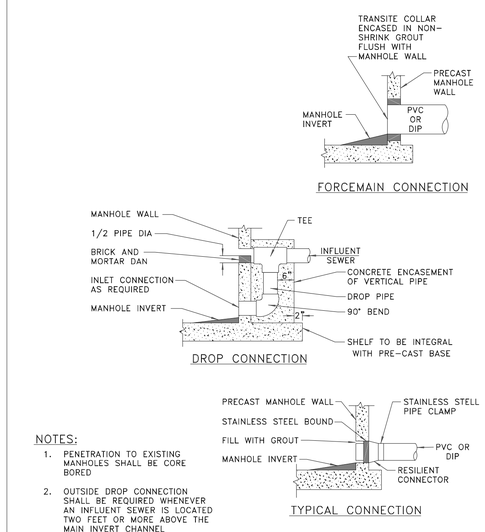


PIPE IDENTIFICAT ION AND WARNING TAPE



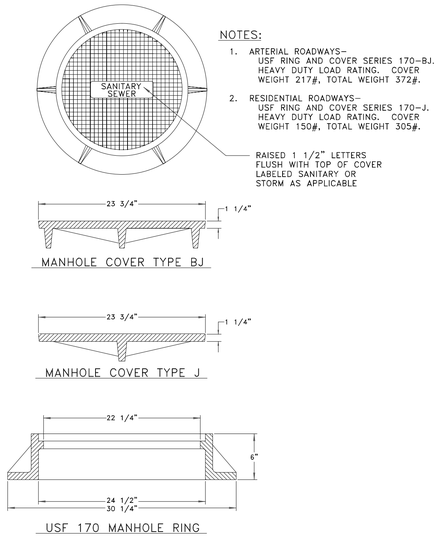


NOTES:
1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.



NOTES:
1. PENETRATION TO EXISTING MANHOLES SHALL BE CORE BORED
2. OUTSIDE DROP CONNECTION SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO FEET OR MORE ABOVE THE MAIN INVERT CHANNEL

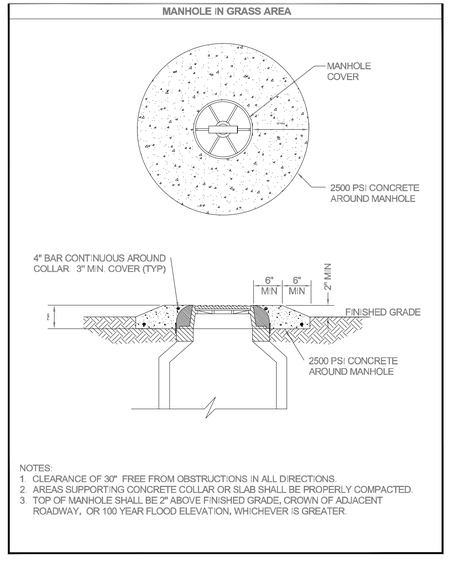
TYPICAL MANHOLE CONNECTIONS



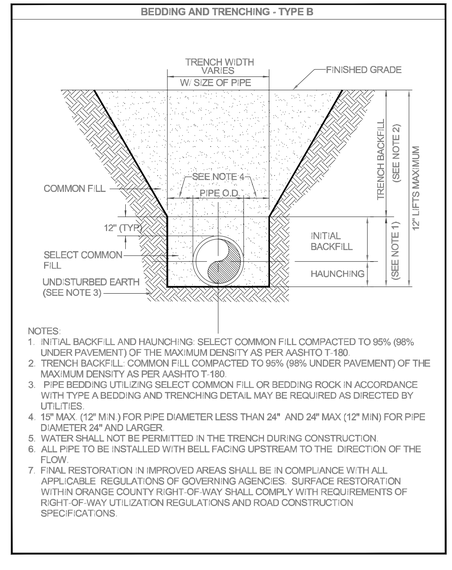
NOTES:
1. ARTERIAL ROADWAYS– USF RING AND COVER SERIES 170–BJ. HEAVY DUTY LOAD RATING. COVER WEIGHT 217#, TOTAL WEIGHT 372#.
2. RESIDENTIAL ROADWAYS– USF RING AND COVER SERIES 170–J. HEAVY DUTY LOAD RATING. COVER WEIGHT 150#, TOTAL WEIGHT 305#.

MANHOLE FRAME & COVER

W.S. Detail 6-9-00



NOTES:
1. CLEARANCE OF 30" FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.
2. AREAS SUPPORTING CONCRETE COLLAR OR SLAB SHALL BE PROPERLY COMPACTED.
3. TOP OF MANHOLE SHALL BE 2" ABOVE FINISHED GRADE, CROWN OF ADJACENT ROADWAY, OR 100 YEAR FLOOD ELEVATION, WHICHEVER IS GREATER.



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-OCDS

PROJECT:
PROP. SITE PLAN DOCUMENTS
FOR
SUTTON CROSSINGS
PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

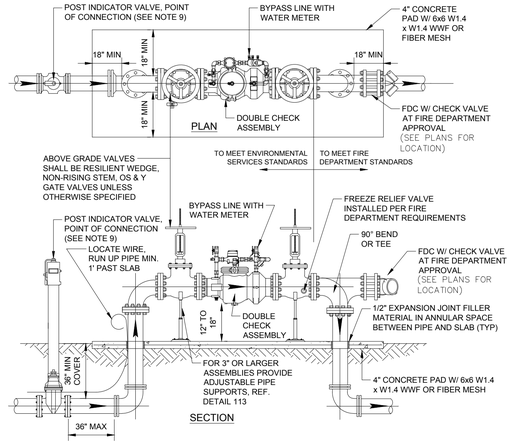
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600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlerengineering.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", C=US, 1.2.840.113549.1.9.1=#16124B4F484C4552454E47494E45455249...
Date: 2025.02.11 16:00:33-05'00'
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SHEET TITLE:
CITY OF WINTER SPRINGS UTILITY DETAILS
SHEET NUMBER:
C-905

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\SP-CIVL-OCDS-FLA240162.00-0A-----LAYOUT: C-905 - UTILITY DETAILS
KM

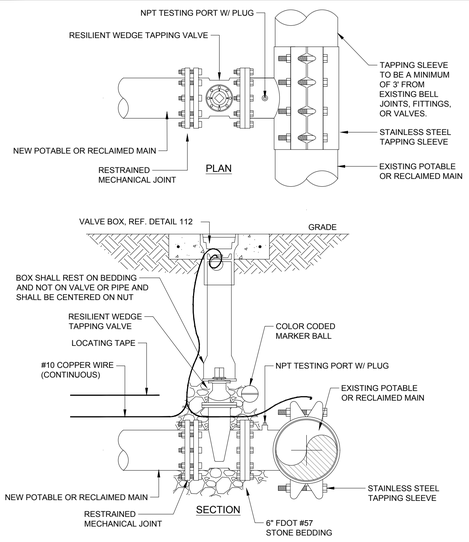


NOTES:
1. BY-PASS METER ASSEMBLY SHALL BE REQUIRED ON MONITORED FIRE SPRINKLER PROTECTION SYSTEMS.
2. THREE (3) INCH DIAMETER AND GREATER METER AND BACKFLOW ASSEMBLIES SHALL MEET REQUIREMENTS SET BY SEMINOLE COUNTY CROSS-CONNECTION CONTROL ORDINANCE 270.11, OR LATEST EDITION.
3. THE OWNER/CUSTOMER, AT HIS OR HER OWN EXPENSE, SHALL INSTALL, OPERATE, TEST, AND MAINTAIN APPROVED BACKFLOW PREVENTION ASSEMBLIES, AS DIRECTED BY SEMINOLE COUNTY ENVIRONMENTAL SERVICES.
4. ALL PIPE AND FITTINGS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
5. THREE (3) INCH DIAMETER AND GREATER ABOVE GRADE PIPE AND FITTINGS SHALL BE FLANGED DUCTILE IRON WITH 316 S.S. HARDWARE. BELOW GRADE FITTINGS SHALL BE RESTRAINED MECHANICAL JOINTS.
6. THREE (3) INCH DIAMETER AND GREATER FIRE LINES SHALL BE DUCTILE IRON PIPE FROM THE CONNECTION TO THE MAIN TO THE ASSEMBLE IF BOTH ARE LOCATED ON THE SAME SIDE OF THE STREET.
7. THE CHECK VALVE ASSEMBLY, VALVES, PIPING, BYPASS METER AND DOUBLE CHECK SHALL BE COATED IN ACCORDANCE TO THE SEMINOLE COUNTY UTILITY ENGINEERING MANUAL..
8. BYPASS METER AND BACKFLOW PREVENTER SHALL BE ASSEMBLED WITH APPROPRIATE FITTINGS TO ALLOW REMOVAL AND RE-INSTALLATION.
9. POST INDICATOR VALVE SHALL BE INSTALLED UPSTREAM OF DOUBLE DETECTOR CHECK VALVE ASSEMBLY AND DOWNSTREAM OF ALL OTHER POTABLE WATER CONNECTIONS.
10. CONCRETE PAD SHALL EXTEND 18 INCHES OUT FROM OUTSIDE EDGE OF ABOVE GRADE PIPING, ALL AROUND, AND SHALL BE A CONTINUOUS MONOLITHIC POUR, REINFORCED WITH 6"x6" W1.4xW1.4 WWF OR FIBER-MESH.
11. TAMPER SWITCHES SHALL BE INSTALLED PER AND INSPECTED BY FIRE DEPARTMENT.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION

FIGURE: 203

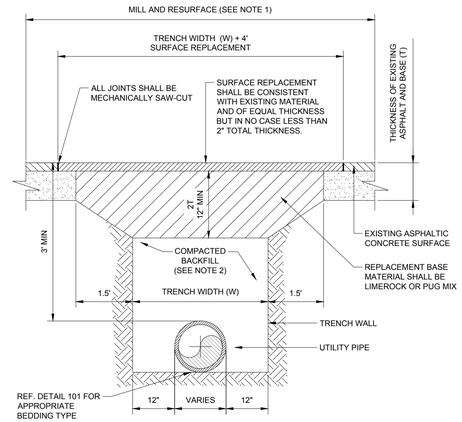
DOUBLE DETECTOR CHECK VALVE ASSEMBLY



NOTES:
1. THIS DETAIL IS INCOMPLETE WITHOUT ACCOMPANYING DETAIL 111 AND 112.
2. TAPPING SLEEVE AND VALVE SHALL BE INSTALLED AND TESTED UNDER WITNESS OF A REPRESENTATIVE FROM SEMINOLE COUNTY UTILITY ENGINEERING DIVISION.
3. TAPPING SLEEVE SHALL BE INSTALLED TO EXISTING MAIN PER MANUFACTURES INSTRUCTIONS, ALL HARDWARE TO BE TORQUED TO MANUFACTURES SPECIFICATIONS.
4. TAPPING SLEEVE AND VALVE SHALL BE PRESSURE TESTED IN ACCORDANCE TO THE UTILITY ENGINEERING MANUAL (150 PSI FOR 15 MINUTES FOR POTABLE AND RECLAIM WATER MAINS) PRIOR TO TAPPING EXISTING MAIN.
5. VALVE EXTENSION STEM REQUIRED IF TOP OF VALVE OPERATING NUT IS GREATER THAN 3' FROM FINISHED GRADE.
6. REF. STANDARD DETAIL 109 - PIPE MATERIAL LOCATION FOR FULL MATERIAL LOCATION REQUIREMENTS.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION — DATE: 05/18/21

POTABLE & RECLAIM MAIN WET TAP — FIGURE: 204



NOTES:
1. MILL AND RESURFACING REQUIREMENTS PER SEMINOLE COUNTY PUBLIC WORKS REQUIREMENTS OR WHICH EVER GOVERNING MUNICIPALITY.
2. BACKFILL SHALL BE PLACED IN 6" LAYERS FROM BENEATH THE HAUNCHES OF THE PIPE TO THE BASE AND COMPACTED TO 98% DENSITY PER AASHTO T-180 MODIFIED PROCTER.
3. BASE MATERIALS SHALL BE PLACED IN TWO OR THREE LAYERS ROLLED AND TAMPED TO ABOVE SPECIFIED DENSITY.
4. PARTIAL LANE REPLACEMENT SHALL HAVE FULL LANE WIDTH MILLED AND RESURFACED.
5. REF. DETAIL 104 FOR PIPE RESTRAINT REQUIREMENTS.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION — DATE: 05/18/21

EXISTING ROADWAY OPEN CUT — FIGURE: 102

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DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
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CITY OF WINTER SPRINGS

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Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLIE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kylie Morel
DN: E=kmorel@bohlereng.com, CN=Kylie J. Morel, O="BOHLER ENGINEERING FL, LLC", L=Tampa, S=Florida, SERIALNUMBER=MA1202408286738 26, C=US
Date: 2025.02.11 18:00:56-05'00'

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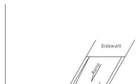
CITY OF WINTER SPRINGS UTILITY DETAILS

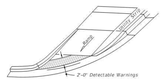
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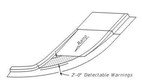
C-906

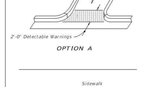
REVISION 2 - 01/28/2025

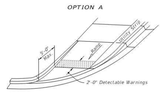


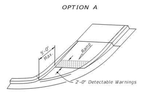


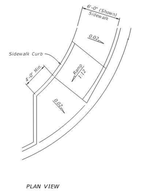


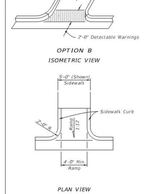


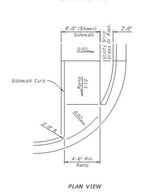


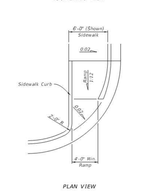












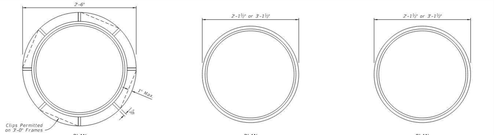
SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

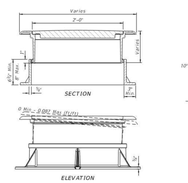
LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 4 of 7

TABLE 1
WEIGHT OF CASTINGS (lb)

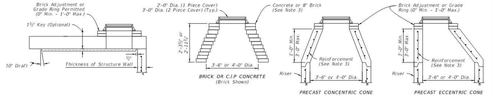
Frame Type	2'-0" OPENING		3'-0" OPENING		
	Frame	Cover (Std.)	Frame	2-Piece Cover Inside/Solid	Total
I	155	180	230	180 / 200	410
II	155	180	155	180 / 200	355
III	190	190	180	190 / 230	420

NOTE: Frame Type 1 in Table 1, includes Adjustable Frames.





MANHOLE FRAMES



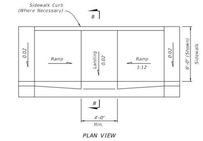
NOTES:
1. Use Class II concrete for Manhole top Type 7 slabs.
2. Manhole top Type 7 slabs may be of cast-in-place or precast construction. The optional key is for precast tops and in lieu of dowels. Omit frame and slab openings when top is used over a junction box.
3. Manhole top Type 8 may be of cast-in-place, precast concrete construction, or brick construction. For concrete construction, use the same concrete and steel reinforcement as the supporting wall unit. An eccentric cone may be used.
4. Use construction joint options, as shown on Sheet 6 to secure manhole tops to structures.
5. Frames may be adjusted to a maximum 12" height with brick or precast ASTM C478 grade rings.
6. Manhole top Type 8 may be substituted for a Type 7, if the minimum dimensions are not reduced.
7. Manhole top Type 7 may be substituted for Type 8, if the minimum thickness (h) above pipe opening cannot be maintained with Type 8.

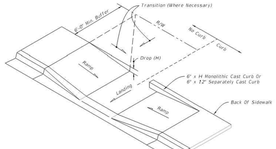
TYPE 7

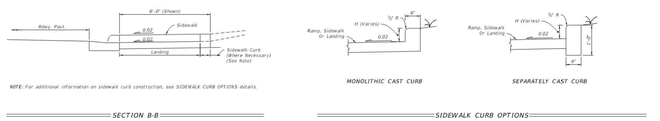
MANHOLE TOPS

MANHOLE FRAMES AND MANHOLE TOPS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX 425-001	SHEET 2 of 8

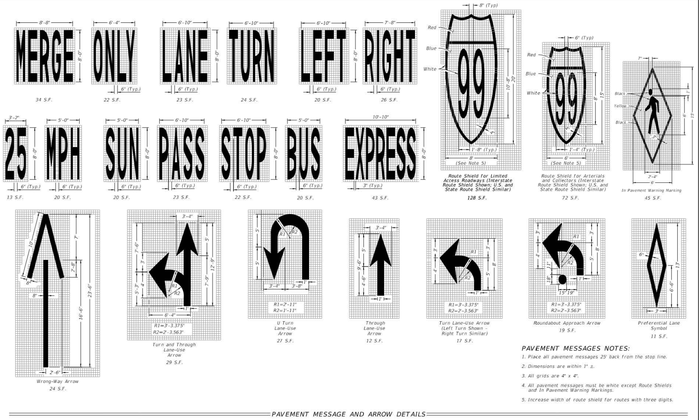






SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

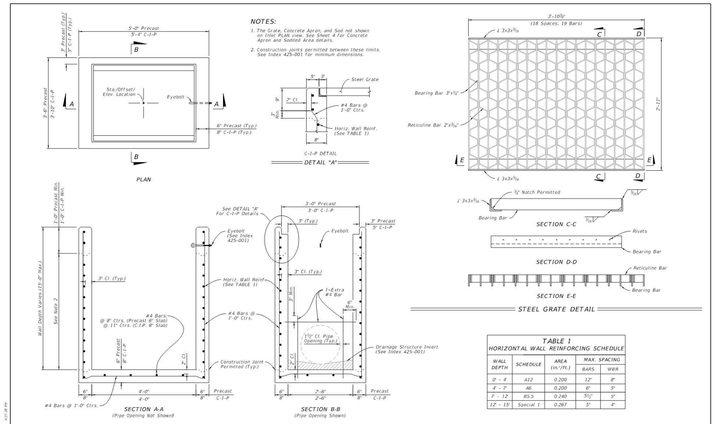
LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 3 of 7



PAVEMENT MESSAGES NOTES:
1. Place all pavement messages 25' back from the stop line.
2. Dimensions are within 3" ±.
3. All grids are 4' x 4'.
4. All pavement messages must be white except Route Shields and In Pavement Warning Markings.
5. Increase width of route shield for routes with three digits.

PAVEMENT MESSAGE AND ARROW DETAILS

LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 1 of 13



NOTES:
1. The Grate, Concrete Aprons, and Sod not shown for Clarity. See Index 425-031 for Concrete Apron and Slotted Area details.
2. Construction joints permitted between these limits. See Index 425-001 for minimum dimensions.

TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWR
0' - 4'	A12	0.200	12"	8"
4' - 7'	A8	0.200	8"	5"
7' - 12'	B5.5	0.240	9½"	9"
12' - 15'	Special 1	0.267	5"	4"

DIMENSIONAL AND REINFORCING DETAILS

TYPE F - DIMENSIONAL, REINFORCING, AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	DITCH BOTTOM INLET TYPES F AND G	INDEX 425-053	SHEET 2 of 4



LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 5 of 13

FRAME AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	CURB INLET TYPE 9	INDEX 425-024	SHEET 2 of 3

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ELECTRICAL ENGINEERING
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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ALWAYS CALL 811
It's fast. It's free. It's the law.

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVIL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Hillsborough, S=Florida, C=US, 1.2.840.113549.1.9.2=MAS2024082867.3826, OID.2.5.4.65=
Date: 2025.02.13 18:01:10-05'00'

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SHEET TITLE:

FDOT STANDARD DETAILS

SHEET NUMBER:

C-907

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\SP-CIVL-OCDS-FLA240162.00-0A.dwg — LAYOUT: C-907 - FDOT STANDARD DETAILS
KK

TRAFFIC IMPACT ANALYSIS

ACE HARDWARE DEVELOPMENT

WINTER SPRINGS, SEMINOLE COUNTY

Prepared for:

McMillan Ace Hardware
5040 W State Road 46,
Sanford, FL 32771

Prepared by:

Traffic Planning and Design, Inc.
535 Versailles Drive
Maitland, Florida 32751
407-628-9955

September 2023

TPD № 5824

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic Planning and Design, Inc., a corporation authorized to operate as an engineering business, EB-3702, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Ace Hardware Development

LOCATION: Winter Spring, Seminole County

CLIENT: McMillian Ace Hardware

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Turgut Dervish

P.E. No.: 20400

DATE: **September 26, 2023**

SIGNATURE:



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B Traffic Data and Roadway Concurrency Information
C Existing Intersection Counts and FDOT Seasonal Factors
D Existing HCS Capacity Worksheets
E Projected HCS Capacity Worksheets

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INTRODUCTION

This analysis was conducted in order to assess the traffic impact of the proposed Ace Hardware Development in the City of Winter Springs, Seminole County. The development is located in the northeast corner of the Tuskawilla Road and Michael Blake Boulevard intersection. **Figure 1** depicts the site location. Access to the site is proposed via three access driveways, a full access connection on Michael Blake Boulevard and right in/right out driveways on Tuskawilla Road and SR 434. **Figure 2** depicts the conceptual site plan.

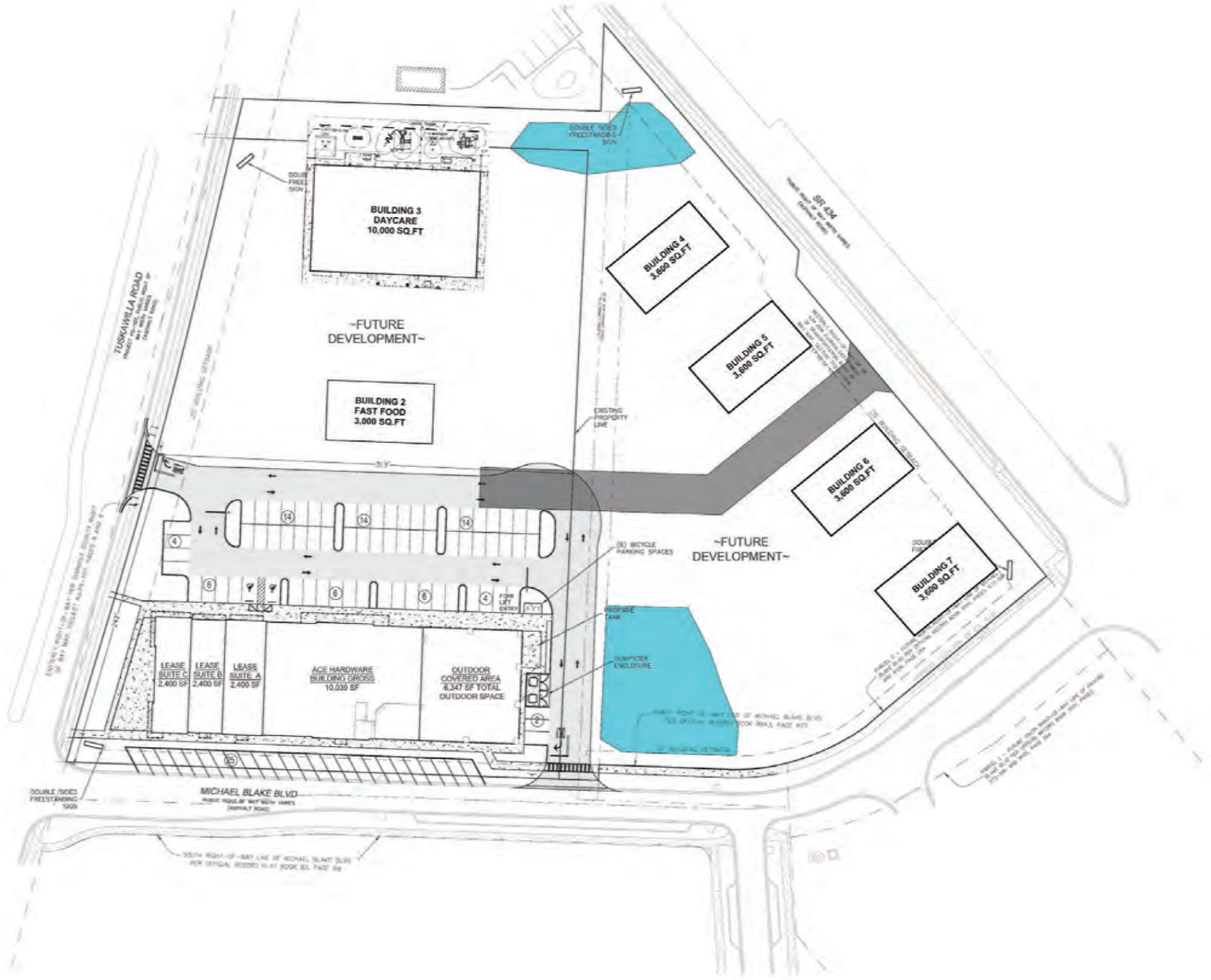
The analysis was conducted in accordance with a study methodology submitted and reviewed by Seminole County. The project is in the Seminole County Dense Urban Land Use Area (DULA). As per Seminole County requirements, the classified roadways within the one-mile sphere of influence (or impact area) and major intersections within a quarter mile from the site were included in the traffic analysis. The study methodology and related correspondence are included in **Appendix A.** Data used in the analysis consisted of site plan and development information provided by the Project Engineers, daily traffic volume data obtained from Seminole County, and A.M. & P.M. peak hour intersection counts made by Traffic Planning and Design, Inc. (TPD) personnel.



Ace Hardware - Winter Springs
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Page 2

Site Location

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Ace Hardware - Winter Springs
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Page 3

Concept Plan

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EXISTING TRAFFIC CONDITIONS

Existing traffic conditions were analyzed using daily traffic volumes for the study roadways and A.M. & P.M. peak hour traffic volumes for the study intersections. The roadway analysis consisted of a generalized capacity analysis with the existing traffic volumes and the available capacity. The intersection analysis was conducted as per the procedures of the Highway Capacity Manual. Pertinent roadway segment data sheets showing the existing and committed trips along with the corresponding segment capacities are included in **Appendix B**.

Analysis of Daily Traffic Conditions

A roadway segment analysis was performed for the study roadway segments by comparing the daily traffic volume of each segment with the corresponding capacity of the segment. **Table 1** shows each of the roadway segments along with their number of lanes, adopted daily LOS/capacities, existing traffic volumes, available capacities, and existing Levels of Service (LOS). The results of the analysis indicate that the roadway segments currently operate satisfactorily with excess traffic capacity available.

Table 1
Existing Roadway Conditions Analysis

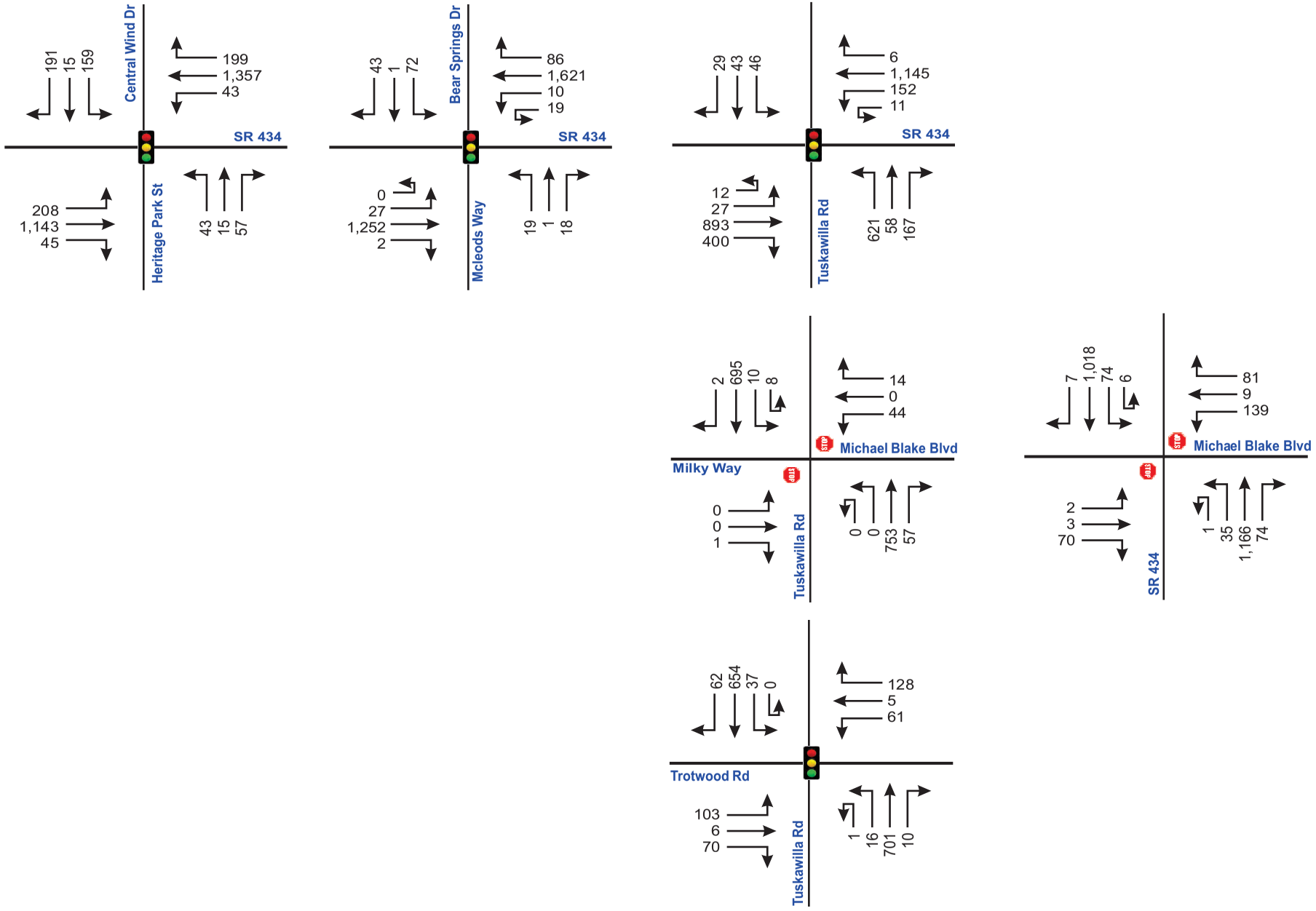
Seg #	Roadway Segment	Lanes	Daily Capacity	Existing Daily Traffic	Committed Trips	Available Capacity	LOS
Tuscawilla Road							
326	SR 434 to Trotwood Blvd	4L	42,560	21,241	0	21,319	C
327	Trotwood Blvd to Winter Springs Blvd	4L	42,560	20,748	8	21,804	C
SR 434							
296	Springs Ave to Tuskawilla Rd	4L	48,000	27,610	293	20,097	C
297	Tuskawilla Rd to SR 419	4L	48,000	36,344	0	11,656	C

Analysis of Peak Hour Traffic Conditions

A capacity analysis was conducted for the A.M. & P.M. peak hour traffic conditions for the study intersections. The analysis was conducted utilizing Highway Capacity Software in accordance with the procedures of the Highway Capacity Manual. Existing traffic consisting of turning movement counts are included in **Appendix C** along with the FDOT Peak Season Factor report. The traffic counts were made on September 12, 2023, when the FDOT seasonal factor for Seminole County was 1.04 and therefore the counts were adjusted. The existing peak hour traffic volumes are shown in **Figures 3 and 4**. The intersection capacity analysis results are summarized in **Table 2** and indicate that the study intersections are currently operating at satisfactory Levels of Service except for the southbound movement at the intersection of SR 434 and Tuskawilla Road during the P.M. peak hour and the westbound movement at the intersection of SR 434 & Michael Blake Boulevard during the A.M. and P.M. peak hours. Detailed capacity analysis worksheets are included in **Appendix D.**

Table 2
Existing Intersection LOS Analysis

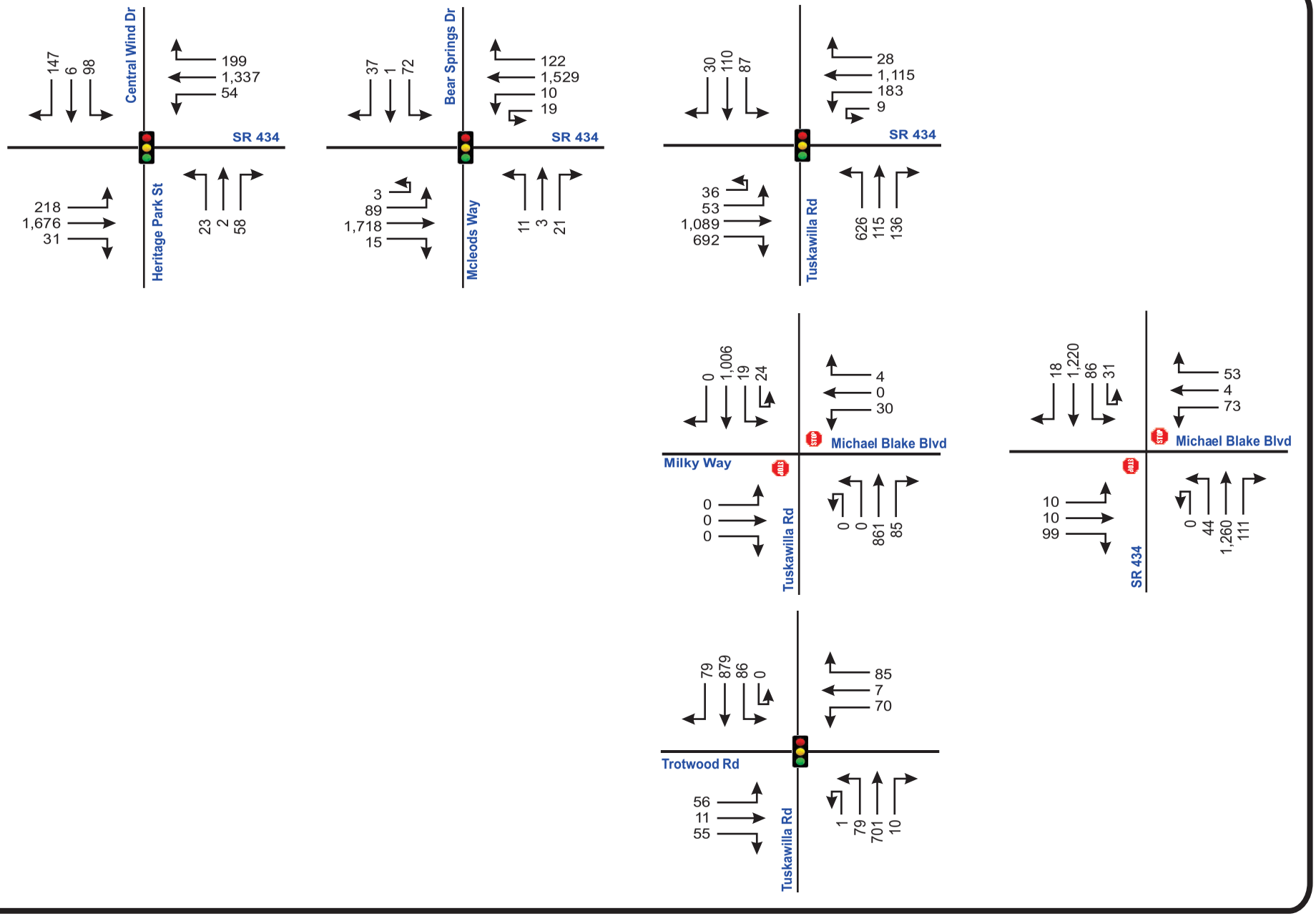
Intersection	Time Period	Control	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Tuskawilla Rd & Trotwood Blvd	A.M.	Signal	38.8	D	52.3	D	15.9	B	15.0	B	21.6	C
	P.M		43.9	D	47.2	D	13.2	B	14.7	B	18.3	B
Tuskawilla Rd & Michael Blake Blvd	A.M.	Stop	10.6	B	20.2	C	0.0	A	0.3	A	--	--
	P.M.		12.1	B	26.6	D	0.0	A	0.6	A	--	--
SR 434 & Tuskawilla Rd	A.M.	Signal	33.8	C	39.7	D	57.4	E	75.7	E	42.8	D
	P.M.		44.4	D	49.4	D	73.6	E	99.1	F	54.8	D
SR 434 & Michael Blake Blvd	A.M.	Stop	16.3	C	181.8	F	0.3	A	1.0	A	--	--
	P.M.		41.2	E	199.4	F	0.4	A	1.8	A	--	--
SR 434 & Bear Springs Dr/McLeod Way	A.M.	Signal	9.1	A	13.7	B	64.8	E	70.0	E	14.5	B
	P.M.		11.3	B	13.0	B	65.3	E	69.9	E	14.4	B
SR 434 & Central Winds Dr/Heritage Park St	A.M.	Signal	31.8	C	54.7	D	70.8	E	77.9	E	48.4	D
	P.M.		26.6	C	32.8	C	75.7	E	81.3	F	33.8	C



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Existing A.M. Peak Hour Turning Movements

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Ace Hardware - Winter Springs
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Figure 4
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Existing P.M. Peak Hour Turning Movements

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PROPOSED DEVELOPMENT AND TRIP GENERATION

The proposed development will consist of a 10,000 square foot Day Care facility, 23,586 square foot strip retail center with Ace Hardware as the anchor tenant, three fast food restaurants with drive through windows totaling 9,000 square feet and two stand-alone high-turnover (sit-down) restaurants totaling 9,500 square feet. To determine the impact of this development in the area, an analysis of its trip generation characteristics was made. This included the determination of the trips to be generated and the distribution/ assignment of these trips to the area roadways.

Trip Generation

The trip generation of the proposed development was calculated using rates provided by the *11th Edition* of the *Institute of Transportation Engineers (ITE) Trip Generation Manual.* The results of the trip generation calculation are summarized in **Table 3** and ITE trip generation sheets are included in the Study Methodology, in Appendix A. As shown in the table, the proposed development will generate 3,354 net new daily trips, of which 293 will occur during the A.M. peak hour and 285 will occur during the P.M. peak hour.

Table 3
Trip Generation Summary

ITE Code	Land Use	Size (KSF)[1]	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate[2]	Trips	Rate[2]	Enter	Exit	Total	Rate[2]	Enter	Exit	Total
565	Day Care	10.00	4.09	41	0.78	4	4	8	0.79	4	4	8
822	Strip Retail Plaza (<40K)	23.586	51.94	1,225	2.36	33	23	56	6.59	78	77	155
934	Fast Food w/Drive Through (3 sites)	9.00	467.48	4,207	44.61	205	196	401	33.03	155	142	297
932	High Turnover (Sit-Down) Restaurant (2 stand-alone sites)	9.50	107.20	1,018	9.57	50	41	91	9.05	52	34	86
	Sub-Total			6,491	---	292	264	556	---	289	257	546
	Retail Pass-by (40%)[2]			490	---	13	9	22	---	31	31	62
	Fast Food Pass-by (AM=50%, PM=55%, Daily=52.5%)[2]			2,209	---	103	98	201	---	85	78	163
	High Turnover Restaurant Pass-by (43%)[2]			438	---	22	18	40	---	22	14	36
	Total Net New Trips			**3,354**	**---**	**154**	**139**	**293**	**---**	**151**	**134**	**285**

[1]KSF=1,000 sq. ft. [2]Equation utilized when R^2 >0.75 [3]Pass-by rates obtained from ITE's Trip Generation Manual, 11th Edition, LUC 821

Trip Distribution and Assignment

A distribution pattern will be determined with the use of the 2030 Central Florida Regional Planning Model (CFRPM v7). The model was revised to add a traffic zone representing the project and its proposed development. Subsequently, the model was run with a Select Zone Analysis which produced a trip distribution for the project trips. **Figure 5** depicts the trip distribution on the area roadways. The model distribution plot is included in the study methodology, in Appendix A.



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Trip Distribution

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PROJECTED TRAFFIC CONDITIONS

Projected traffic conditions were analyzed using daily traffic volumes for the study roadways and A.M. & P.M. peak hour traffic volumes for the study intersections. The roadway analysis consisted of a generalized capacity analysis with the projected traffic consisting of background traffic and project trips. The intersection analysis was conducted as per the procedures of the Highway Capacity Manual. Background traffic consisting of existing traffic and committed trips was provided by Seminole County.

Analysis of Daily Traffic Conditions

A roadway segment analysis was performed for the study roadway segments by comparing the total daily traffic volume of each segment with the corresponding capacity of the segment. The roadway segment analysis is summarized in **Table 4**. The table shows each of the road segments along with their number of lanes, adopted daily LOS/capacities, projected traffic volumes and resultant Levels of Service. The results of the analysis indicate that the impacted road segments are projected to operate similar to existing conditions with excess traffic capacity available.

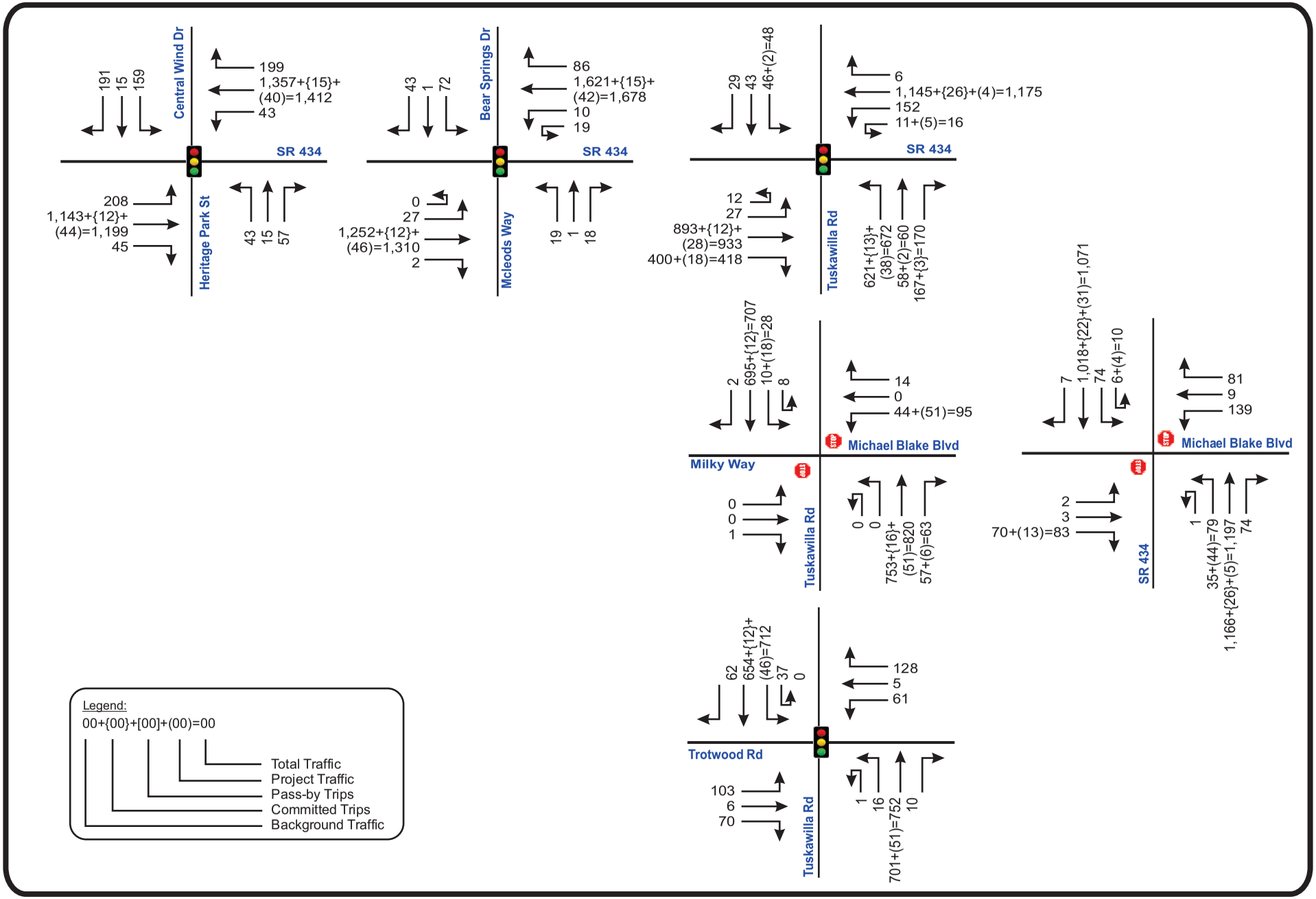
Table 4
Future Roadway Conditions Analysis

Seg #	Roadway Segment	Lns	Daily Capacity	Background Daily Traffic		Project Daily Trips		Total Daily Volume	Available Capacity	LOS
				Existing	Committed[1]	%[2]	Volume			
Tuscawilla Road										
326	SR 434 to Trotwood Blvd	4L	42,560	21,241	425[1]	37%	1,241	22,907	19,653	C
327	Trotwood Blvd to Winter Springs Blvd	4L	42,560	20,748	8	33%	1,107	21,863	20,697	C
SR 434										
296	Springs Ave to Tuskawilla Rd	4L	48,000	27,610	293	32%	1,073	28,976	19,024	C
297	Tuskawilla Rd to SR 419	4L	48,000	36,344	727[1]	30%	1,006	38,077	9,923	C

[1]2% of existing traffic volume added when no committee trip were originally assigned [2]Highest Percentage on the Segment

Analysis of Peak Hour Traffic Conditions

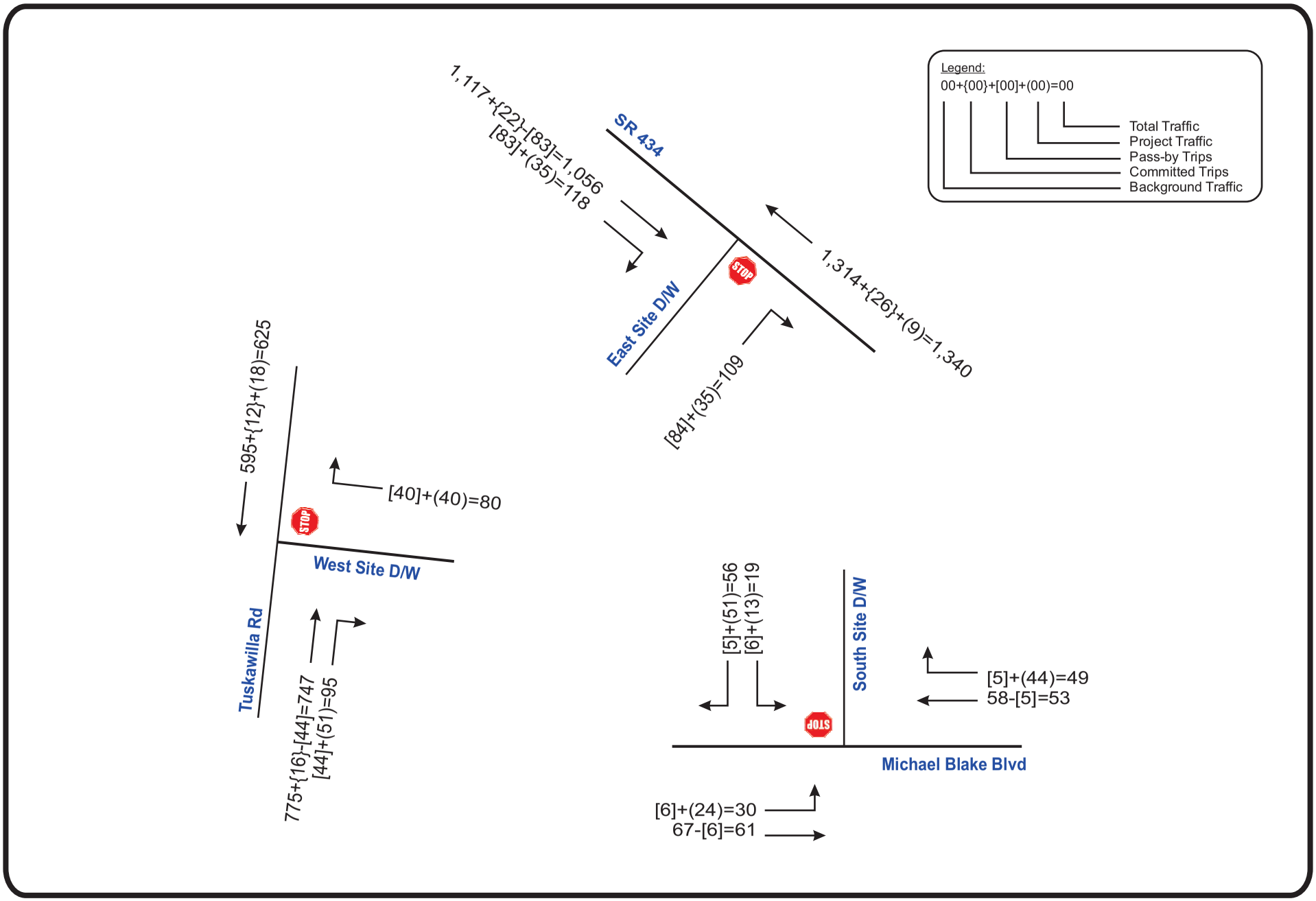
The peak hour traffic conditions at the study intersections were estimated by adding the project trips to existing traffic and committed trips. Daily committed trips were converted to peak hour directional trips using an A.M. and P.M. K=0.091 factors, and an A.M. and P.M. D=0.568 factor. These trips were assigned to the intersections based upon the existing traffic patterns at the intersections. The projected A.M. peak hour traffic volumes are shown in **Figures 6 and 7** and the projected P.M. peak hour traffic volumes are shown in **Figures 8 and 9**.



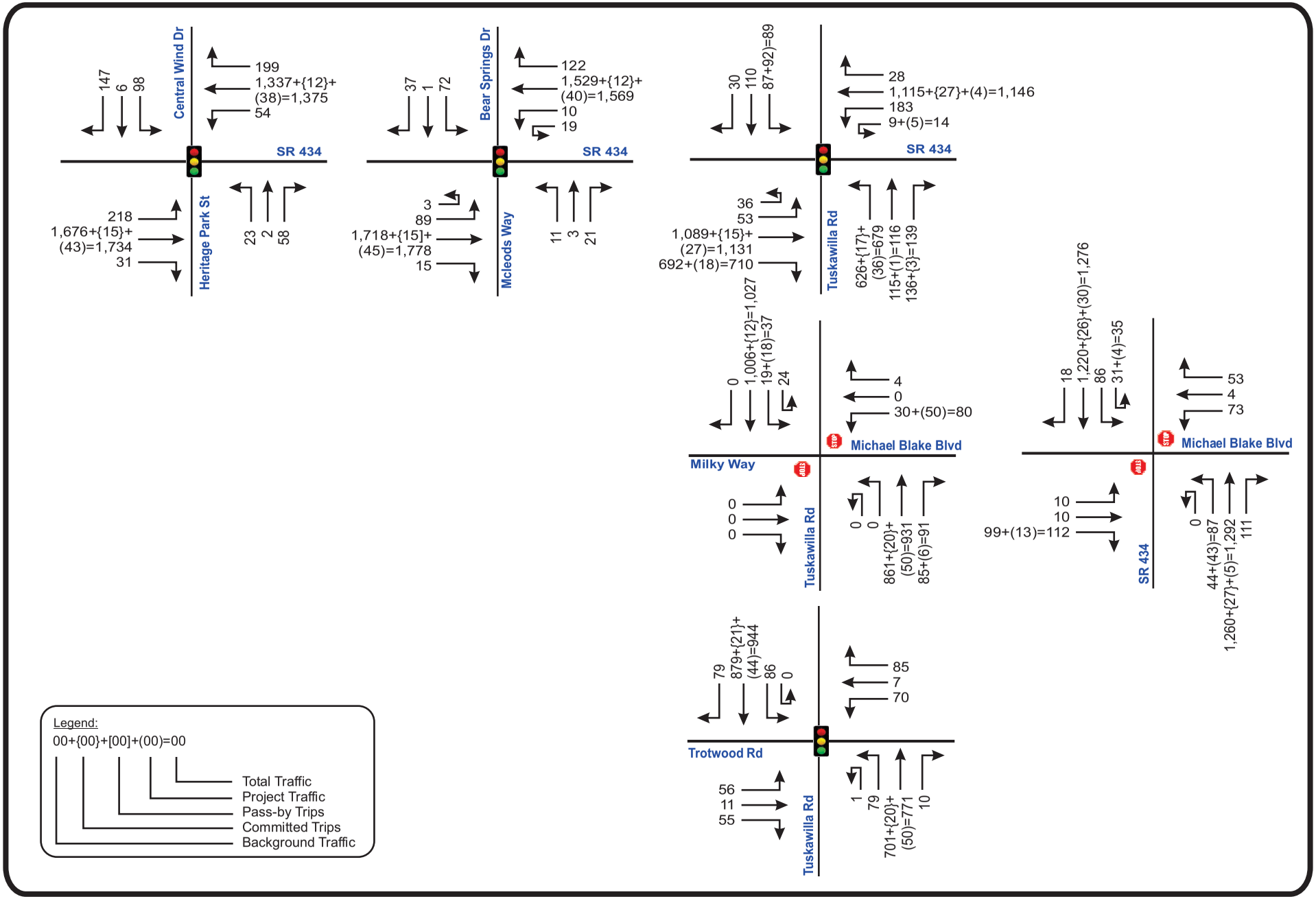
Ace Hardware - Winter Springs
Project № 5824
Figure 6
Page 12

Projected A.M. Peak Hour Turning Movements

N
NTS

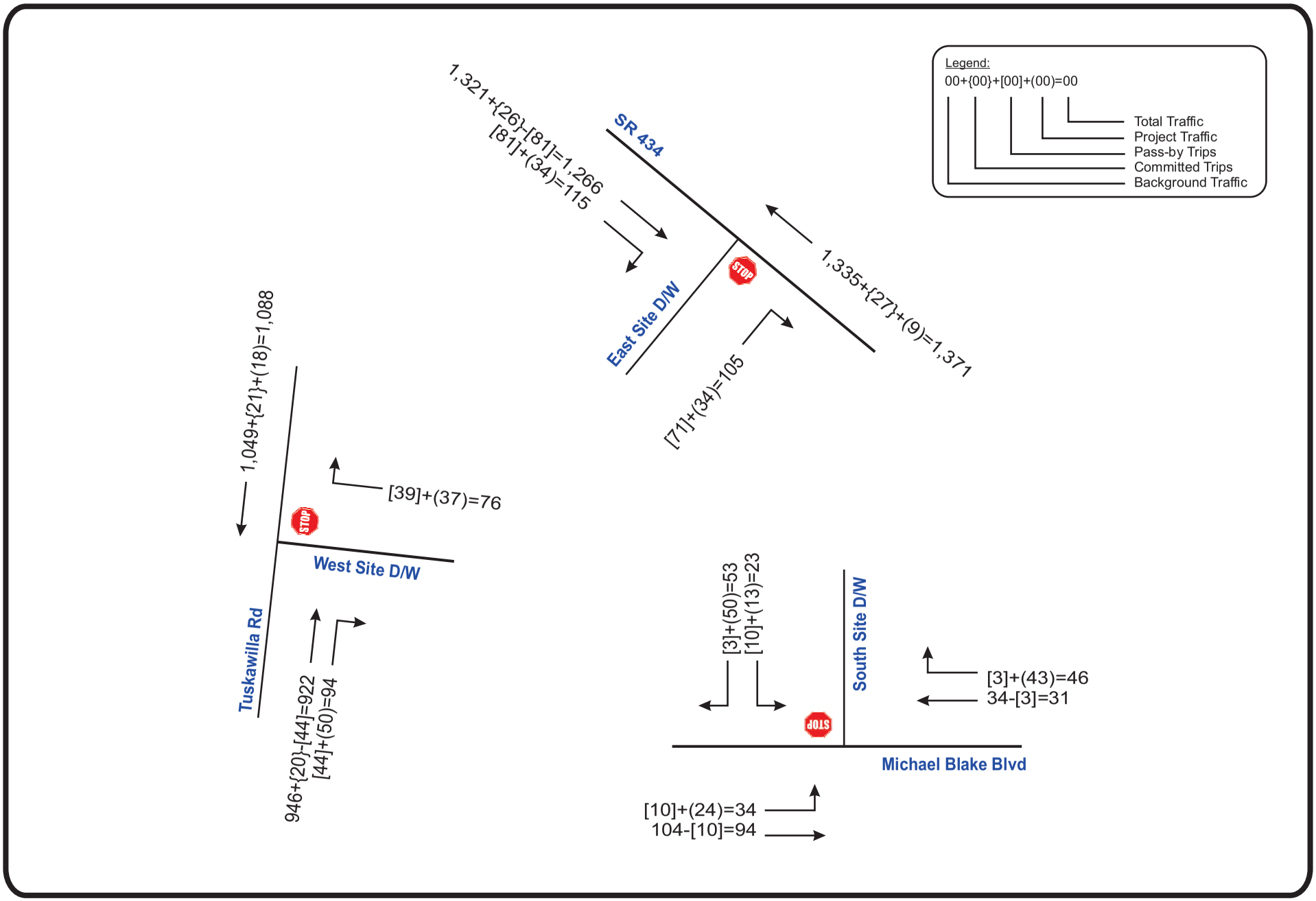


Projected A.M. Peak Hour Turning Movements



Projected P.M. Peak Hour Turning Movements

N
NTS



Ace Hardware - Winter Springs
Project № 5824
Figure 7
Page 15

Projected P.M. Peak Hour Turning Movements

N
NTS

701

An analysis of projected peak hour traffic conditions was performed using the Highway Capacity software and procedures of the *Highway Capacity Manual* for intersections. The analysis was accomplished utilizing existing intersection geometry and traffic controls. The results of the capacity analysis as summarized in **Table 5** indicate satisfactory traffic operating conditions (LOS "E" or better) for the study intersections and project driveways except for the following:

- The southbound movement at the intersection of SR 434 and Tuskawilla Road during the P.M. peak hour. Similar to existing conditions, this movement is failing, however the volume to capacity (v/c) ratio is less than one, which indicates that there is capacity.

- The westbound and eastbound movements at the intersection of SR 434 & Michael Blake Boulevard during the A.M. and P.M. peak hours. Similar to existing conditions, the westbound movement is failing however, the project is not contributing any trips to this movement. The eastbound movement is failing, however the volume to capacity (v/c) ratio is less than one, which indicates that there is capacity.

- The southbound movement at the intersection of SR 434 and Central Winds Drive / Heritage Park Street. The southbound movement is failing however, the project is not contributing any trips to this movement.

The HCS capacity worksheets are included in **Appendix E.**

Table 5
Projected Intersection LOS Analysis

Intersection	Time Period	Control	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Tuskawilla Rd & Trotwood Blvd	A.M.	Signal	38.8	D	52.3	D	16.5	B	15.5	B	21.6	C
	P.M.		43.9	D	47.2	D	13.7	B	15.3	B	18.5	B
Tuskawilla Rd & Michael Blake Blvd	A.M.	Stop	10.7	B	32.1	D	0.0	A	0.5	A	--	--
	P.M.		12.2	B	47.2	E	0.0	A	0.8	A	--	--
SR 434 & Tuskawilla Rd	A.M.	Signal	36.8	D	42.7	D	56.9	E	75.7	E	45.0	D
	P.M.		48.4	D	53.3	D	72.8	E	99.4	F	57.6	E
SR 434 & Michael Blake Blvd	A.M.	Stop	18.0	C	328.0	F	0.7	A	1.1	A	--	--
	P.M.		124.8	F	629.3	F	0.8	A	1.9	A	--	--
SR 434 & Bear Springs Dr/McLeod Way	A.M.	Signal	9.5	A	14.3	B	64.8	E	70.0	E	14.9	B
	P.M.		11.9	B	13.4	B	65.3	E	69.9	E	14.8	B
SR 434 & Central Winds Dr/Heritage Park St	A.M.	Signal	32.0	C	59.8	E	70.8	E	77.9	E	50.7	D
	P.M.		27.1	C	33.9	C	75.7	E	81.3	F	34.2	C
Michael Blake Blvd & South Site Driveway	A.M.	Stop	2.6	A	--	--	--	--	9.3	A	--	--
	P.M.		2.1	A	--	--	--	--	9.3	A	--	--
Tuskawilla Rd & West Site Driveway	A.M.	Stop	--	--	12.6	B	--	--	--	--	--	--
	P.M.		--	--	13.8	B	--	--	--	--	--	--
SR 434 and East Site Driveway	A.M.	Stop	16.7	C	--	--	--	--	--	--	--	--
	P.M.		19.7	C	--	--	--	--	--	--	--	--

CONCLUSIONS

This analysis was undertaken in order to assess the traffic impact of a proposed Ace Hardware Development located in the northeast corner of the intersection of Tuskawilla Road & Michael Blake Boulevard in the City of Winter Springs, Seminole County. The following is a summary of the results:

- The proposed development will generate 3,354 net new daily trips, of which 293 will occur during the A.M. peak hour and 285 will occur during the P.M. peak hour. These vehicles were distributed and assigned to the project driveways and area roadways within the development's one-mile impact area.

- The impacted roadways segments were analyzed utilizing projected traffic volumes consisting of existing traffic volumes and project trips plus committed trips provided by Seminole County. The roadway capacity analysis revealed that the impacted roadway segments currently operate satisfactorily within their adopted LOS standards. Similar to existing conditions, the impact roadway segments will continue to operate satisfactorily within their adopted LOS standard with the project trips added during the A.M. and P.M. peak hours.

- The intersection capacity analysis conducted in accordance with the procedures of the HCM revealed that the existing study intersections currently operate at satisfactory Levels of Service during the A.M. and P.M. peak hours except for the southbound movement at the intersection of SR 434 and Tuskawilla Road during the P.M. peak hour and the westbound movement at the intersection of SR 434 & Michael Blake Boulevard during the A.M. and P.M. peak hours. Similar to existing conditions, the study intersections will continue to operate at satisfactory Levels of Service with the project trips added during the A.M. and P.M. peak hours except for the southbound movement at the intersection of SR 434 and Tuskawilla Road during the P.M. peak hour,the westbound movement at the intersection of SR 434 & Michael Blake Boulevard during the A.M. and P.M. peak hours, and the southbound movement at the intersection of SR 434 and Central Winds Drive / Heritage Park Street. As reference, the project is contributing no trips to several of these movement and the other movements show that the volume to capacity (v/c) ratio is less than one, which indicates that there is capacity.

APPENDICES

APPENDIX A

Study Methodology

Jay Davoll

From: Rita Merhi
Sent: Tuesday, August 29, 2023 10:29 AM
To: Jay Davoll
Subject: FW: TPD# 5824 Winter Springs Ace Hardware and Future Development

Regards,

Rita Merhi

Traffic Planning and Design, Inc.
535 Versailles Drive
Maitland, Florida 32751
407.628.9955
www.tpdtraffic.com

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Traffic Planning and Design, Inc. (TPD) is a premiere transportation planning and traffic engineering company that has been extending consultancy services to its ...

From: Nick Tafelsky <ntafelsky@winterspringsfl.org>
Sent: Friday, August 25, 2023 1:13 PM
To: Turgut Dervish <turgut@tpdtraffic.com>
Cc: Rita Merhi <rita@tpdtraffic.com>; Planning <planning@winterspringsfl.org>
Subject: RE: TPD# 5824 Winter Springs Ace Hardware and Future Development

The City does not review methodologies before submittal. Once a project is submitted along with the traffic study, we will advise if there are any concerns about the methodology used.

Nick Tafelsky, AICP
Senior City Planner
P: (407) 327-5968 **F:** (407) 327-4753

A: 1126 East State Road 434
Winter Springs, Florida 32708

Jay Davoll

From: Perez, Arturo <aperez07@seminolecountyfl.gov>
Sent: Tuesday, August 29, 2023 5:31 PM
To: Rita Merhi
Cc: Turgut Dervish; Jay Davoll; Wharton, William
Subject: RE: TPD# 5824 Winter Springs Ace Hardware and Future Development

Rita,

The requested changes have been satisfactorily made. The methodology to prepare the TIS is approved.

Stay safe.

Regards,

Arturo

Arturo J. Perez, MSCE, P.E. (FL, GA, CO)
Professional Engineer - Transportation
Public Works Department | Engineering Division
Phone: 407-665-5716
100 East First Street
Sanford, FL 32771
aperez07@seminolecountyfl.gov

From: Rita Merhi <rita@tpdtraffic.com>
Sent: Tuesday, August 29, 2023 10:45 AM
To: Perez, Arturo <aperez07@seminolecountyfl.gov>
Cc: Turgut Dervish <turgut@tpdtraffic.com>; Jay Davoll <jay@tpdtraffic.com>
Subject: TPD# 5824 Winter Springs Ace Hardware and Future Development

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Good morning Arturo,

As you can see from the emails below, the City of Winter Springs is not going to review our proposed methodology.
Attached please find the response to methodology comments and the revised methodology for Ace Hardware.
We will be requesting turning movements count to be collected next week and we will proceed with the traffic study.

Thank you for your assistance.

Regards,

Rita Merhi

Jay Davoll

From: Perez, Arturo <aperez07@seminolecountyfl.gov>
Sent: Friday, August 25, 2023 12:01 PM
To: Rita Merhi; rgironella@winterspringsfl.org
Cc: Turgut Dervish; Jay Davoll; Benjamin Weinberg
Subject: RE: TPD# 5824 Winter Springs Ace Hardware and Future Development
Attachments: 5824 Ace Hardware Winter Springs TIA Methodology_AJP08252023.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Rita,

The methodology looks good, I just have a few minor edits. Go ahead and make those changes, anything else Rachel requires and resubmit.

Regards,

Arturo

Arturo J. Perez, MSCE, P.E. (FL, GA, CO)
Professional Engineer - Transportation
Public Works Department | Engineering Division
Phone: 407-665-5716
100 East First Street
Sanford, FL 32771
aperez07@seminolecountyfl.gov

From: Rita Merhi <rita@tpdtraffic.com>
Sent: Monday, August 21, 2023 11:06 AM
To: rgironella@winterspringsfl.org; Perez, Arturo <aperez07@seminolecountyfl.gov>
Cc: Turgut Dervish <turgut@tpdtraffic.com>; Jay Davoll <jay@tpdtraffic.com>; Benjamin Weinberg <ben@weinberg-eng.com>
Subject: TPD# 5824 Winter Springs Ace Hardware and Future Development

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Good morning Rachel & Arturo,

Attached please find our proposed study methodology for Ace Hardware Development in Winter Springs.
Please review and let us know if you have any questions or comments.

Thank you for your assistance.

Regards,

Rita Merhi

Traffic Planning and Design, Inc.
535 Versailles Drive
Maitland, Florida 32751
407.628.9955
www.tpdtraffic.com

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RESPONSE TO SEMINOLE COUNTY COMMENTS
ACE HARDWARE DEVELOPMENT

The following is our response to Seminole County comments regarding the TIA Methodology for Ace Hardware Development located in the northeast corner of the intersection of Tuskawilla Road and Michael Blake Boulevard. The comments are listed first in **bold** followed by our responses.

Comment 1. Proposed Development, add the type of connection that will be utilized.

Response – The type of connection was added to the description. See the revised methodology.

Comment 2. Include the intersection of SR 434 and site access to the list of intersections.

Response – SR 434 and site access was added to the list of itersections. See revised methodology.

TPD No. 5824
August 29, 2023

Traffic Planning and Design, Inc.
535 Versailles Drive, Maitland, Florida 32751 ■ Phone (407) 628-9955 ■ Fax (407) 628-8850 ■ www.tpdtraffic.com

TO: Rachel Gironella, Civil Engineer
City of Winter Springs

To: Arturo J. Perez, MSCE, P.E.
Professional Engineer - Transportation
Seminole County Public Works Department – Engineering Division

FROM: Turgut Dervish, P.E.

DATE: August 29, 2023

RE: Traffic Impact Study Methodology - Revised
Ace Hardware Development – Winter Springs
TPD No. 5824

The following is an outline of the proposed methodology for the Traffic Impact Study for the proposed retail project in Winter Springs, Seminole County. The project site is located in the northeast corner of Tuskawilla Road and Michael Blake Boulevard. The project is anticipated to be completed by the end of 2025. **Figure 1** depicts the site location and the area roadways.

1. Proposed Development

The proposed development will consist of a 10,000 square foot Day Care facility, 23,586 square foot strip retail center with Ace Hardware as the anchor tenant, three fast food restaurants with drive through windows totaling 9,000 square feet and two stand-alone high-turnover (sit-down) restaurants totaling 9,500 square feet. Access to the site is proposed via a full access connection from Michael Blake Boulevard and right in / right out (RI/RO) connections from SR 434 and Tuskawilla Road. **Figure 2** depicts the conceptual site plan and the access configuration.

2. Trip Generation

Trip generation data from the 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual* will be used for the trip generation estimation of the development. **Table 1** provides a summary of the trip generation calculation for the proposed retail development. ITE Trip Generation sheets are attached. As shown in the table, the proposed development is estimated to generate 3,354 net new daily trips, of which 293 will occur during the A.M. peak hour and 285 during the P.M. peak hour.

3. Trip Distribution

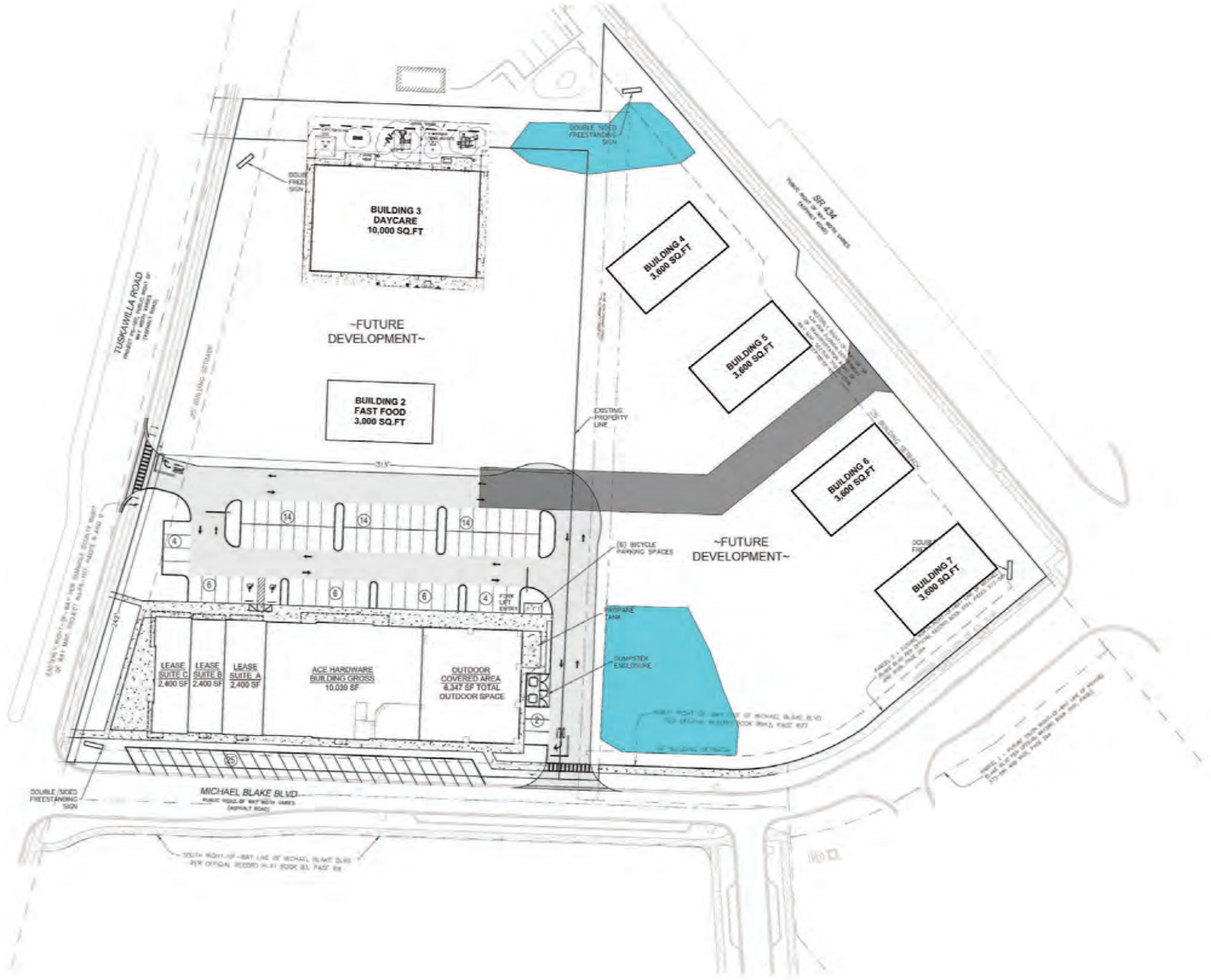
A distribution pattern will be determined with the use of the 2030 Central Florida Regional Planning Model (CFRPM v7). The model was revised to add a traffic zone representing the project and its proposed development. Subsequently, the model was run with a Select Zone Analysis which produced a trip distribution for the project trips. **Figure 3** depicts the trip distribution on the area roadways. The model distribution plot is provided in the Attachment.



Ace Hardware - Winter Springs
Project № 5824
Figure 1

Site Location

N
NTS



Ace Hardware - Winter Springs
Project № 5824
Figure 2

Concept Plan

N
NTS



Ace Hardware - Winter Springs
Project № 5824
Figure 3

Trip Distribution

N
NTS

Table 1
Trip Generation Summary

ITE Code	Land Use	Size (KSF)[1]	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate[2]	Trips	Rate[2]	Enter	Exit	Total	Rate[2]	Enter	Exit	Total
565	Day Care	10.00	4.09	41	0.78	4	4	8	0.79	4	4	8
822	Strip Retail Plaza (<40K)	23.586	51.94	1,225	2.36	33	23	56	6.59	78	77	155
934	Fast Food w/Drive Through (3 sites)	9.00	467.48	4,207	44.61	205	196	401	33.03	155	142	297
932	High Turnover (Sit-Down) Restaurant (2 stand-alone sites)	9.50	107.20	1,018	9.57	50	41	91	9.05	52	34	86
Sub-Total				6,491	---	292	264	556	---	289	257	546
Retail Pass-by (40%)[2]				490	---	13	9	22	---	31	31	62
Fast Food Pass-by (AM=50%, PM=55%, Daily=52.5%)[2]				2,209	---	103	98	201	---	85	78	163
High Turnover Restaurant Pass-by (43%)[2]				438	---	22	18	40	---	22	14	36
Total Net New Trips				**3,354**	**---**	**154**	**139**	**293**	**---**	**151**	**134**	**285**

[1]KSF=1,000 sq. ft. [2]Equation utilized when R^2 >0.75 [3]Pass-by rates obtained from ITE's Trip Generation Manual, 11th Edition, LUC 821

4. Impact Area

As per Seminole County TIA guidelines, major roadways within a one-mile radius and intersections within a quarter mile radius of the site will be included in the analysis.

The concurrency roadways within one mile to be included in the area analysis are:

- Tuskawilla Road
  - SR 434 to Trotwood Blvd (Segment 326)
  - Trotwood Blvd to Winer Springs Blvd (Segment 327)
- SR 434
  - Springs Avenue to Tuskawilla Road (Segment 296)
  - Tuskawilla Road to SR 419 (Segment 297)

The intersections to be included in the area analysis are:

- Tuskawilla Road and Trotwood Boulevard
- Tuskawilla Road and Michael Blake Boulevard/Milky Way
- Tuskawilla Road and SR 434
- SR 434 and Michael Blake Boulevard
- SR 434 and Bear Springs Drive/McLeod's Way
- SR 434 and Central Winds Drive/Heritage Park Street
- SR 434 and Site access connection (RI/RO)
- Tuskawilla Road and Site access connection (RI/RO)
- Michael Blake Boulevard and Site access connection (full access)

5. Traffic Impact Assessment

a) Roadways

- Obtain background traffic volumes on the study roadway segments from Seminole County for use in the traffic analysis.
- Determine background traffic by combining existing traffic counts with committed trips to be provided by the City of Winter Spring and/or Seminole County.
- Combine project traffic with background traffic to obtain total traffic volumes.
- Perform daily roadway capacity analysis utilizing the City of Winter Springs and Seminole County standards.

Intersections

- Conduct intersection counts during the A.M./P.M. peak hour period at the study intersections.
- Determine background traffic by combining existing traffic counts with committed trips to be provided by Seminole County.
- Combine project traffic with background traffic to obtain total traffic.
- Perform intersection capacity analysis utilizing the HCM/HCS operational analysis for the A.M./P.M. peak hour.

7. Traffic Report

Prepare traffic report summarizing study procedures, analyses and recommendations.

If you have any questions or concerns, please contact us at (407) 628-9955.

Attachments

Day Care Center
(565)

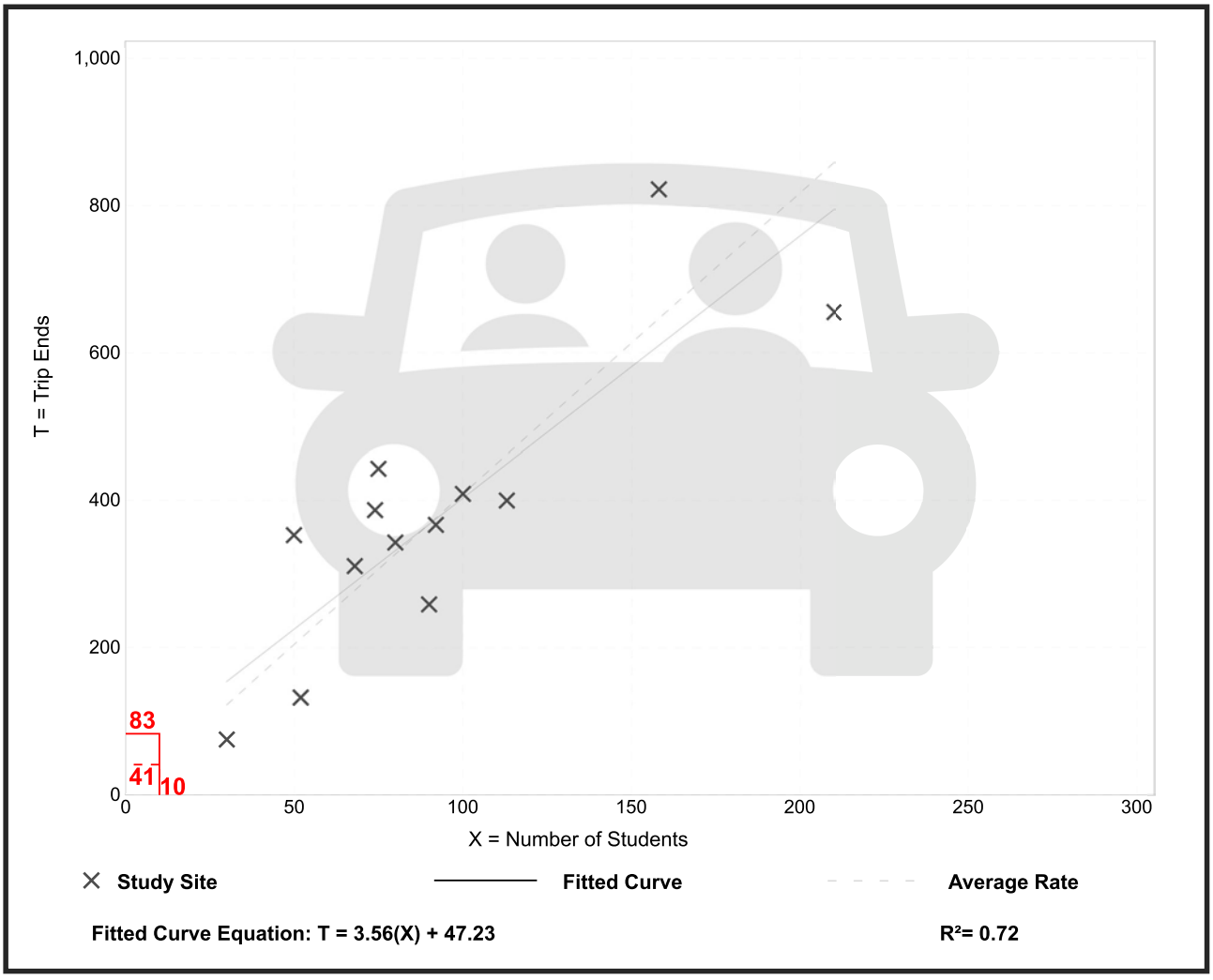
Vehicle Trip Ends vs: **Students**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 14
Avg. Num. of Students: 89
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
4.09	2.50 - 7.06	1.21

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

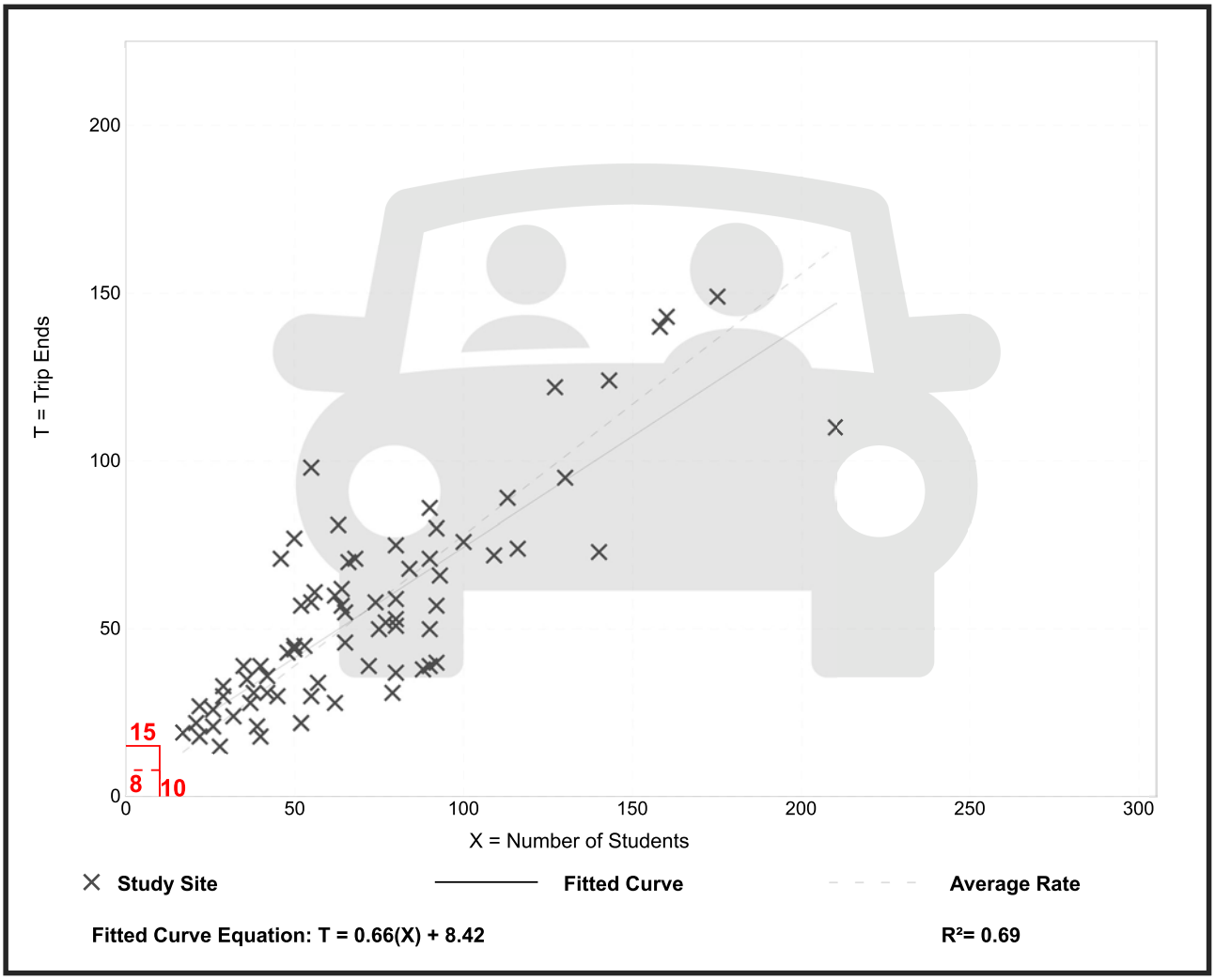
Day Care Center
(565)

Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 75
Avg. Num. of Students: 71
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.78	0.39 - 1.78	0.25

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

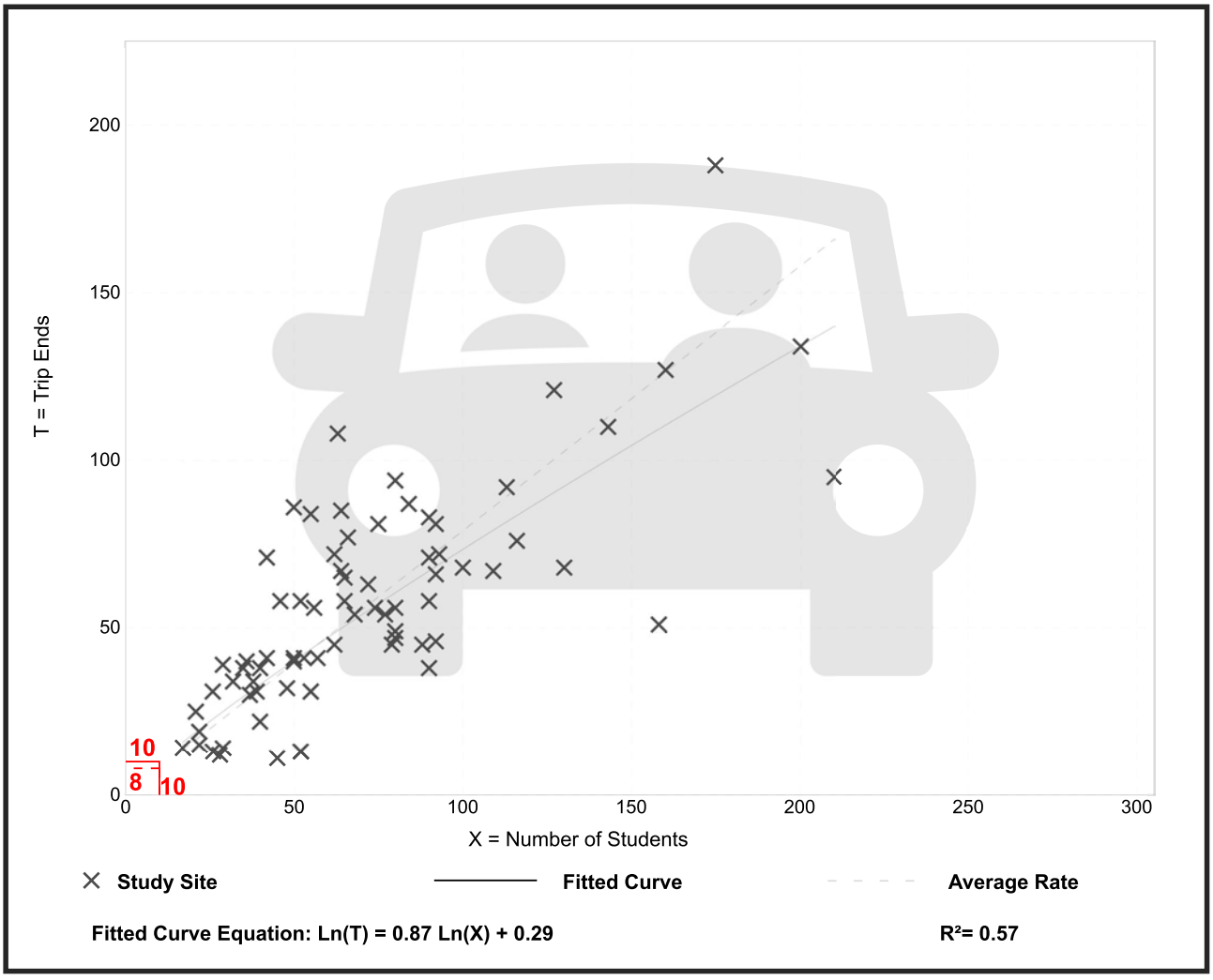
Day Care Center
(565)

Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 75
Avg. Num. of Students: 72
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.79	0.24 - 1.72	0.30

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Strip Retail Plaza (<40k)
(822)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday**

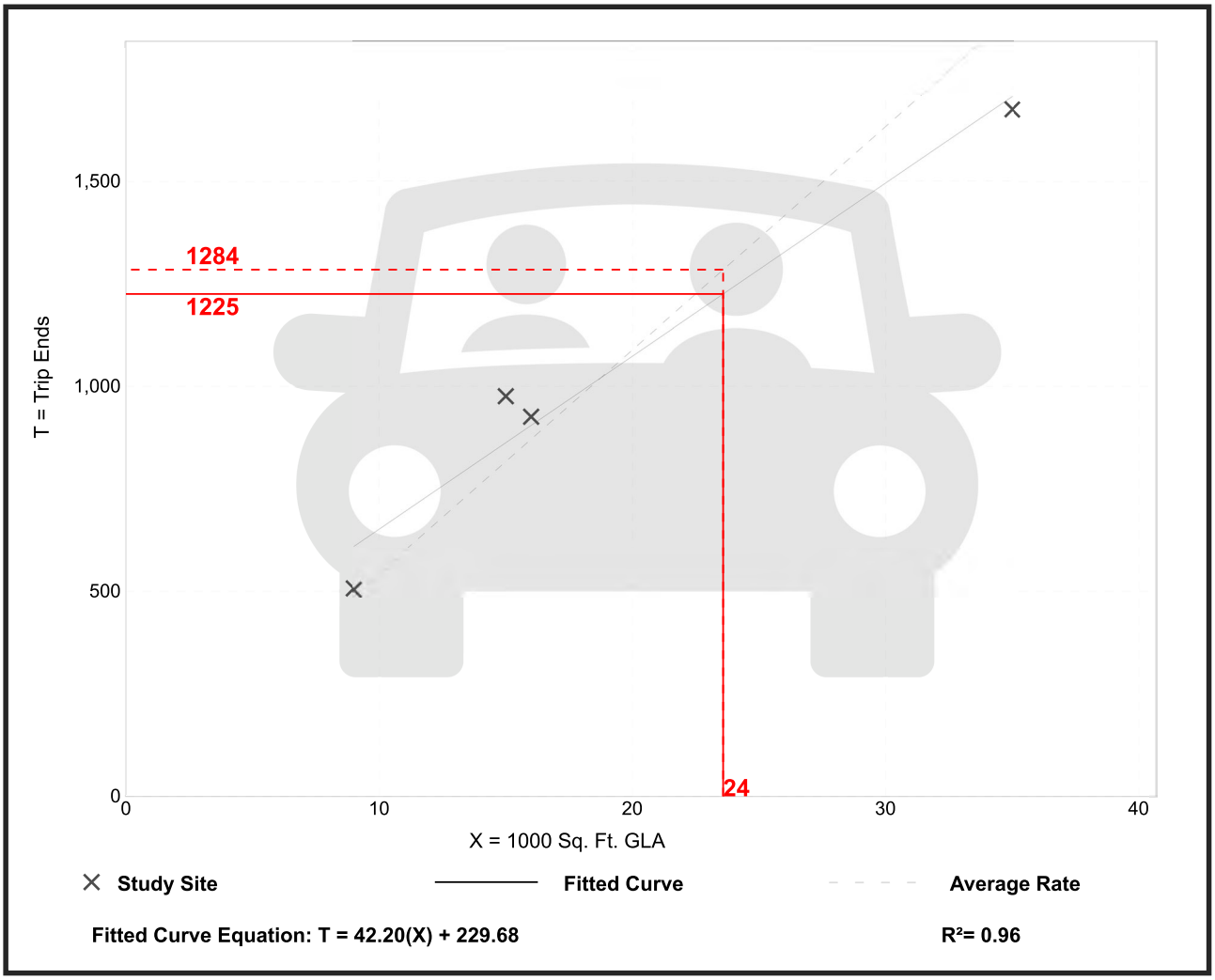
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. 1000 Sq. Ft. GLA: 19
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
54.45	47.86 - 65.07	7.81

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: T = 42.20(X) + 229.68

R^2= 0.96

Trip Gen Manual, 11th Edition • Institute of Transportation Engineers

Strip Retail Plaza (<40k)
(822)

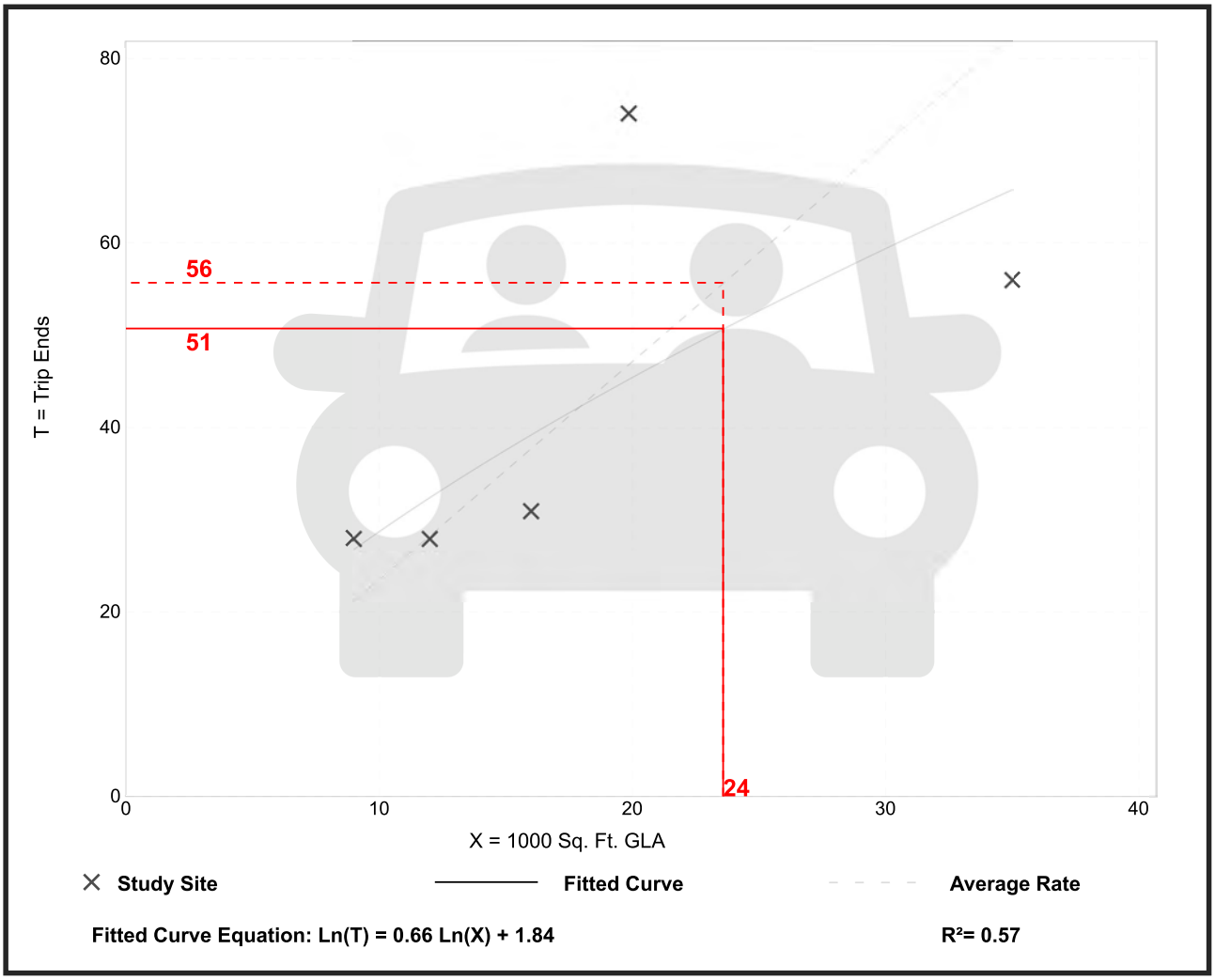
Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. 1000 Sq. Ft. GLA: 18
Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

Data Plot and Equation

Caution – Small Sample Size



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

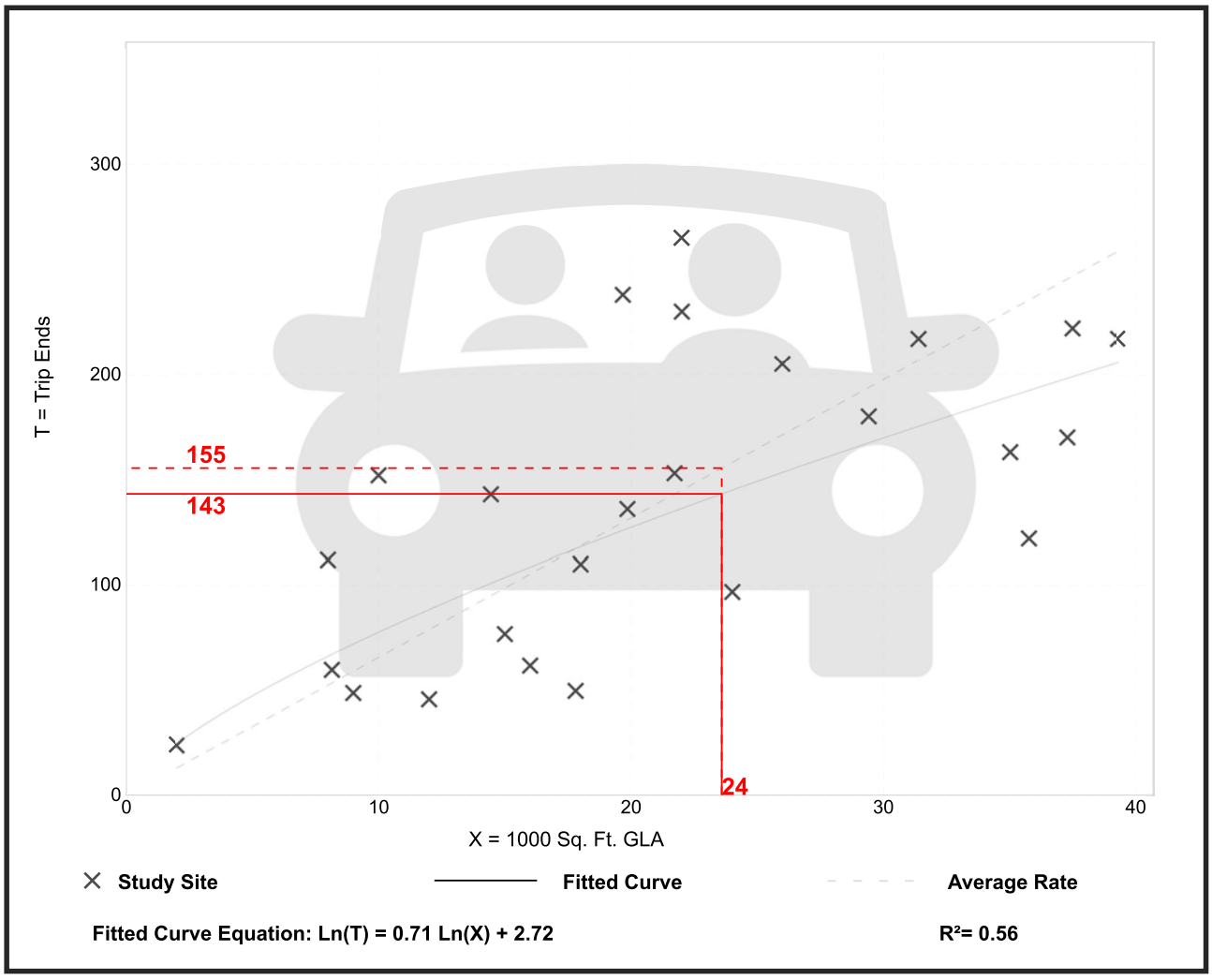
Strip Retail Plaza (<40k)
(822)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 25
Avg. 1000 Sq. Ft. GLA: 21
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

Data Plot and Equation



Trip Gen Manual, 11th Edition • Institute of Transportation Engineers

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	821
Land Use	Shopping Plaza (40 - 150k)
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	15
Average Pass-By Rate	40%

Pass-By Characteristics for Individual Sites

GLA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
45	Florida	1992	844	56	24	20	44	—	30
50	Florida	1992	555	41	41	18	59	—	30
52	Florida	1995	665	42	33	25	58	—	30
53	Florida	1993	162	59	—	—	41	—	30
57.23	Kentucky	1993	247	31	53	16	69	2659	34
60	Florida	1995	1583	40	38	22	60	—	30
69.4	Kentucky	1993	109	25	42	33	75	1559	34
77	Florida	1992	365	46	—	—	54	—	30
78	Florida	1991	702	55	23	22	45	—	30
82	Florida	1992	336	34	—	—	66	—	30
92.857	Kentucky	1993	133	22	50	28	78	3555	34
100.888	Kentucky	1993	281	28	50	22	72	2111	34
121.54	Kentucky	1993	210	53	30	17	47	2636	34
144	New Jersey	1990	176	32	44	24	68	—	24
146.8	Kentucky	1993	—	36	39	25	64	—	34

Fast-Food Restaurant with Drive-Through Window
(934)

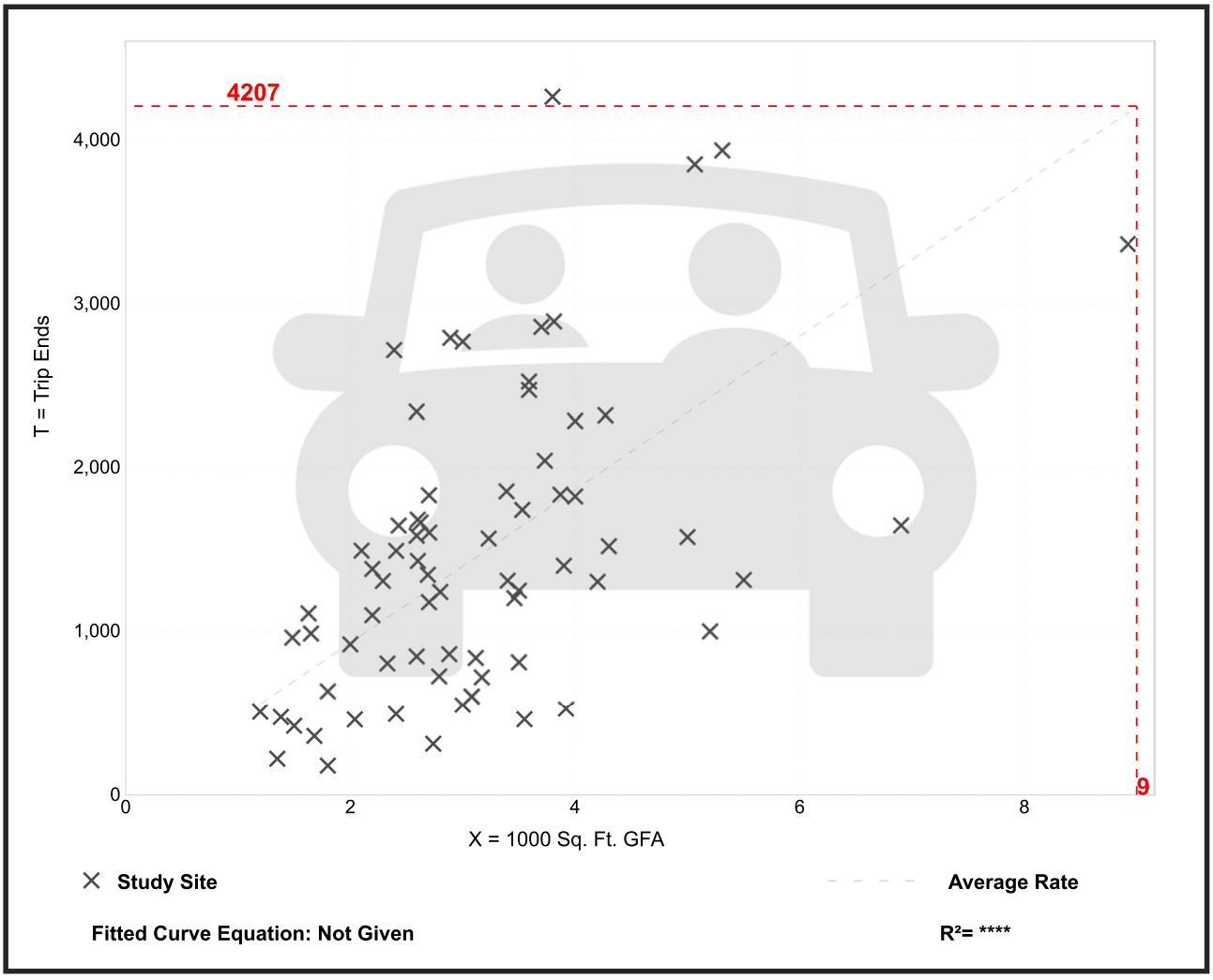
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 71
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

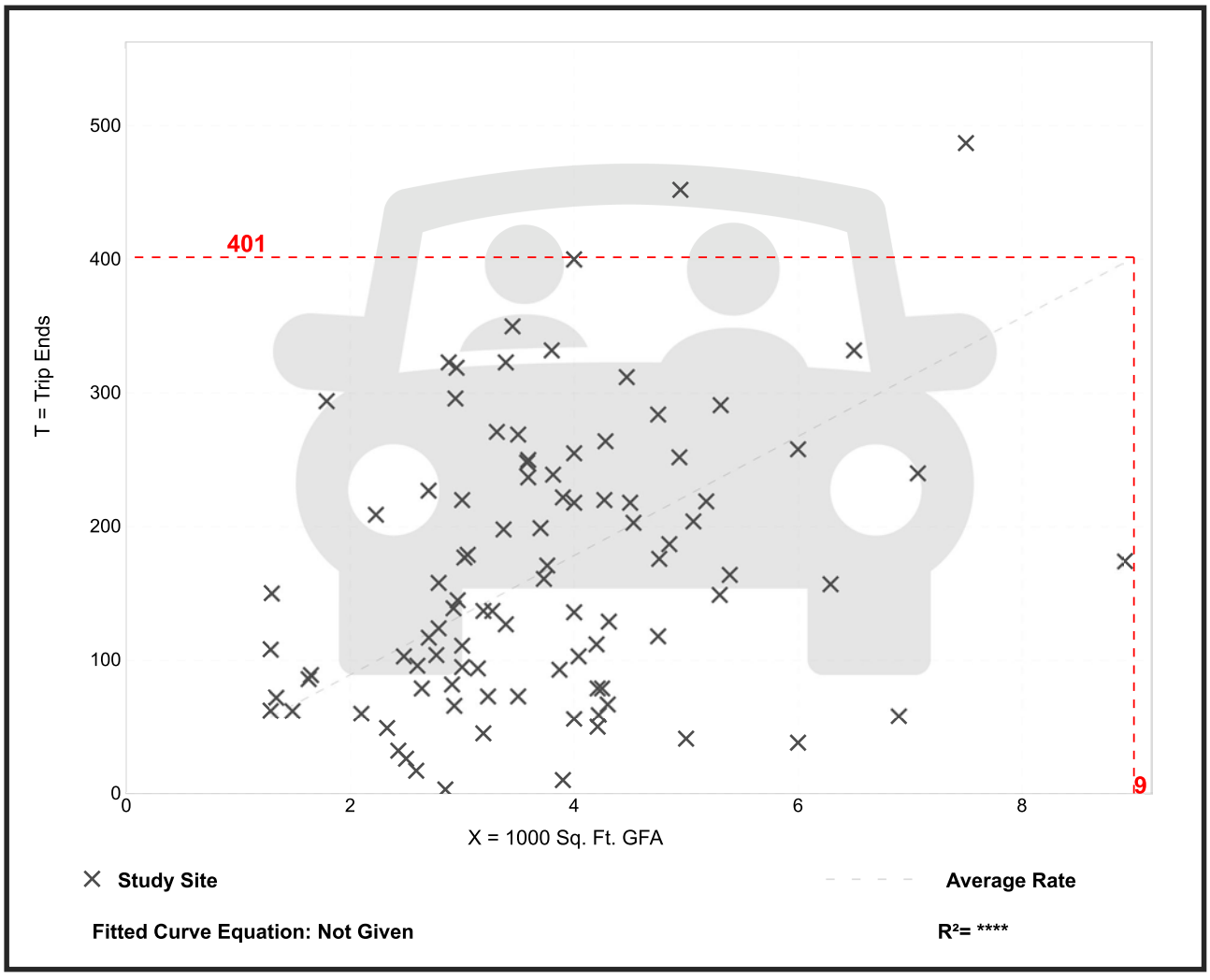
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	96
Avg. 1000 Sq. Ft. GFA:	4
Directional Distribution:	51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

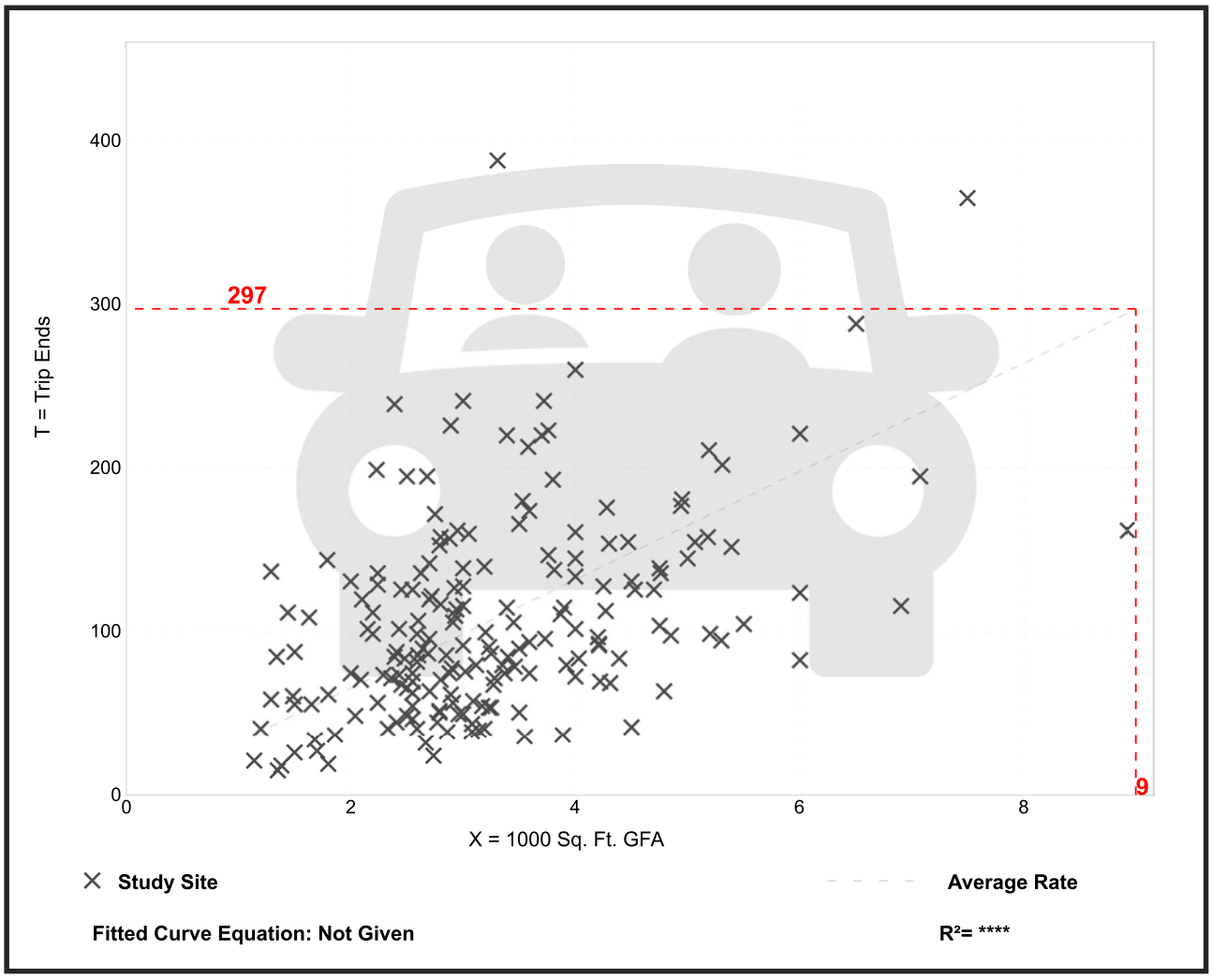
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 190
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday AM Peak Period
# Data Sites	5
Average Pass-By Rate	50%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	11
Average Pass-By Rate	55%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

High-Turnover (Sit-Down) Restaurant
(932)

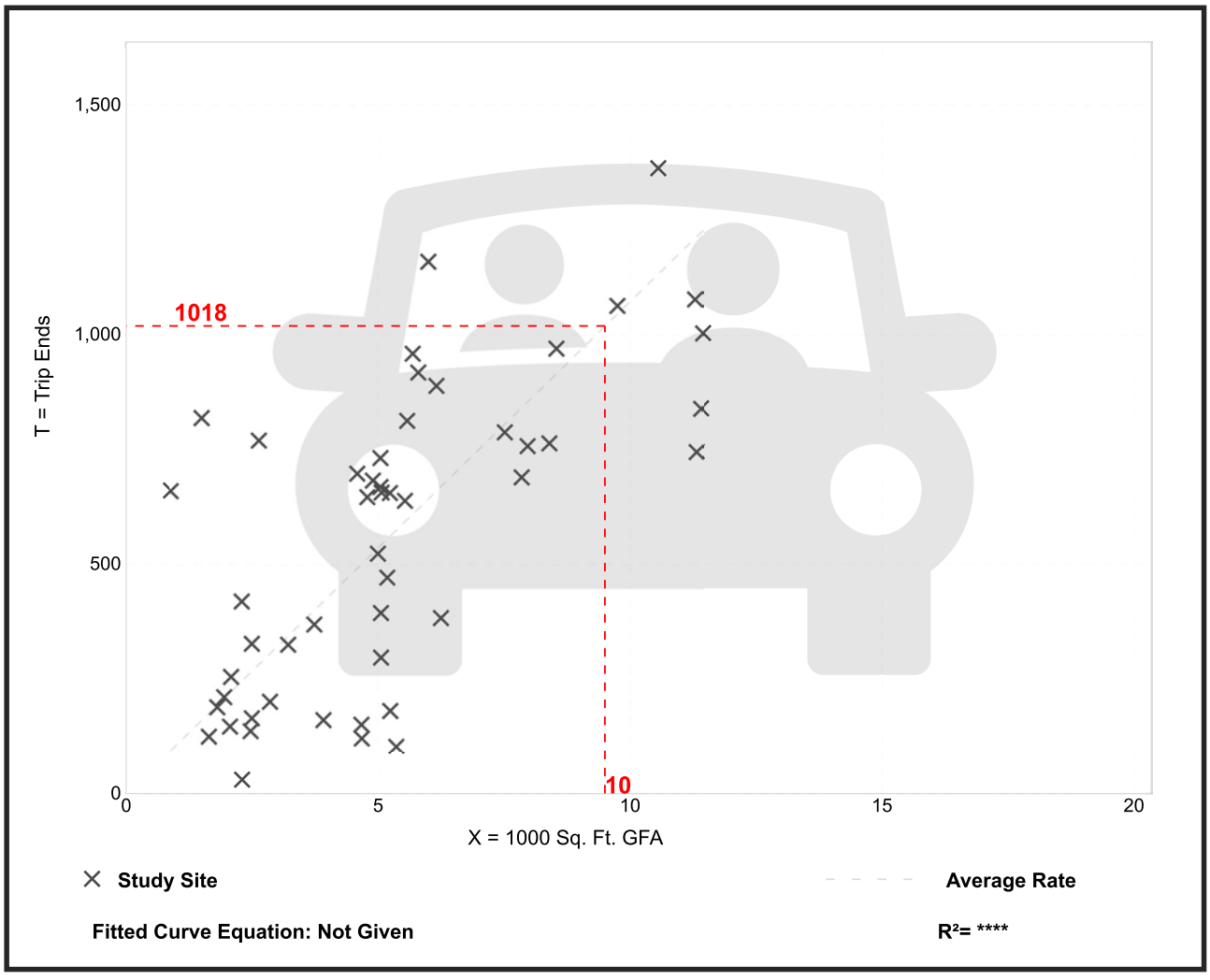
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 50
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
107.20	13.04 - 742.41	66.72

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

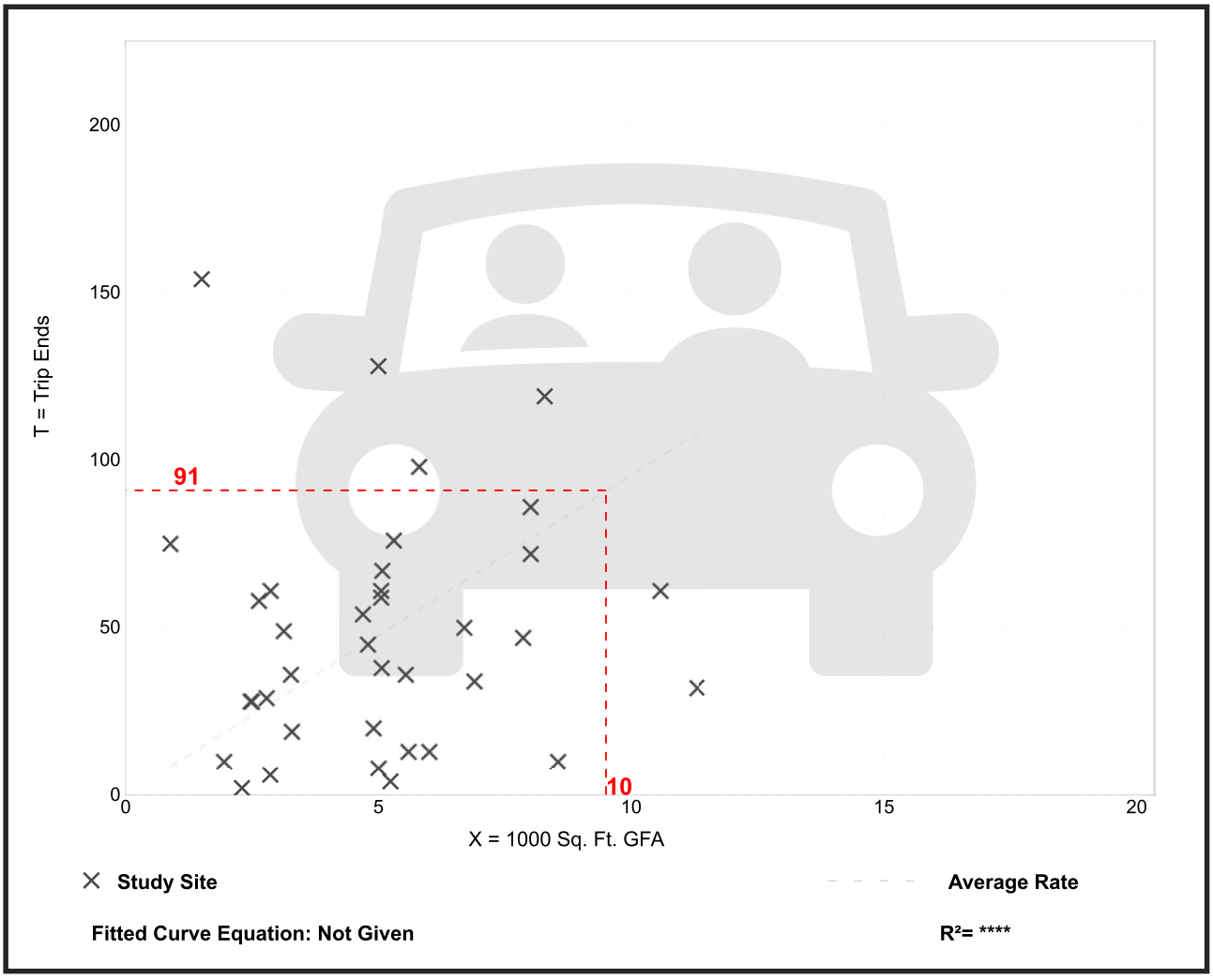
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 37
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.57	0.76 - 102.39	11.61

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

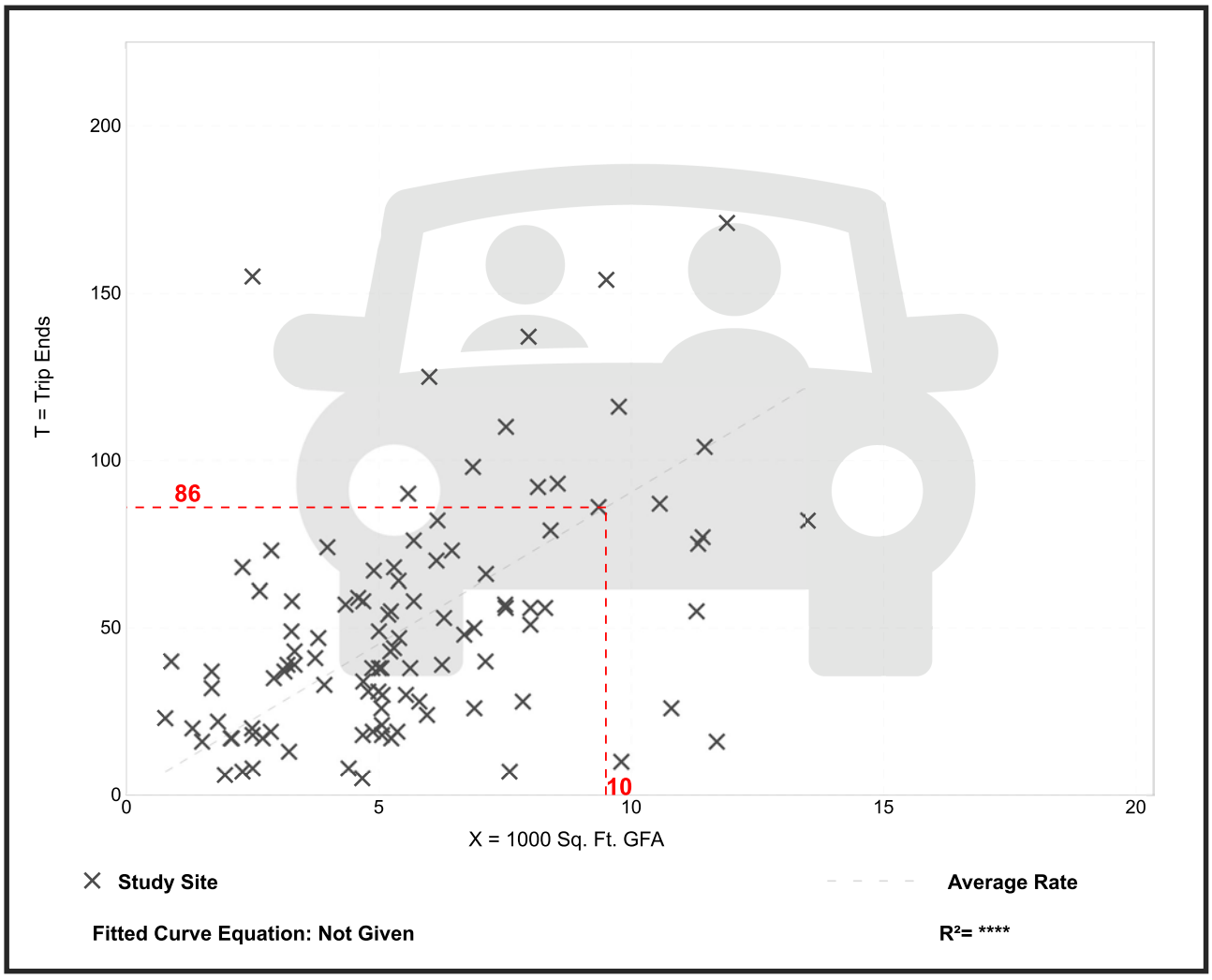
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 104
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.05	0.92 - 62.00	6.18

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

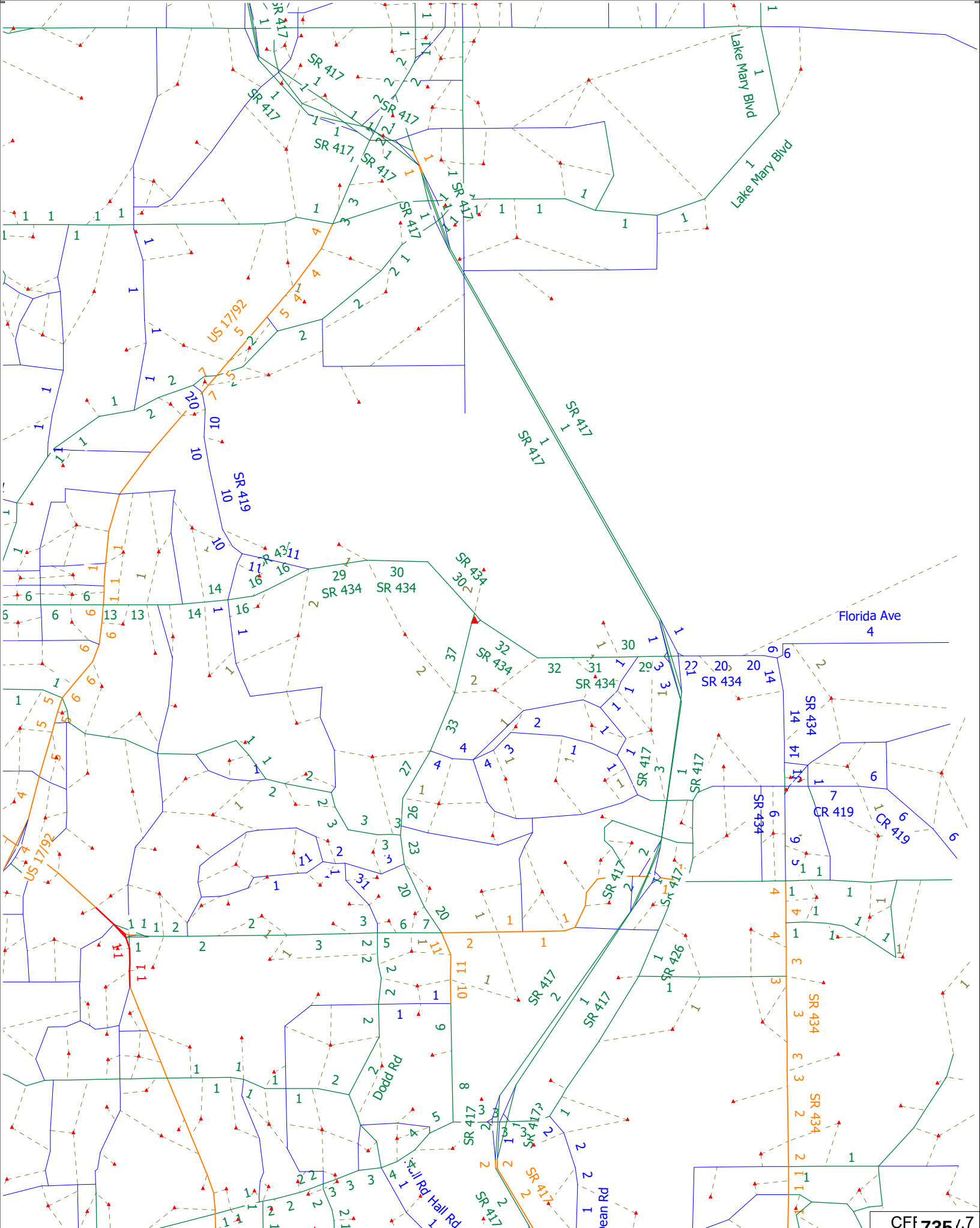
Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	932
Land Use	High-Turnover (Sit-Down) Restaurant
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	12
Average Pass-By Rate	43%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
2.9	Kentucky	1993	41	37	27	36	63	3935	2
3.1	Kentucky	1993	21	38	29	33	62	2580	2
4.6	Florida	1992	276	63	—	—	37	—	30
5	Florida	1992	65	58	—	—	42	—	30
5.3	Kentucky	1993	24	50	37	13	50	1615	2
5.7	Florida	1994	308	57	—	—	43	—	30
5.8	Florida	1992	150	32	—	—	68	—	30
6.2	Florida	1995	521	46	43	11	54	—	30
7.1	Indiana	1993	—	23	23	54	77	1565	2
8	Florida	1995	664	40	39	21	60	—	30
11	Florida	1996	267	38	43	19	62	—	30
12	Florida	1996	317	29	51	20	71	—	30



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APPENDIX B

Traffic Data and Roadway Concurrency Information

Summary of Roadway Concurrency Information

Traffic Counter ID	Roadway Name	From	To
			Net Available Capacity 15958
325	TRIPLET LAKE	US 17-92	N. Triplet Lake Dr
			Current Traffic Count 2483 Roadway Link Capacity 19360 Committed Trips 0 Net Available Capacity 16877
326	TUSKAWILLA RD	SR 434	Trotwood Blvd
			Current Traffic Count 21241 Roadway Link Capacity 42560 Committed Trips 0 Net Available Capacity 21319
327	TUSKAWILLA RD	Trotwood Blvd	Winter Springs Blvd
			Current Traffic Count 20748 Roadway Link Capacity 42560 Committed Trips 8 Net Available Capacity 21804

This information has been provided by Tony Nelson, P.E. at Seminole County Engineering and is current information as of the above referenced date.

Summary of Roadway Concurrency Information

Traffic Counter ID	Roadway Name	From	To
			Net Available Capacity -1617
294	SR 434	DeLeon St	E-W Expressway
			Current Traffic Count 23955 Roadway Link Capacity 18270 Committed Trips 293 Net Available Capacity -5978
295	SR 434	E-W Expressway	Springs Ave
			Current Traffic Count 27563 Roadway Link Capacity 48000 Committed Trips 0 Net Available Capacity 20437
296	SR 434	Springs Ave	Tuskawilla Rd
			Current Traffic Count 27610 Roadway Link Capacity 48000 Committed Trips 293 Net Available Capacity 20097

This information has been provided by Tony Nelson, P.E. at Seminole County Engineering and is current information as of the above referenced date.

Summary of Roadway Concurrency Information

Traffic Counter ID	Roadway Name	From	To
297	SR 434	Tuskawilla Rd	SR 419
		Current Traffic Count	36344
		Roadway Link Capacity	48000
		Committed Trips	0
		Net Available Capacity	11656
298	SR 434	SR 419	Belle Ave
		Current Traffic Count	24671
		Roadway Link Capacity	48000
		Committed Trips	0
		Net Available Capacity	23329
299	SR 434	Belle Ave	US 17-92
		Current Traffic Count	33165
		Roadway Link Capacity	48000
		Committed Trips	0
		Net Available Capacity	14835
300	SR 434	US 17-92	CR 427
		Current Traffic Count	23146

This information has been provided by Tony Nelson, P.E. at Seminole County Engineering and is current information as of the above referenced date.

APPENDIX C

Existing Intersection Counts, FDOT Seasonal Factors, Signal Timings

Prepared by National Data & Surveying Services

Tuskawilla Rd & SR 434/SR 419

Peak Hour Turning Movement Count

ID: 23-130259-001
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS		COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Tuskawilla Rd)

	Left	Thru	Right	U-Turn	Total	
AM	28	41	44	0	88	AM
NOON	0	0	0	0	0	NOON
PM	29	106	84	0	189	PM

EASTBOUND (SR 434/SR 419)

	Left	Thru	Right	U-Turn	
AM	12	0	35	0	
NOON	26	0	51	0	
PM	859	0	1047	0	
	385	0	665	0	

AM	NOON	PM
1738	0	1738

WESTBOUND (SR 434/SR 419)

	Left	Thru	Right	U-Turn	
PM	27	0	6	0	
NOON	1072	0	1101	0	
AM	176	0	146	0	
	9	0	11	0	

PM	NOON	AM
1271	0	1075

NORTHBOUND (Tuskawilla Rd)

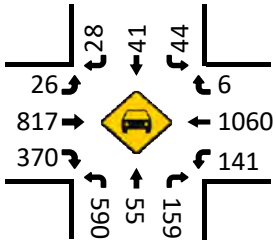
	Left	Thru	Right	U-Turn	Total	
PM	947	0	602	111	131	PM
NOON	0	0	0	0	0	NOON
AM	572	0	597	56	161	AM

CONTROL

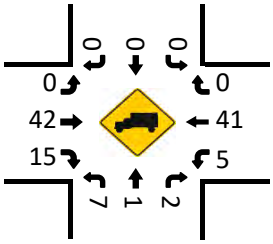
Signalized

TEV	3473	0	4145
	AM	NOON	PM
PHF	0.96		0.98

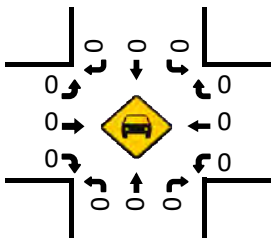
Cars (AM)



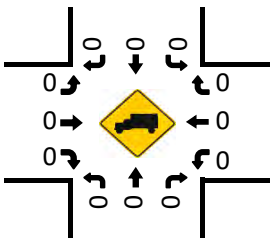
HT (AM)



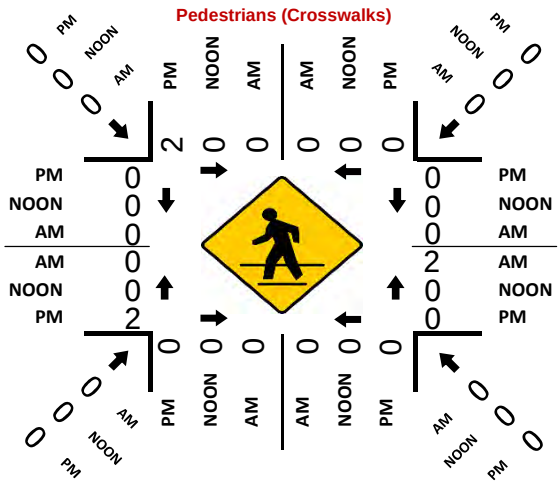
Cars (NOON)



HT (NOON)



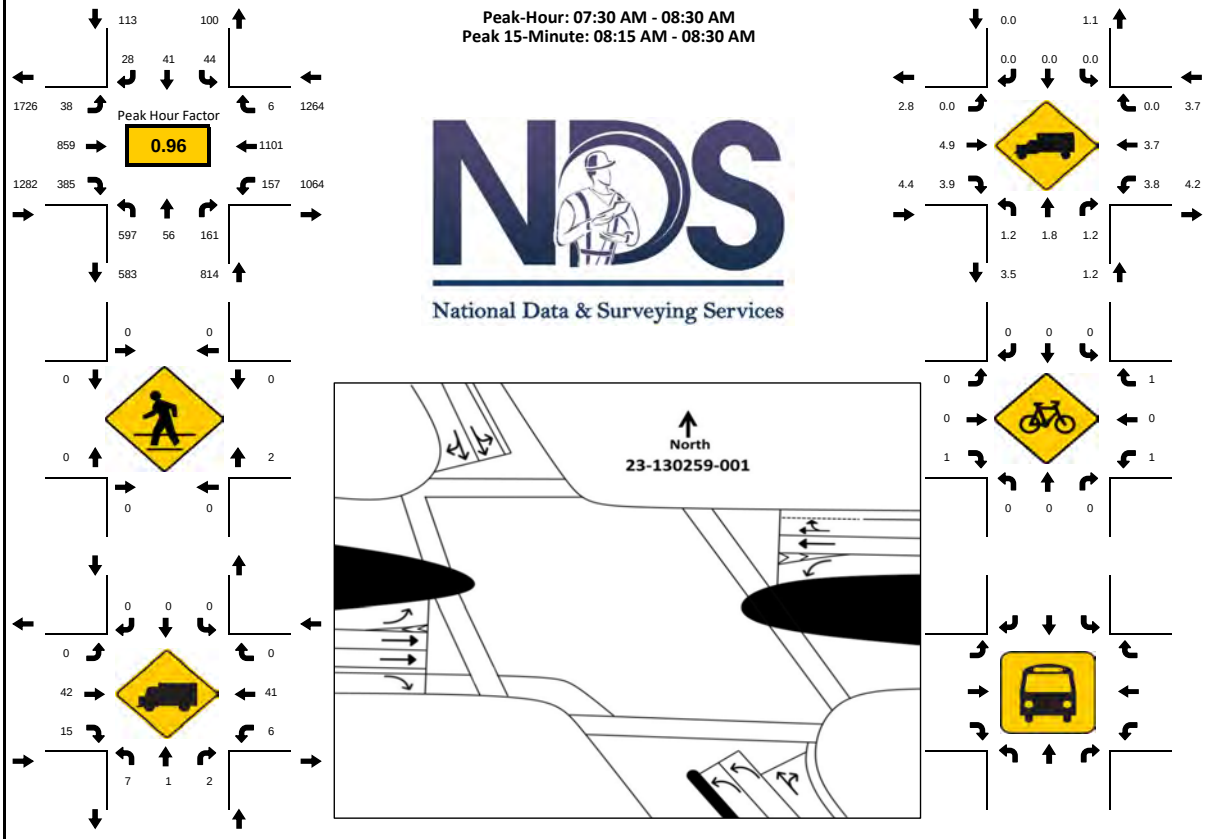
Pedestrians (Crosswalks)


PM
NOON
AM
0
2
0
0
0
0
0
0
0
0
0
0
0

LOCATION: Tuskawilla Rd & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-001
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:30 AM - 08:30 AM
Peak 15-Minute: 08:15 AM - 08:30 AM

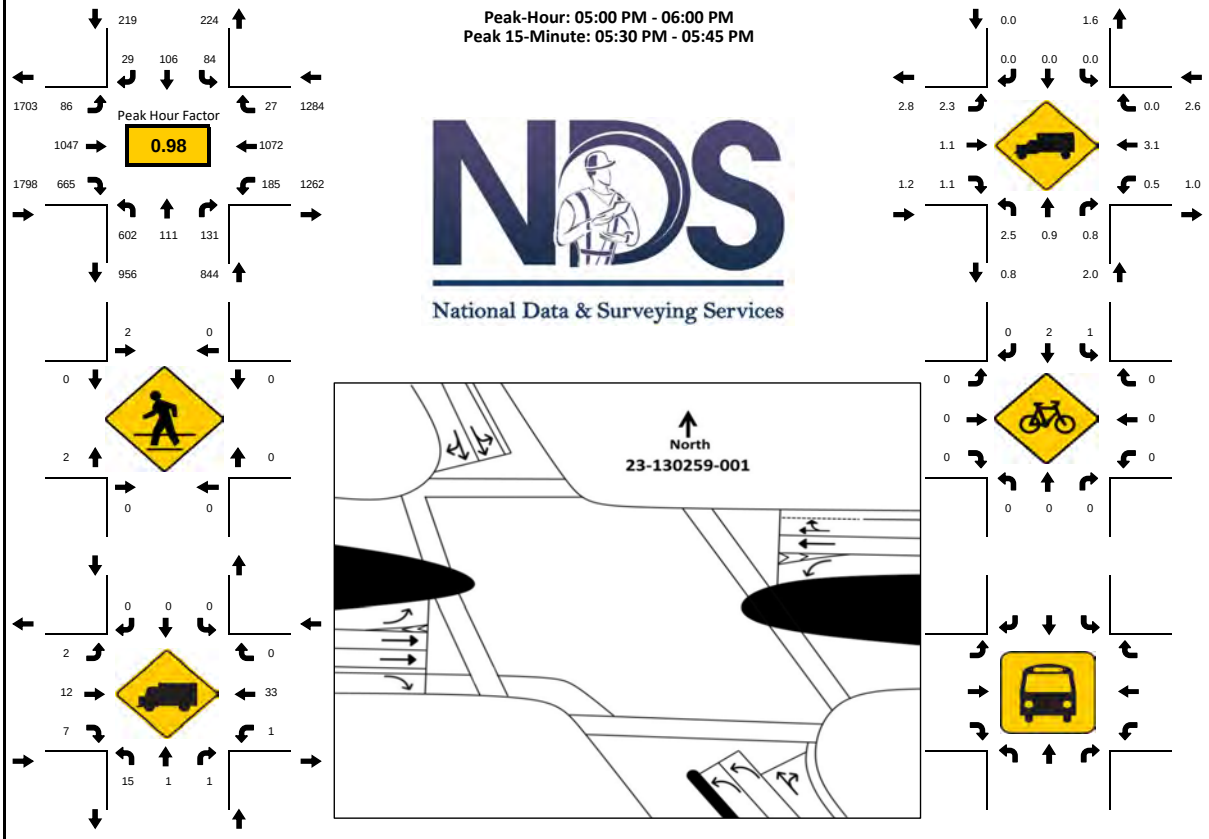


15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	163	15	42	0		12	13	2	0		7	173	135	5		27	183	1	0		778	3300
7:15 AM	118	8	28	0		6	9	6	0		4	186	134	6		39	227	1	4		776	3343
7:30 AM	130	10	47	0		7	9	9	0		7	221	91	6		39	292	0	3		871	3473
7:45 AM	154	14	47	0		14	6	6	0		6	194	89	3		41	298	1	2		875	3455
8:00 AM	151	14	27	0		12	11	9	0		6	187	89	1		37	270	3	4		821	3363
8:15 AM	162	18	40	0		11	15	4	0		7	257	116	2		29	241	2	2		906	2542
8:30 AM	116	7	37	0		11	10	4	0		6	240	140	4		51	221	4	2		853	1636
8:45 AM	127	16	30	0		10	15	5	0		9	189	129	2		42	198	8	3		783	783
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	648	72	188	0		56	60	36	0		28	1028	464	24		164	1192	12	16		**3988**	
Heavy Trucks	16	4	4	0		0	0	0	0		0	56	32	0		8	60	0	4		**180**	
Pedestrians		0					0					0					8				**8**	
Bicycles	0	0	0	0		0	0	0	0		0	0	4	0		4	0	4	0		**12**	
Buses																						
Stopped Buses																						

LOCATION: Tuskawilla Rd & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-001
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:30 PM - 05:45 PM

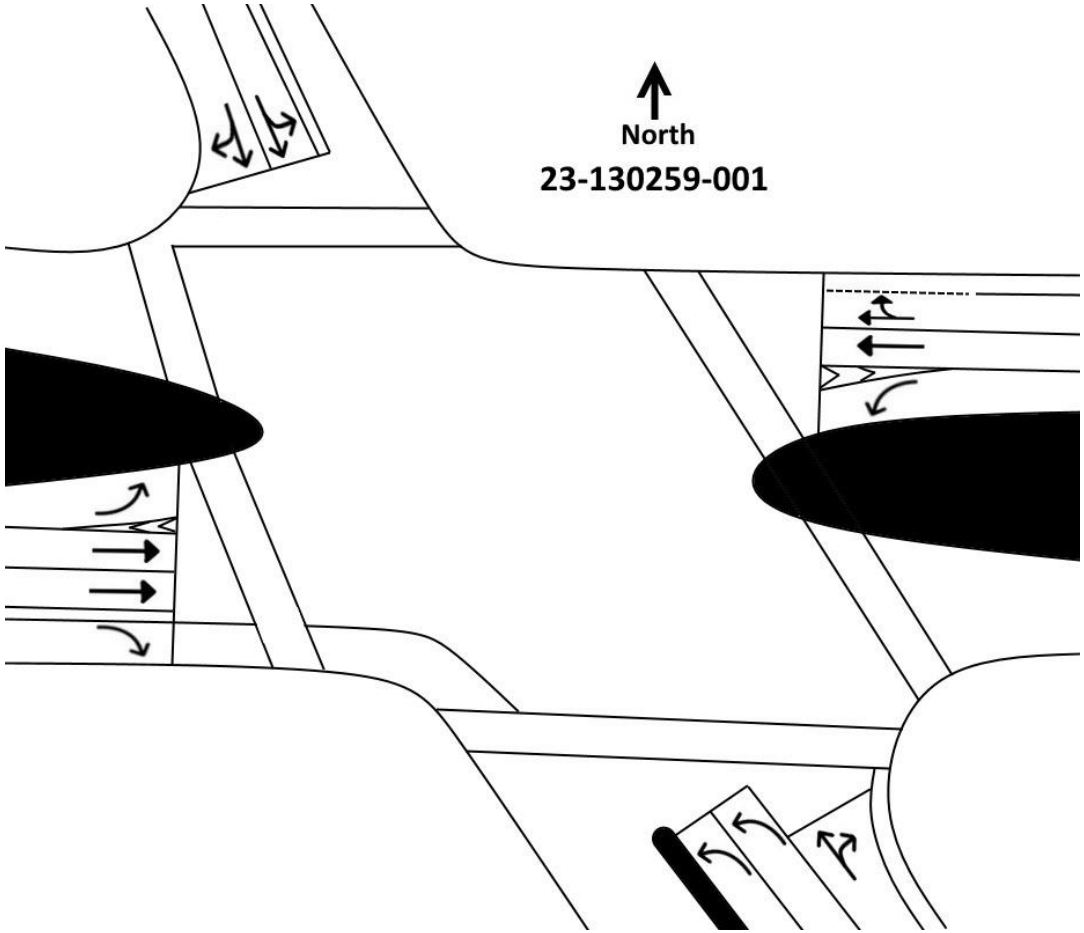


15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	124	9	32	0		15	14	5	0		11	217	133	17		45	156	4	2		784	3654
4:15 PM	179	27	50	0		16	16	5	0		6	277	128	9		32	215	10	2		972	3902
4:30 PM	161	20	34	0		20	17	12	0		8	212	128	10		35	251	2	1		911	3977
4:45 PM	170	13	38	0		17	22	7	0		16	244	132	11		50	261	3	3		987	4123
5:00 PM	136	15	35	0		20	27	6	0		12	272	156	9		43	290	6	5		1032	4145
5:15 PM	133	33	31	0		25	24	6	0		16	277	150	3		44	297	8	0		1047	3113
5:30 PM	173	42	33	0		20	26	8	0		12	269	173	8		42	240	9	2		1057	2066
5:45 PM	160	21	32	0		19	29	9	0		11	229	186	15		47	245	4	2		1009	1009
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	692	168	140	0		100	116	36	0		64	1108	744	60		188	1188	36	20		**4660**	
Heavy Trucks	24	4	4	0		0	0	0	0		4	20	16	0		4	48	0	0		**124**	
Pedestrians		0					8					8					0				**16**	
Bicycles	0	0	0	0		4	4	0	0		0	0	0	0		0	0	0	0		**8**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

N/S Street: **Tuskawilla Rd**

Speed: **45/50 MPH**



E/W Street: **SR 434/SR 419**

Speed: **45 MPH**

Site Code: **23-130259-001**

Date: **09/12/2023**

Weather: **Sunny**

City: **Winter Springs**

County: **Seminole**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	**1**	**2**	**3**
SL/ST	00:55	00:22	00:26
NL/NT	00:56	00:34	00:32
EL/WL	00:18	00:18	00:17
WL/WT	00:06	00:05	00:08
ET/WT	01:10	01:08	01:15

Prepared by National Data & Surveying Services

Tuskawilla Rd & Michael Blake Blvd/Milky Way

Peak Hour Turning Movement Count

ID: 23-130259-002
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS

AM	08:00 AM - 09:00 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND — Tuskawilla Rd

AM	2	668	10	8	745	AM
NOON	0	0	0	0	0	NOON
PM	0	967	18	23	855	PM

EASTBOUND — Michael Blake Blvd/Milky Way

AM	NOON	PM	
2	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
AM	NOON	PM	

WESTBOUND — Michael Blake Blvd/Milky Way

PM	NOON	AM	
4	0	13	0
0	0	0	0
29	0	42	0
0	0	0	0
100	0	65	
PM	NOON	AM	

CONTROL

2- Way Stop(EB/WB)

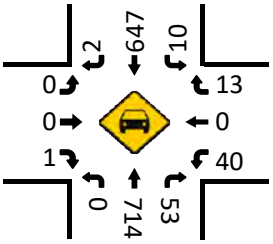
TEV	1523 AM	0 NOON	1951 PM
PHF	0.96		0.97

NORTHBOUND — Tuskawilla Rd

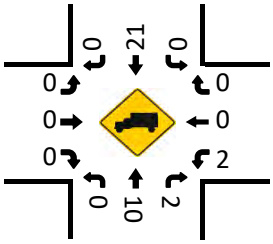
PM	996	0	0	828	82	PM
NOON	0	0	0	0	0	NOON
AM	711	0	0	724	55	AM

0 0 0 0

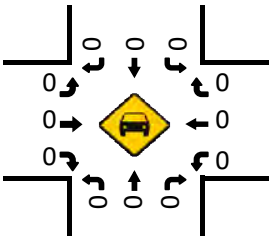
Cars (AM)



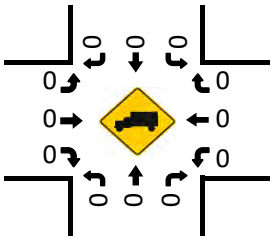
HT (AM)



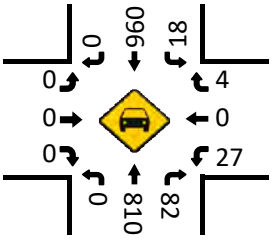
Cars (NOON)



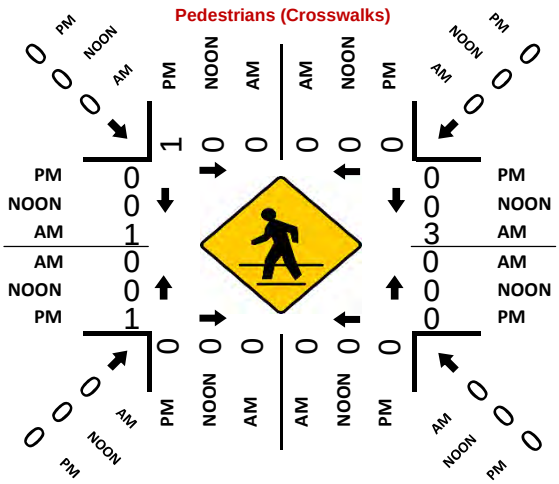
HT (NOON)



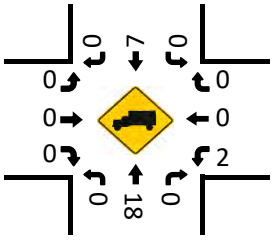
Cars (PM)



Pedestrians (Crosswalks)



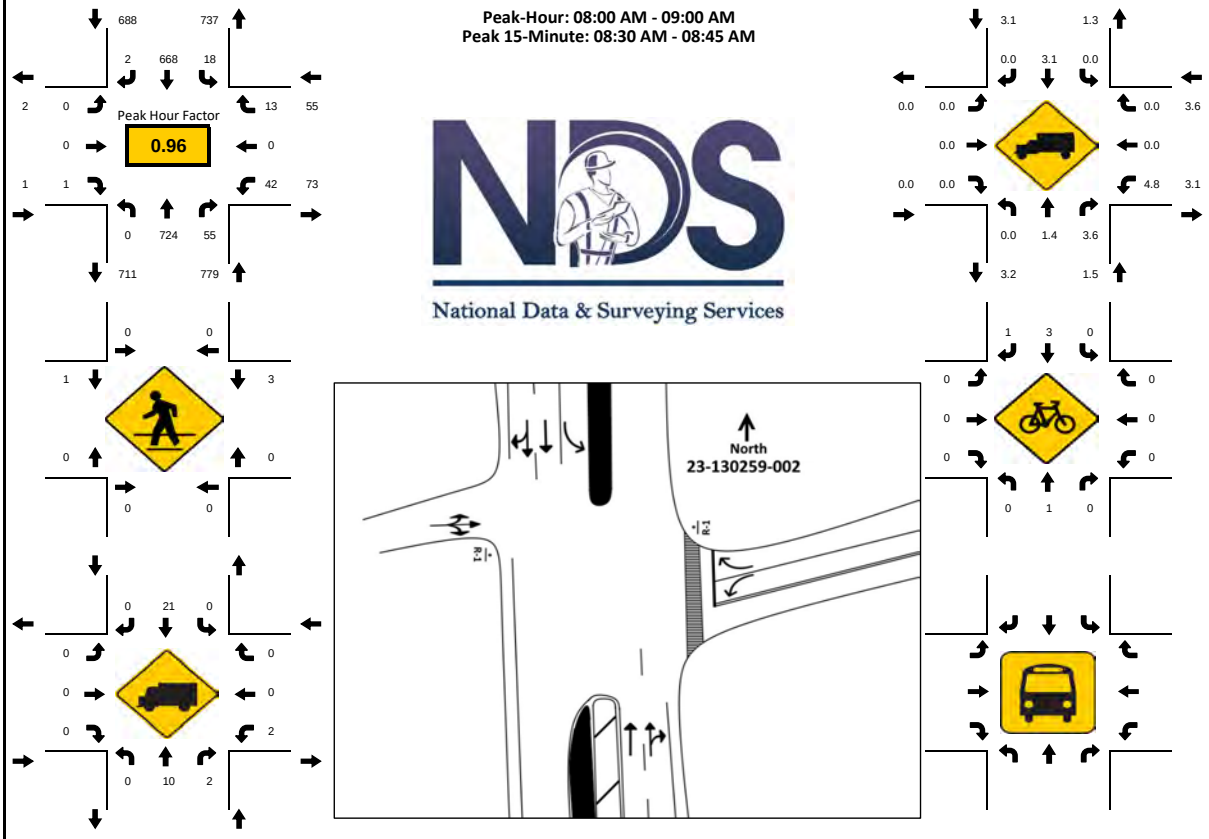
HT (PM)



LOCATION: Tuskawilla Rd & Michael Blake Blvd/Milky Way
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-002
DATE: Tue, Sep 12, 2023

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:30 AM - 08:45 AM

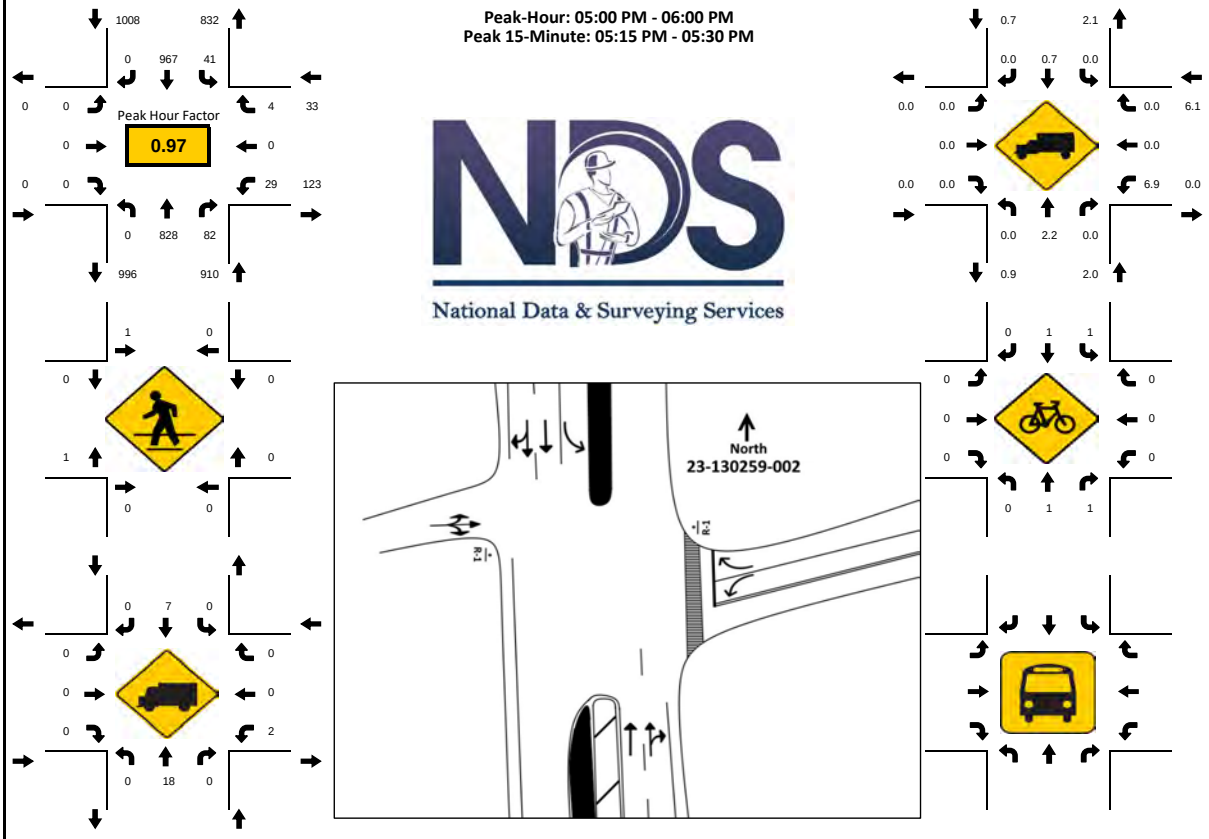


15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					Michael Blake Blvd/Milky Way Eastbound					Michael Blake Blvd/Milky Way Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	0	185	6	0		1	178	0	1		0	0	0	0		7	0	5	0		383	1480
7:15 AM	0	170	13	0		4	176	0	0		0	0	0	0		9	0	3	0		375	1471
7:30 AM	0	183	11	0		1	145	0	0		1	0	0	0		5	0	10	0		356	1464
7:45 AM	0	211	11	0		3	131	0	0		0	0	0	0		9	0	1	0		366	1505
8:00 AM	0	207	11	0		1	140	1	0		0	0	0	0		5	0	9	0		374	1523
8:15 AM	0	186	14	0		5	146	0	3		0	0	0	0		13	0	1	0		368	1149
8:30 AM	0	162	18	0		0	203	0	1		0	0	0	0		12	0	1	0		397	781
8:45 AM	0	169	12	0		4	179	1	4		0	0	1	0		12	0	2	0		384	384
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	828	72	0		20	812	4	16		0	0	4	0		52	0	36	0		**1844**	
Heavy Trucks	0	16	4	0		0	36	0	0		0	0	0	0		4	0	0	0		**60**	
Pedestrians		0					0					4					4				**8**	
Bicycles	0	4	0	0		0	8	4	0		0	0	0	0		0	0	0	0		**16**	
Buses																						
Stopped Buses																						

LOCATION: Tuskawilla Rd & Michael Blake Blvd/Milky Way
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-002
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services

15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					Michael Blake Blvd/Milky Way Eastbound					Michael Blake Blvd/Milky Way Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	0	168	12	0		3	197	0	6		0	0	0	0		6	0	4	0		396	1786
4:15 PM	0	265	25	0		3	196	1	8		1	0	0	0		8	0	4	0		511	1878
4:30 PM	0	225	18	0		4	182	0	7		0	0	1	0		7	0	2	0		446	1869
4:45 PM	0	198	15	0		2	205	0	8		0	0	0	0		3	0	2	0		433	1894
5:00 PM	0	214	18	0		7	235	0	4		0	0	0	0		9	0	1	0		488	1951
5:15 PM	0	220	31	0		5	234	0	4		0	0	0	0		7	0	1	0		502	1463
5:30 PM	0	195	21	0		3	235	0	6		0	0	0	0		10	0	1	0		471	961
5:45 PM	0	199	12	0		3	263	0	9		0	0	0	0		3	0	1	0		490	490
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	880	124	0		28	1052	0	36		0	0	0	0		40	0	4	0		**2164**	
Heavy Trucks	0	28	0	0		0	16	0	0		0	0	0	0		4	0	0	0		**48**	
Pedestrians		0					4					4					0				**8**	
Bicycles	0	4	4	0		4	4	0	0		0	0	0	0		0	0	0	0		**16**	
Buses																						
Stopped Buses																						

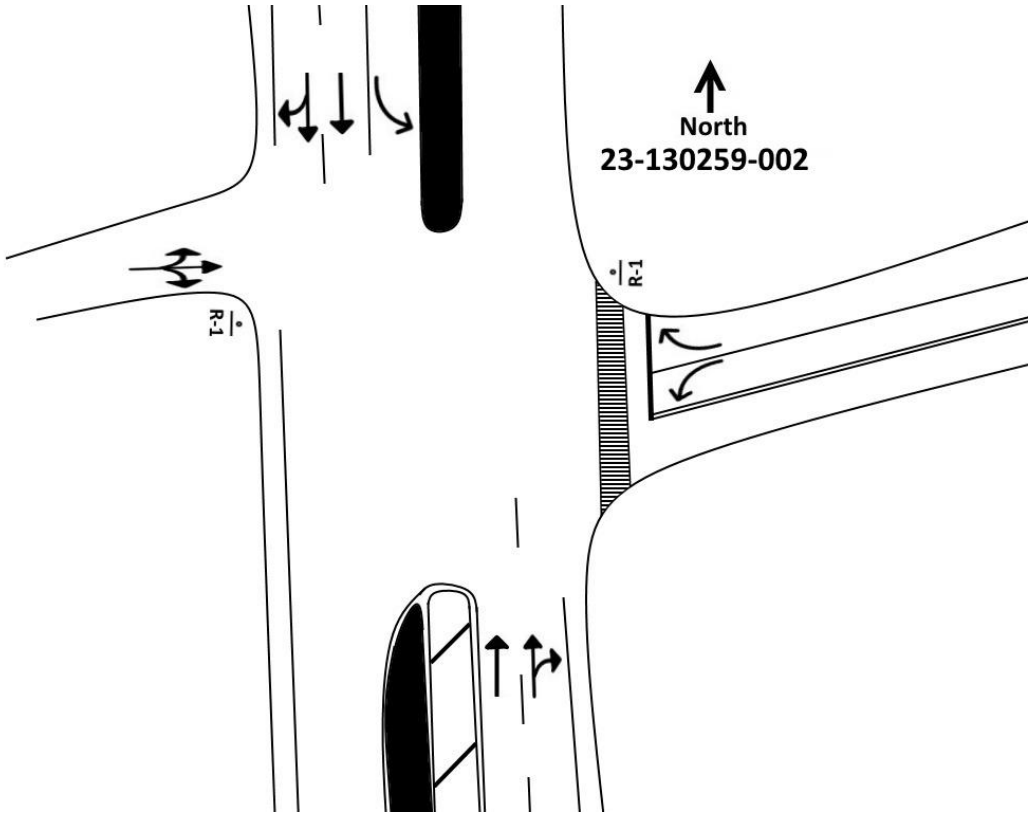
National Data & Surveying Services

Site Code:	**23-130259-002**
Date:	**09/12/2023**
Weather:	**Sunny**
City:	**Winter Springs**
County:	**Seminole**
Count Times:	**07:00 - 09:00**
	16:00 - 18:00
Control:	**2- Way Stop(EB/WB)**

N

N/S Street: **Tuskawilla Rd**

Speed: **45/50 MPH**



E/W Street: **Michael Blake Blvd/Milky Way**

Speed: **25 MPH**

Prepared by National Data & Surveying Services

Michael Blake Blvd & SR 434/SR 419

Peak Hour Turning Movement Count

ID: 23-130259-003
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS		COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Michael Blake Blvd)

AM	78	9	134	0	145	AM
NOON	0	0	0	0	0	NOON
PM	51	4	70	0	200	PM

EASTBOUND (SR 434/SR 419)

AM	NOON	PM	
1207	0	1303	
6	0	30	0
71	0	83	0
979	0	1173	0
7	0	17	0

WESTBOUND (SR 434/SR 419)

PM	NOON	AM	
107	0	71	0
1212	0	1121	0
42	0	34	0
0	0	1	0
1338	0	1181	

NORTHBOUND (Michael Blake Blvd)

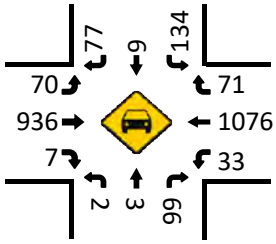
PM	63	0	10	10	95	PM
NOON	0	0	0	0	0	NOON
AM	50	0	2	3	67	AM

CONTROL

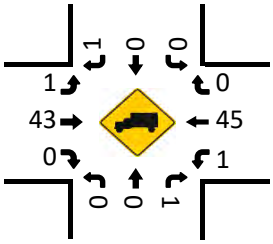
2- Way Stop(NB/SB)

TEV	2583	0	2904
	AM	NOON	PM
PHF	0.98		0.95

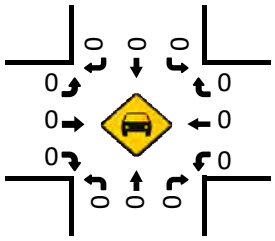
Cars (AM)



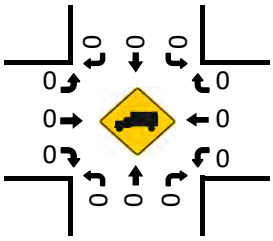
HT (AM)



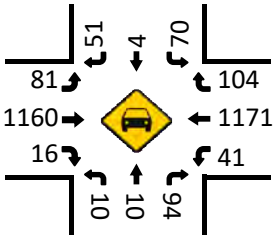
Cars (NOON)



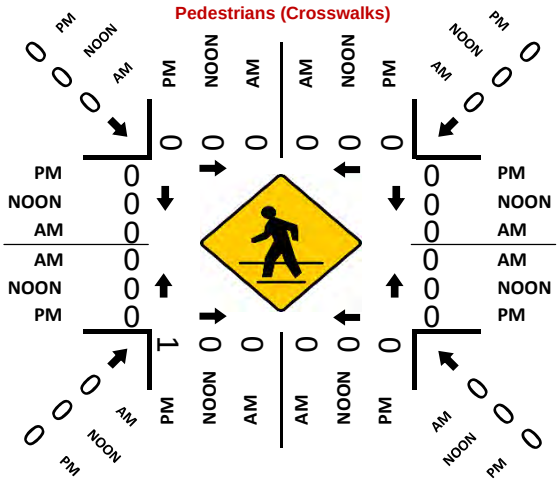
HT (NOON)



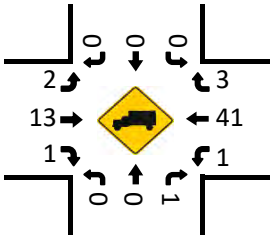
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)

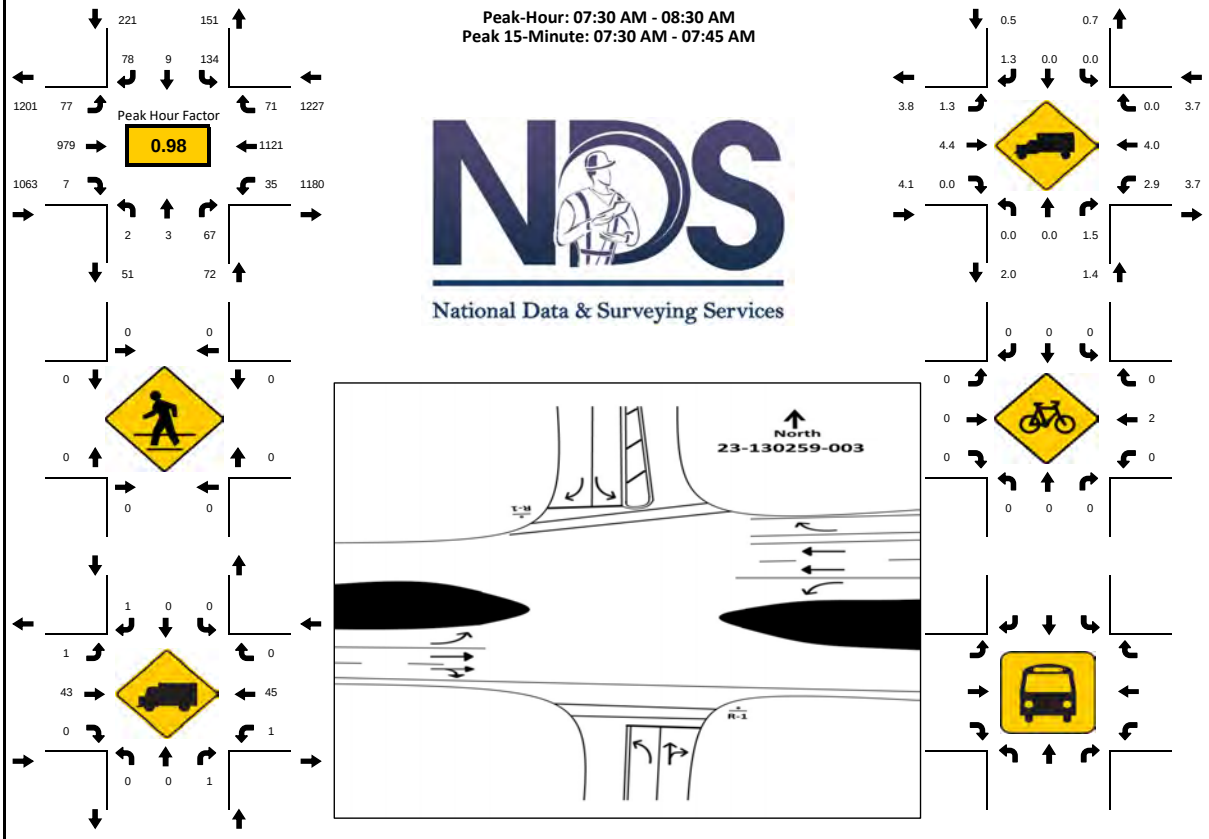


LOCATION: Michael Blake Blvd & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-003
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:30 AM - 08:30 AM
Peak 15-Minute: 07:30 AM - 07:45 AM

Peak Hour Factor: **0.98**

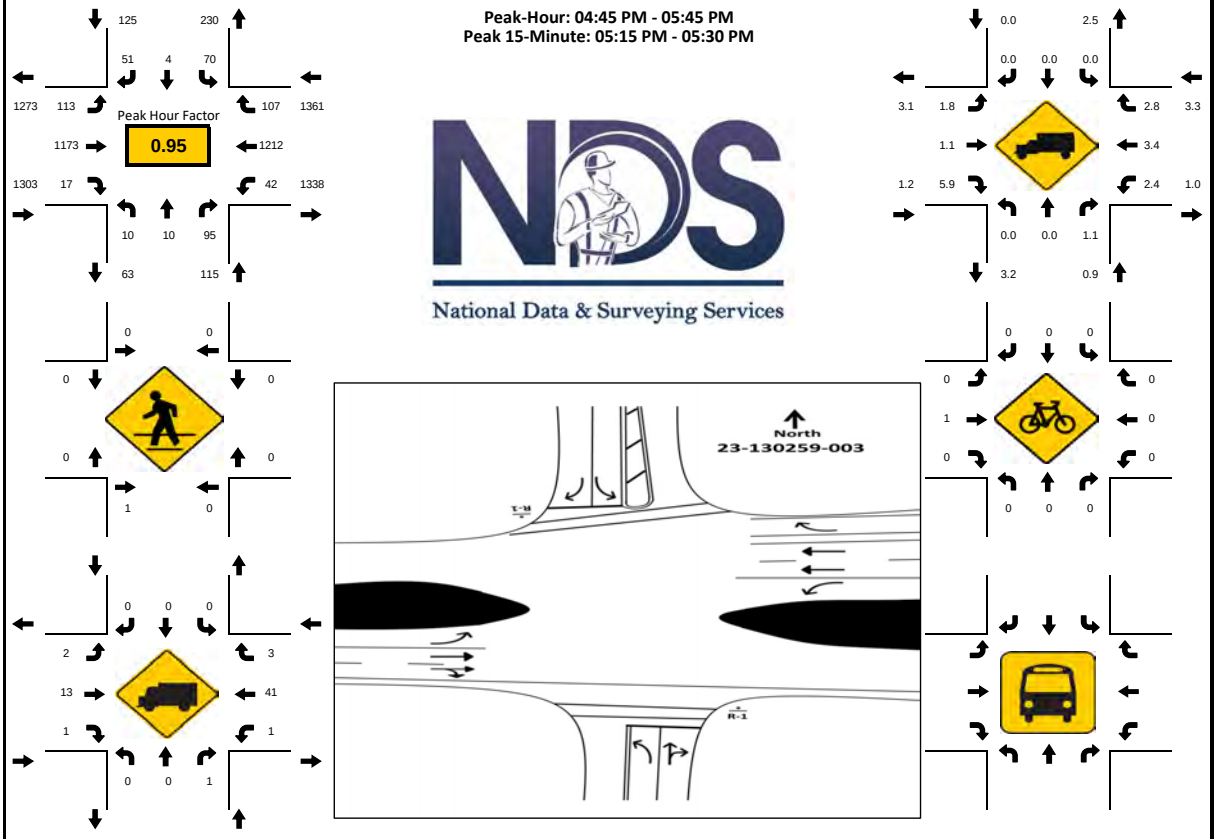


15-Min Count Period Beginning At	Michael Blake Blvd Northbound					Michael Blake Blvd Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	0	4	14	0		36	2	15	0		37	186	2	4		6	175	51	0		532	2427
7:15 AM	1	3	14	0		35	2	19	0		15	209	2	4		6	252	16	0		578	2505
7:30 AM	1	0	18	0		40	4	22	0		17	246	1	2		9	284	15	0		659	2583
7:45 AM	1	1	15	0		31	0	21	0		13	244	4	1		10	300	17	0		658	2566
8:00 AM	0	1	14	0		27	1	19	0		20	215	2	2		7	287	14	1		610	2477
8:15 AM	0	1	20	0		36	4	16	0		21	274	0	1		8	250	25	0		656	1867
8:30 AM	0	1	21	0		23	2	14	0		30	257	2	4		11	246	31	0		642	1211
8:45 AM	2	0	16	0		22	1	10	0		17	217	3	3		15	240	23	0		569	569
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***		
All Vehicles	4	4	80	0		160	16	88	0		84	1096	16	8		40	1200	100	4		**2900**	
Heavy Trucks	0	0	4	0		0	0	4	0		4	60	0	0		4	60	0	0		**136**	
Pedestrians		0					0					0					0				**0**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	8	0	0		**8**	
Buses																						
Stopped Buses																						

LOCATION: Michael Blake Blvd & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-003
DATE: Tue, Sep 12, 2023

Peak-Hour: 04:45 PM - 05:45 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



15-Min Count Period Beginning At	Michael Blake Blvd Northbound					Michael Blake Blvd Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	1	0	16	0		20	3	11	0		14	244	5	5		8	183	21	0		531	2498
4:15 PM	5	3	27	0		17	3	11	0		28	304	3	8		9	210	16	0		644	2676
4:30 PM	1	3	13	0		11	1	8	0		18	246	0	4		6	300	24	1		636	2798
4:45 PM	2	2	17	0		16	1	17	0		26	268	0	10		11	301	16	0		687	2904
5:00 PM	2	3	20	0		14	1	15	0		16	293	7	6		10	296	26	0		709	2827
5:15 PM	3	5	32	0		19	1	9	0		12	316	4	10		12	312	31	0		766	2118
5:30 PM	3	0	26	0		21	1	10	0		29	296	6	4		9	303	34	0		742	1352
5:45 PM	1	0	18	0		16	1	9	0		19	252	1	9		6	248	28	2		610	610
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***	**Left**	**Thru**	**Rgt**	**U**	**R***		
All Vehicles	12	20	128	0		84	4	68	0		116	1264	28	40		48	1248	136	0		**3196**	
Heavy Trucks	0	0	4	0		0	0	0	0		4	24	4	0		4	64	8	0		**112**	
Pedestrians		4					0					0					0				**4**	
Bicycles	0	0	0	0		0	0	0	0		0	4	0	0		0	0	0	0		**4**	
Buses																						
Stopped Buses																						

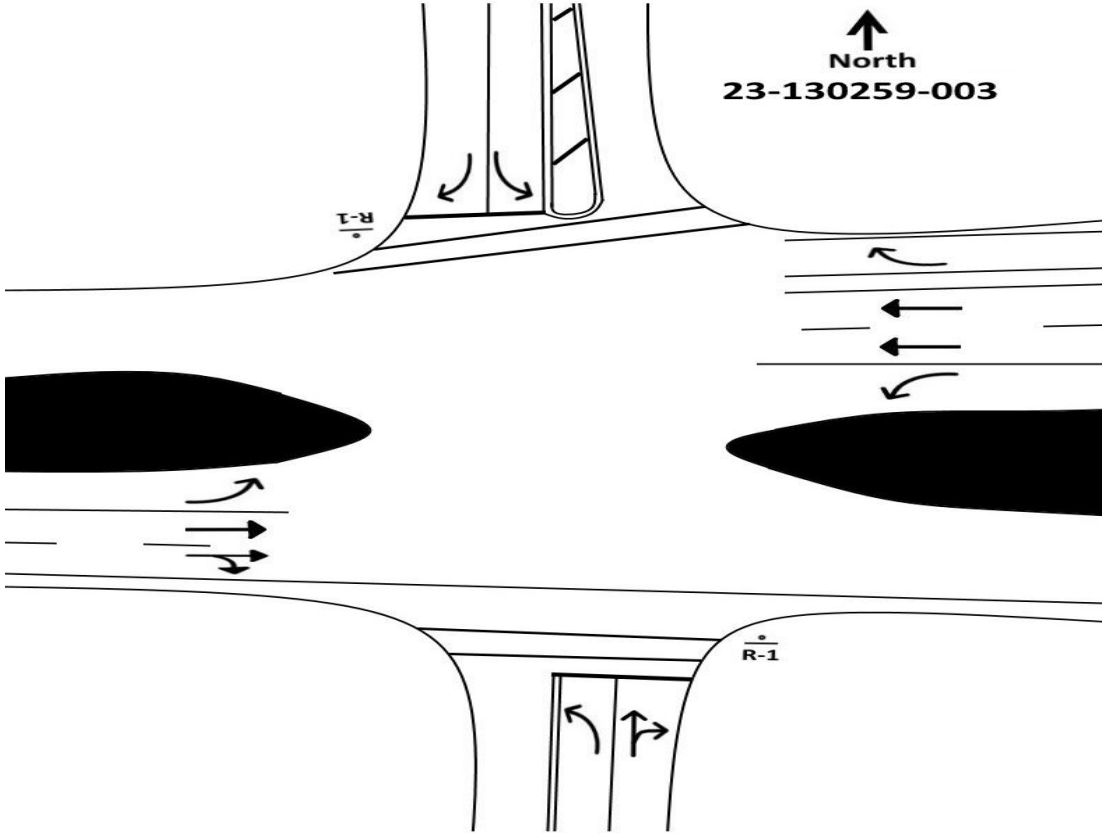
National Data & Surveying Services

Site Code:	**23-130259-003**
Date:	**09/12/2023**
Weather:	**Sunny**
City:	**Winter Springs**
County:	**Seminole**
Count Times:	**07:00 - 09:00**
	16:00 - 18:00
Control:	**2- Way Stop(NB/SB)**

N

N/S Street: **Michael Blake Blvd**

Speed: **25 MPH**



E/W Street: **SR 434/SR 419**

Speed: **45 MPH**

Prepared by National Data & Surveying Services

Tuskawilla Rd & Trotwood Blvd

Peak Hour Turning Movement Count

ID: 23-130259-004
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Tuskawilla Rd)

AM	60	629	36	0	896	AM
NOON	0	0	0	0	0	NOON
PM	76	845	83	0	910	PM

EASTBOUND (Trotwood Blvd)

AM	NOON	PM	
80	0	159	
0	0	0	0
99	0	54	0
6	0	11	0
67	0	53	0

WESTBOUND (Trotwood Blvd)

PM	NOON	AM	
82	0	123	0
7	0	5	0
67	0	59	0
0	0	0	0
190	0	52	

NORTHBOUND (Tuskawilla Rd)

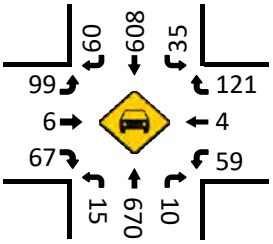
PM	966	1	76	774	96	PM
NOON	0	0	0	0	0	NOON
AM	756	1	15	674	10	AM

CONTROL

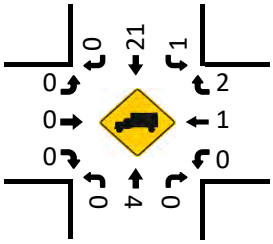
Signalized

TEV	1784 AM	0 NOON	2225 PM
PHF	0.92		0.96

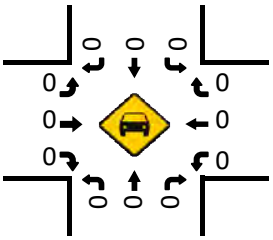
Cars (AM)



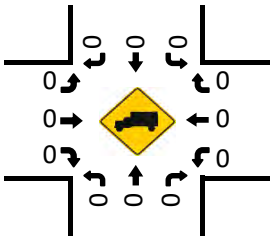
HT (AM)



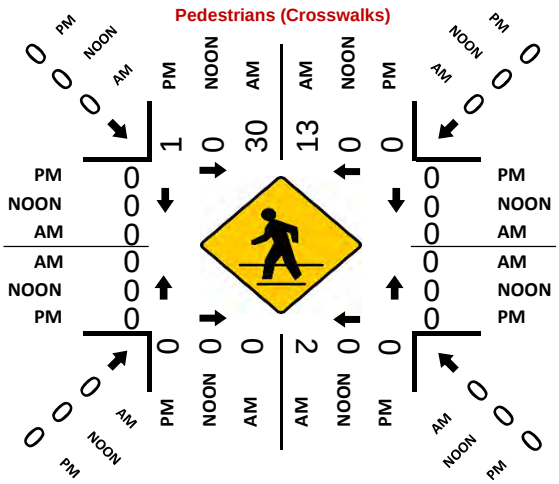
Cars (NOON)



HT (NOON)



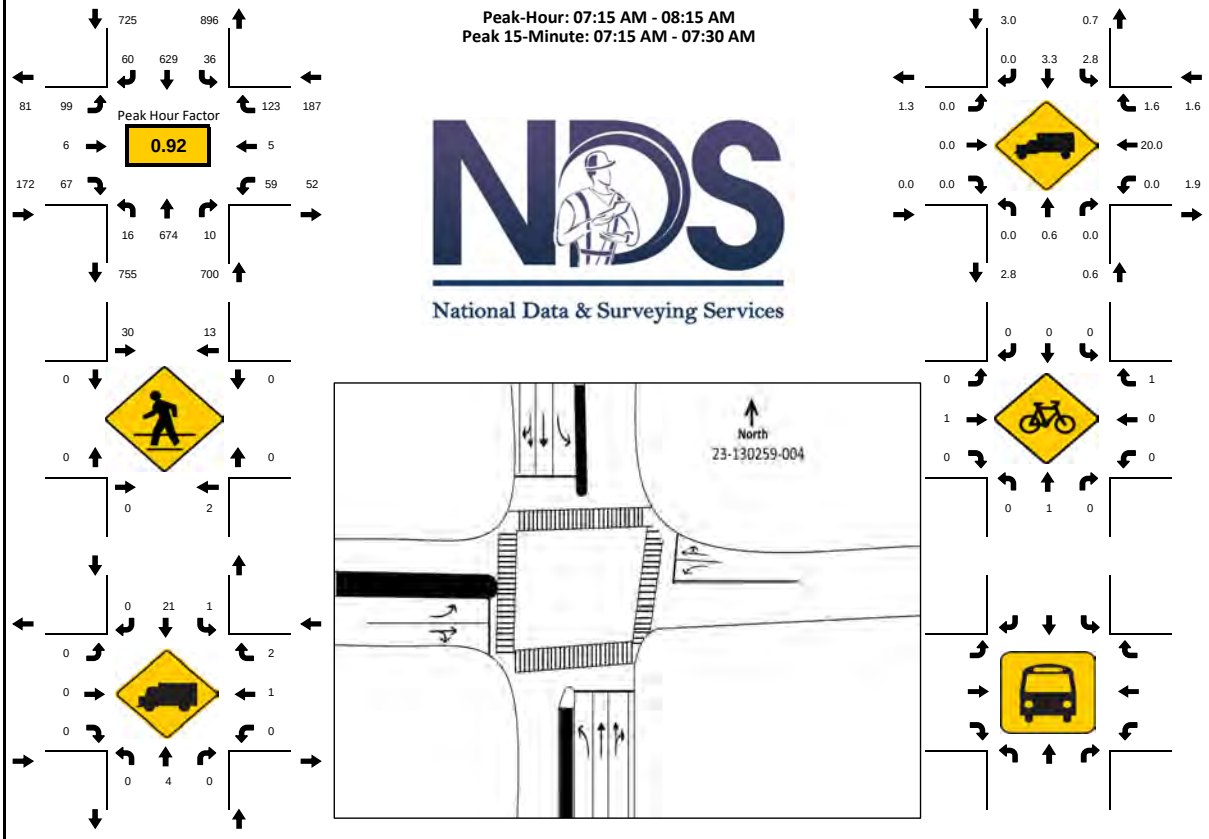
Pedestrians (Crosswalks)


PM
NOON
AM
0
1
0
30
13
0
0
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0
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0

LOCATION: Tuskawilla Rd & Trotwood Blvd
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-004
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:15 AM - 08:15 AM
Peak 15-Minute: 07:15 AM - 07:30 AM

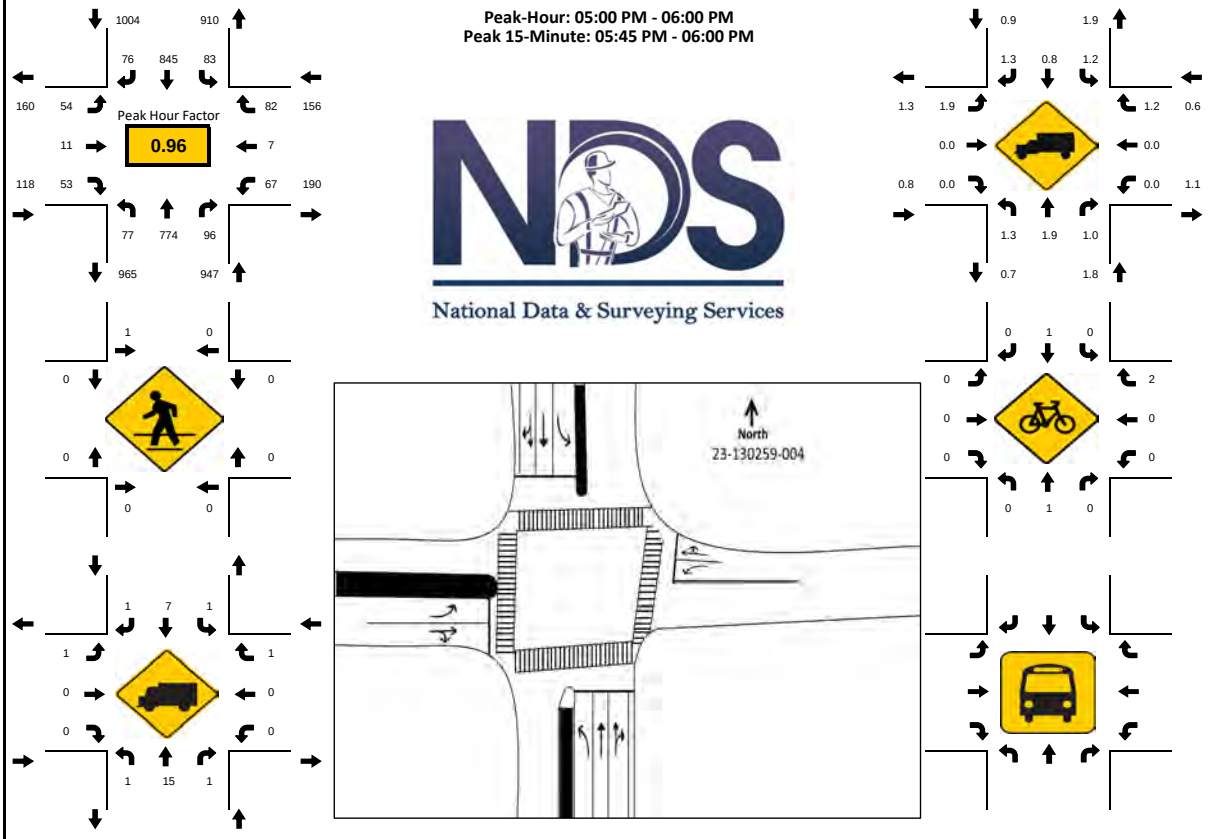


15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					Trotwood Blvd Eastbound					Trotwood Blvd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	1	142	3	0		9	139	5	0		27	0	22	0		12	1	19	0		380	1773
7:15 AM	2	176	2	0		5	187	17	0		29	1	18	0		14	0	35	0		486	1784
7:30 AM	5	178	1	1		8	153	12	0		28	1	14	0		14	1	41	0		457	1703
7:45 AM	4	153	5	0		16	158	27	0		24	2	15	0		16	1	29	0		450	1653
8:00 AM	4	167	2	0		7	131	4	0		18	2	20	0		15	3	18	0		391	1620
8:15 AM	4	168	6	0		8	142	9	0		13	0	20	0		13	1	21	0		405	1229
8:30 AM	5	161	8	0		7	158	9	0		14	0	12	0		17	1	15	0		407	824
8:45 AM	5	170	11	0		13	157	4	0		16	0	11	0		16	0	14	0		417	417
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	20	712	20	4		64	748	108	0		116	8	80	0		64	12	164	0		**2120**	
Heavy Trucks	0	8	0	0		4	32	0	0		0	0	0	0		0	4	4	0		**52**	
Pedestrians		4					148					0					0				**152**	
Bicycles	0	4	0	0		0	0	0	0		0	4	0	0		0	0	4	0		**12**	
Buses																						
Stopped Buses																						

LOCATION: Tuskawilla Rd & Trotwood Blvd
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-004
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:45 PM - 06:00 PM



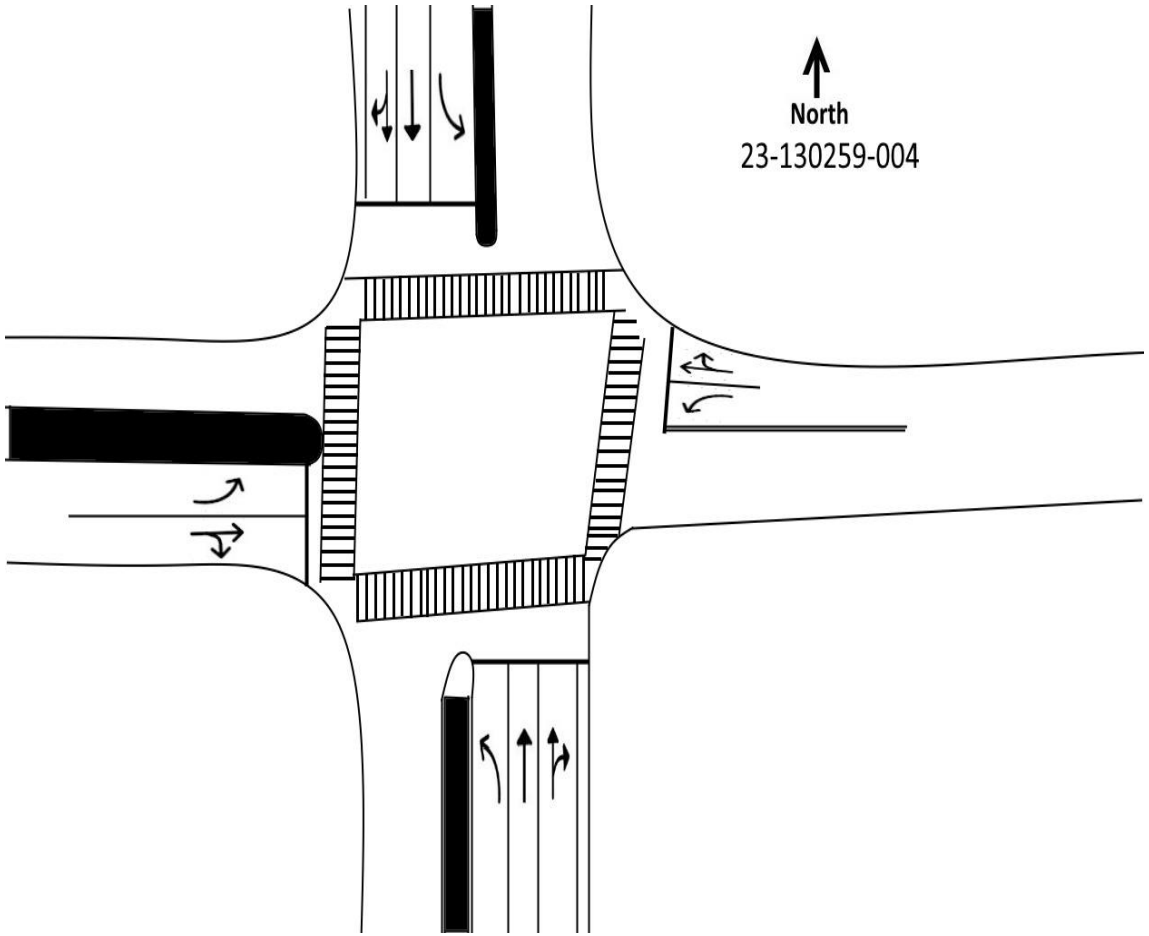
15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					Trotwood Blvd Eastbound					Trotwood Blvd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	11	176	15	0		17	176	14	0		4	1	8	0		9	1	10	0		442	2006
4:15 PM	18	166	26	0		26	239	19	0		17	2	12	0		16	1	28	0		570	2092
4:30 PM	16	190	19	0		19	181	17	0		12	0	15	0		11	2	19	0		501	2087
4:45 PM	15	182	26	0		21	175	18	0		11	3	10	0		17	3	12	0		493	2140
5:00 PM	15	195	22	0		16	197	19	0		14	2	11	0		16	2	19	0		528	2225
5:15 PM	19	205	26	0		18	205	20	0		12	4	17	0		18	2	19	0		565	1697
5:30 PM	20	185	28	1		20	217	22	0		13	2	13	0		17	2	14	0		554	1132
5:45 PM	22	189	20	0		29	226	15	0		15	3	12	0		16	1	30	0		578	578
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	88	820	112	4		116	904	88	0		60	16	68	0		72	8	120	0		**2476**	
Heavy Trucks	4	28	4	0		4	12	4	0		4	0	0	0		0	0	4	0		**64**	
Pedestrians		0					4					0					0				**4**	
Bicycles	0	4	0	0		0	4	0	0		0	0	0	0		0	0	4	0		**12**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

N

N/S Street: **Tuskawilla Rd**

Speed: **45/50 MPH**



E/W Street: **Trotwood Blvd**

Speed: **20 MPH**

Site Code: **23-130259-004**

Date: **09/12/2023**

Weather: **Sunny**

City: **Winter Springs**

County: **Seminole**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	1	2	3
NL/NT	00:15	-	-
SL/ST	-	00:17	-
NL/SL	-	-	00:13
NT/ST	01:05	00:43	00:49
EL/WL	00:13	00:13	-
WL/WT	00:41	00:16	-
EL/ET	-	-	00:17

Prepared by National Data & Surveying Services

Bear Springs Dr/McLeod's Way & SR 434/SR 419

Peak Hour Turning Movement Count

ID: 23-130259-005
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	3049	0	3635
PHF	0.92		0.98

SOUTHBOUND (Bear Springs Dr/McLeod's Way)

	Left	Thru	Right	U-Turn	Total
AM	41	1	69	0	110
NOON	0	0	0	0	0
PM	36	4	142	0	206

EASTBOUND (SR 434/SR 419)

	Left	Thru	Right	U-Turn
AM	1618	0	1520	
NOON	0	0	3	0
PM	26	0	86	0
AM	1204	0	1652	0
NOON	2	0	14	0
PM	35	0	11	3
NOON	0	0	0	0
AM	13	0	18	1

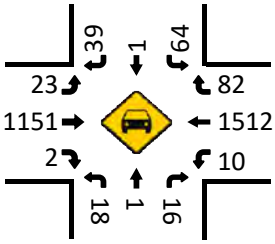
WESTBOUND (SR 434/SR 419)

	Left	Thru	Right	U-Turn
PM	117	0	83	0
NOON	1470	0	1559	0
AM	17	0	10	0
PM	60	0	18	0
NOON	1874	0	1308	
AM	20	0	17	

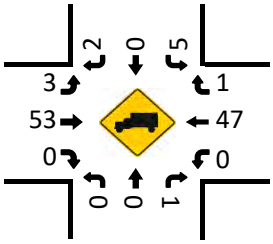
NORTHBOUND (Bear Springs Dr/McLeod's Way)

	Left	Thru	Right	U-Turn	Total
PM	3	0	0	0	3
NOON	0	0	0	0	0
AM	1	0	0	0	1
AM	2	0	0	0	2
NOON	0	0	0	0	0
PM	1	0	0	0	1

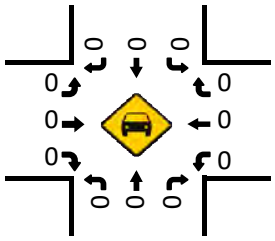
Cars (AM)



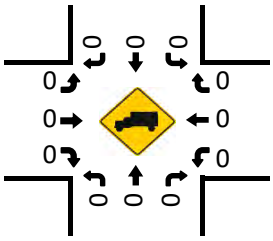
HT (AM)



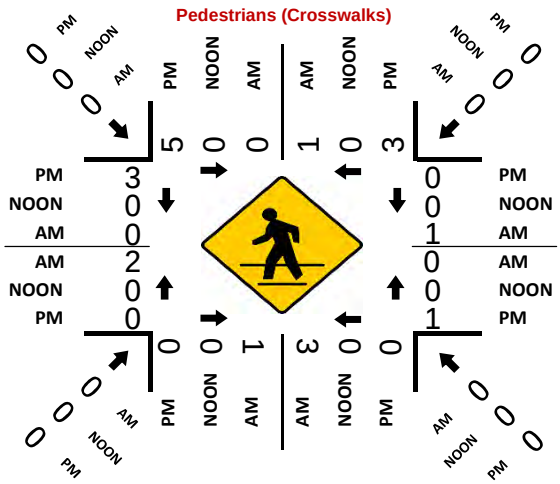
Cars (NOON)



HT (NOON)



Pedestrians (Crosswalks)

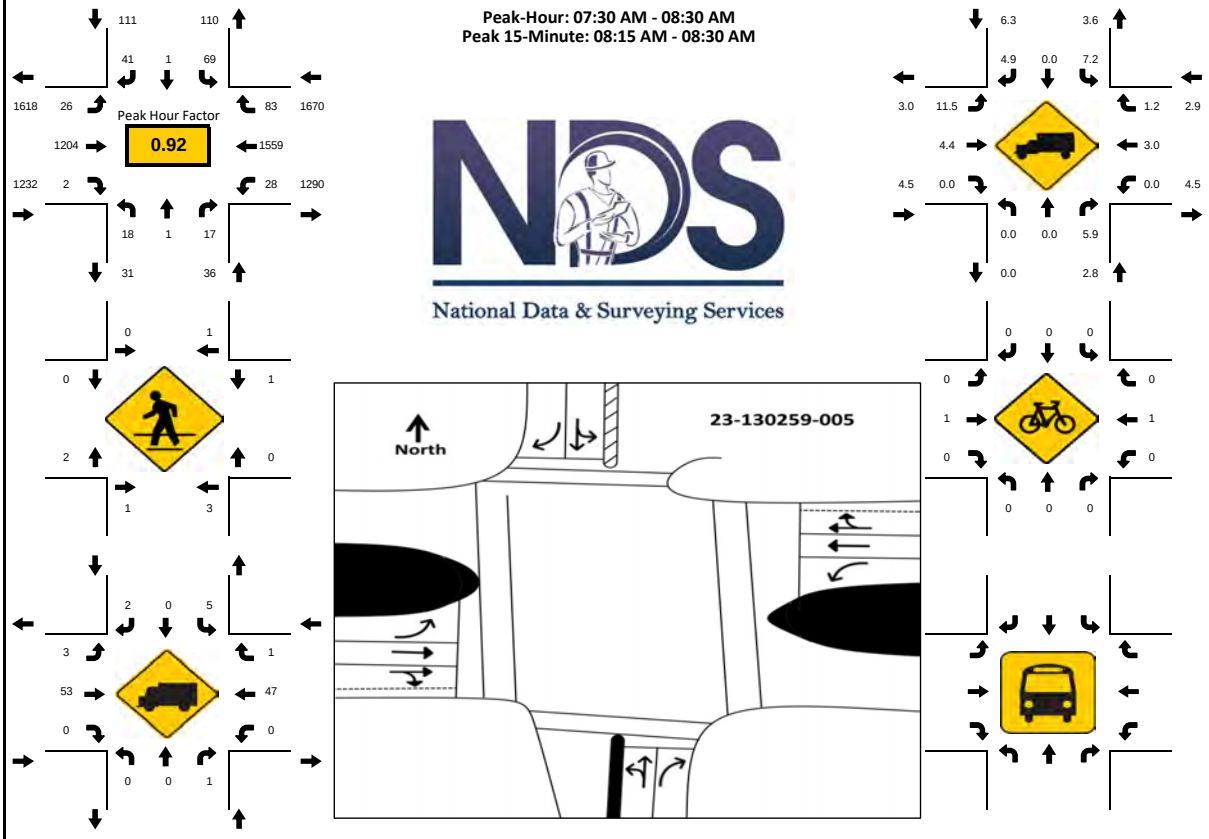

PM
NOON
AM
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5
0
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1
0
3
PM
NOON
AM
3
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0
0
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NOON
PM
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0

LOCATION: Bear Springs Dr/McLeod's Way & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-005
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:30 AM - 08:30 AM
Peak 15-Minute: 08:15 AM - 08:30 AM

Peak Hour Factor: **0.92**



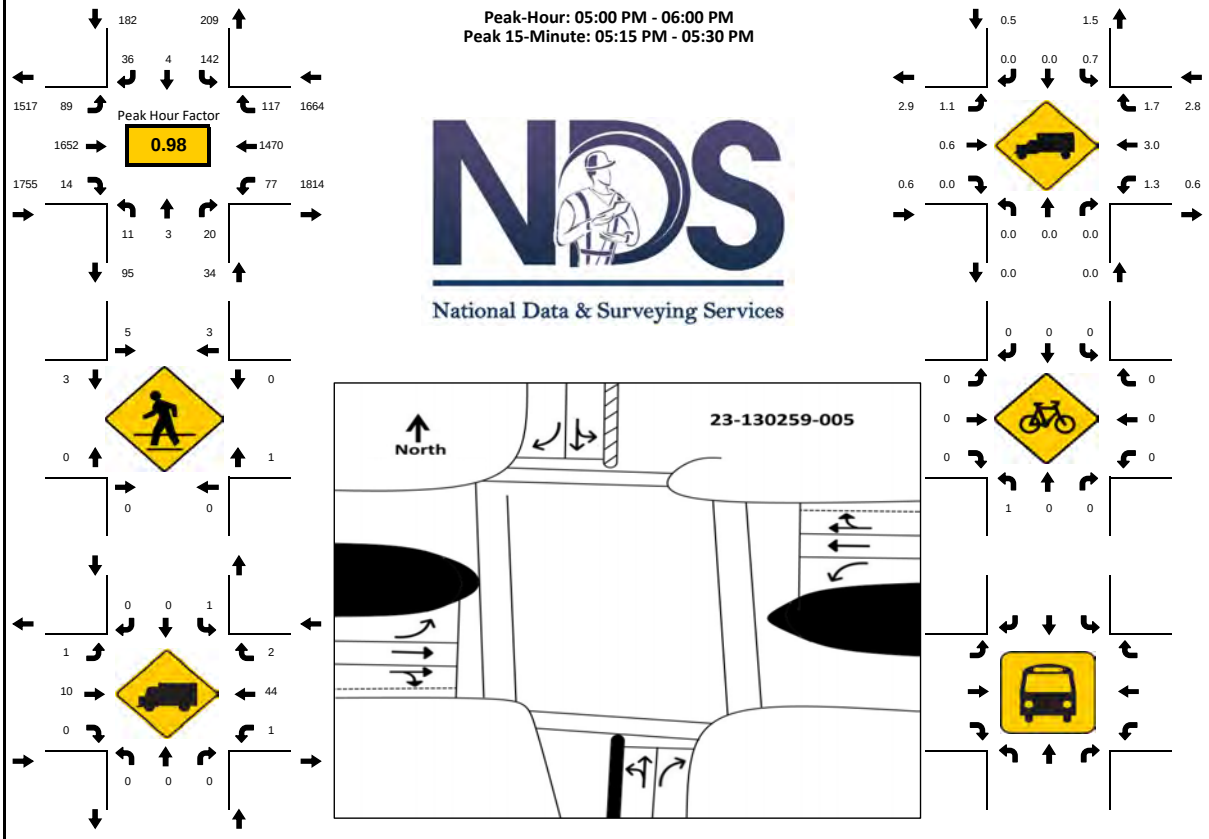
National Data & Surveying Services

15-Min Count Period Beginning At	Bear Springs Dr/McLeod's Way Northbound					Bear Springs Dr/McLeod's Way Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	3	0	7	0		46	1	14	0		18	255	0	0		0	281	43	5		673	2870
7:15 AM	5	0	8	0		51	0	15	0		5	267	0	0		2	328	14	4		699	2919
7:30 AM	6	0	4	0		17	0	13	0		4	302	1	0		0	389	18	5		759	3049
7:45 AM	6	1	4	0		11	0	5	0		3	271	1	0		6	408	18	5		739	3026
8:00 AM	5	0	5	0		18	0	14	0		8	248	0	0		2	395	23	4		722	2959
8:15 AM	1	0	4	0		23	1	9	0		11	383	0	0		2	367	24	4		829	2237
8:30 AM	7	1	6	0		11	0	12	0		9	367	0	1		2	297	17	6		736	1408
8:45 AM	1	0	6	0		12	0	6	0		14	324	0	0		2	286	10	11		672	672
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	24	4	20	0		92	4	56	0		44	1532	4	0		24	1632	96	20		**3552**	
Heavy Trucks	0	0	4	0		12	0	8	0		8	84	0	0		0	80	4	0		**200**	
Pedestrians		8					4					4					4				**20**	
Bicycles	0	0	0	0		0	0	0	0		0	4	0	0		0	4	0	0		**8**	
Buses																						
Stopped Buses																						

LOCATION: Bear Springs Dr/McLeod's Way & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-005
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



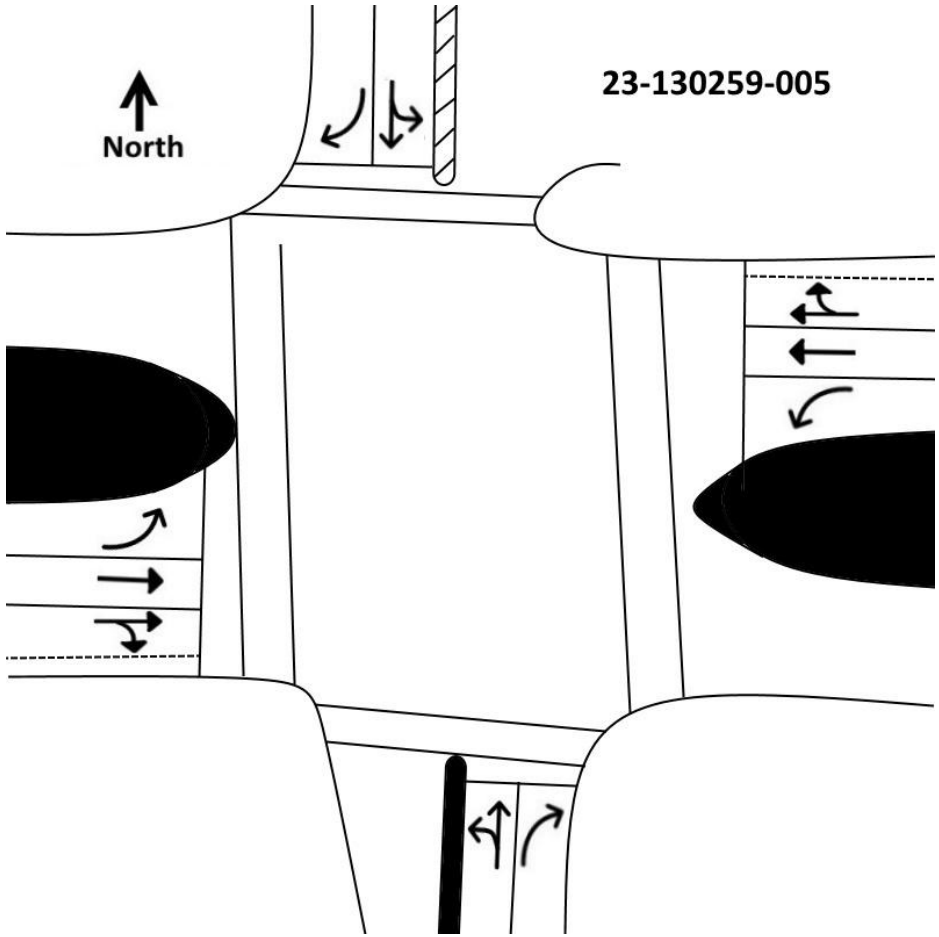
15-Min Count Period Beginning At	Bear Springs Dr/McLeod's Way Northbound					Bear Springs Dr/McLeod's Way Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	3	0	3	0		23	1	5	0		18	347	5	0		4	294	10	17		730	3194
4:15 PM	6	0	6	0		22	0	14	0		19	357	1	0		3	331	20	14		793	3360
4:30 PM	0	3	3	0		31	0	14	0		19	312	3	1		1	369	12	15		783	3490
4:45 PM	0	3	7	0		21	1	11	0		17	390	4	0		4	399	17	14		888	3618
5:00 PM	3	1	4	0		30	0	8	0		19	414	0	0		3	376	23	15		896	3635
5:15 PM	1	1	10	0		24	3	9	0		23	420	5	0		6	385	26	10		923	2739
5:30 PM	7	0	4	0		45	0	11	0		25	427	3	1		4	343	26	15		911	1816
5:45 PM	0	1	2	0		43	1	8	0		19	391	6	2		4	366	42	20		905	905
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	28	4	40	0		180	12	44	0		100	1708	24	8		24	1540	168	80		**3960**	
Heavy Trucks	0	0	0	0		4	0	0	0		4	12	0	0		0	76	8	4		**104**	
Pedestrians		0					16					8					4				**28**	
Bicycles	4	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		**4**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

N

N/S Street: **Bear Springs Dr/McLeod's Way**

Speed: **25 MPH**



E/W Street: **SR 434/SR 419**

Speed: **45 MPH**

Site Code: **23-130259-005**

Date: **09/12/2023**

Weather: **Sunny**

City: **Winter Springs**

County: **Seminole**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	1	2	3
SL/ST	00:34	-	00:20
NT/ST	-	00:30	00:16
EL/WL	00:18	-	-
ET/WT	01:58	02:20	02:14

Prepared by National Data & Surveying Services

Heritage Park St/Central Winds Dr & SR 434/SR 419

Peak Hour Turning Movement Count

ID: 23-130259-006
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS		COUNT PERIODS
07:45 AM - 08:45 AM	AM	7:00 AM - 09:00 AM
NONE	NOON	NONE
05:00 PM - 06:00 PM	PM	4:00 PM - 06:00 PM

SOUTHBOUND — Heritage Park St/Central Winds Dr

AM	184	14	153	0	405	AM
NOON	0	0	0	0	0	NOON
PM	141	6	94	0	398	PM

EASTBOUND — SR 434/SR 419

AM	NOON	PM	
1530	0	1449	⇦
0	0	0	↶ 0
200	0	210	↱ 0
1099	0	1612	→ 0
43	0	30	↴ 0
AM	NOON	PM	

WESTBOUND — SR 434/SR 419

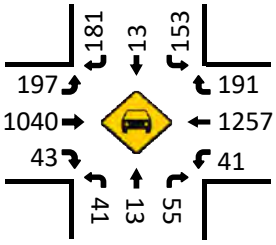
PM	NOON	AM	
186	0	191	0 ↰
1286	0	1305	0 ←
52	0	41	0 ↙
0	0	0	0 ↩
1762	0	1307	⇨
PM	NOON	AM	

NORTHBOUND — Heritage Park St/Central Winds Dr

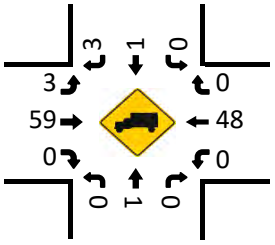
PM	88	0	22	2	56	PM
NOON	0	0	0	0	0	NOON
AM	98	0	41	14	55	AM

CONTROL			
Signalized			
TEV	3340 AM	0 NOON	3697 PM
PHF	0.90		0.97

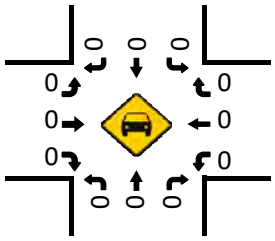
Cars (AM)



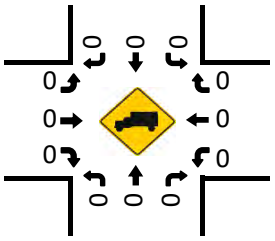
HT (AM)



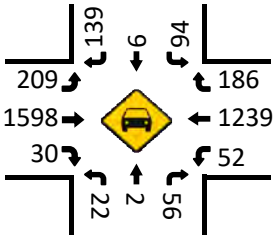
Cars (NOON)



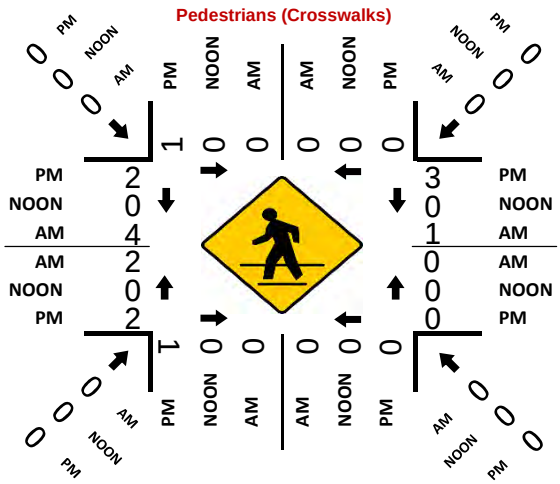
HT (NOON)



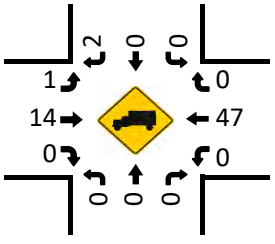
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)

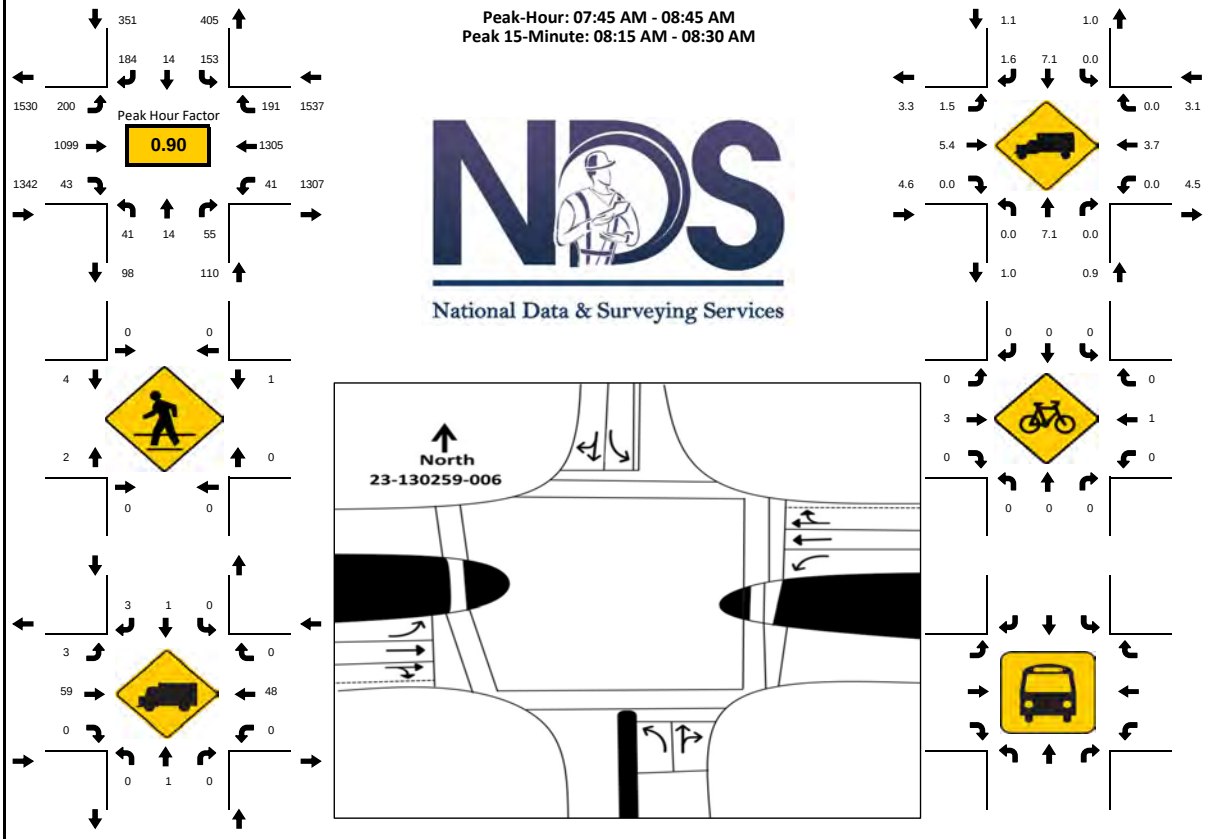


LOCATION: Heritage Park St/Central Winds Dr & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-006
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:45 AM - 08:45 AM
Peak 15-Minute: 08:15 AM - 08:30 AM

Peak Hour Factor: **0.90**

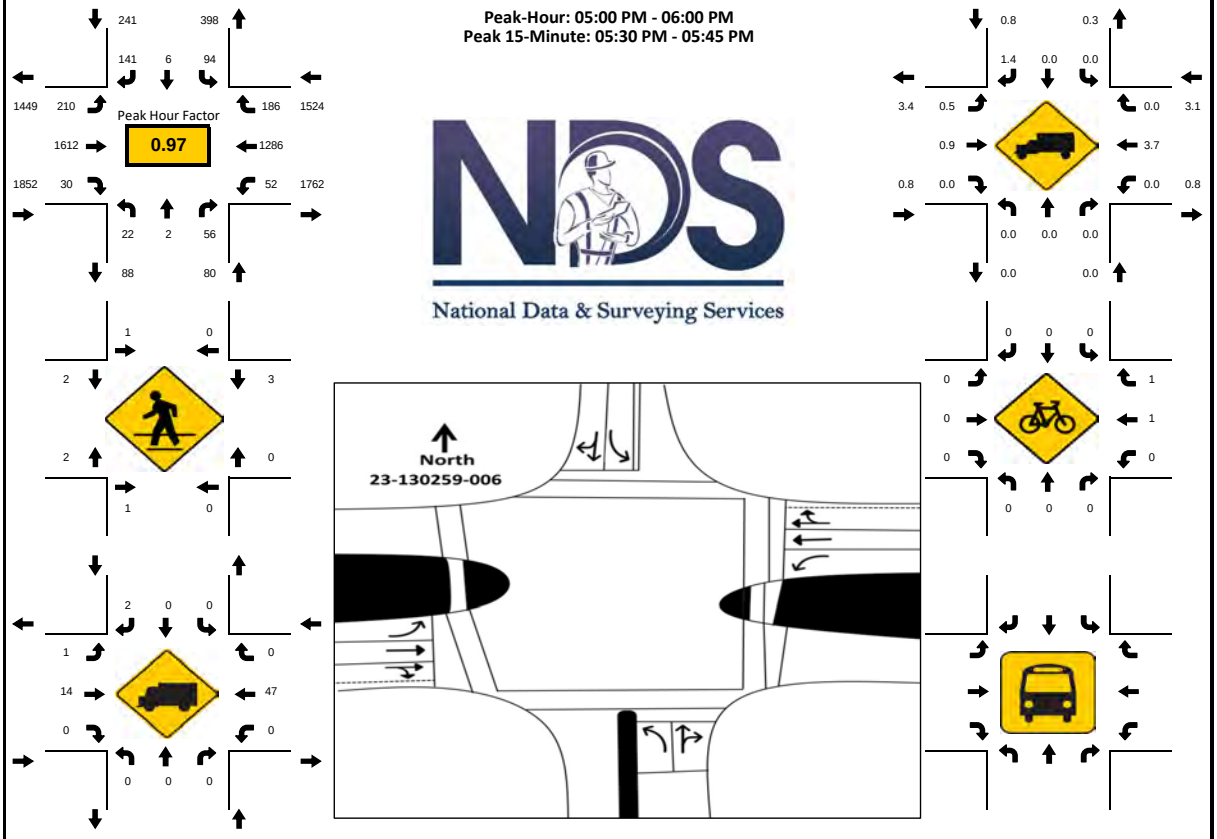


15-Min Count Period Beginning At	Heritage Park St/Central Winds D Northbound					Heritage Park St/Central Winds D Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	5	11	13	0		40	3	63	0		121	247	12	0		3	217	83	0		818	3175
7:15 AM	7	0	10	0		52	1	111	0		33	233	5	0		3	357	29	0		841	3146
7:30 AM	7	0	6	0		11	0	15	0		33	275	3	0		3	378	22	0		753	3235
7:45 AM	11	2	11	0		12	4	27	0		31	252	7	0		12	358	36	0		763	3340
8:00 AM	12	6	12	0		18	2	38	0		55	250	8	0		12	334	42	0		789	3246
8:15 AM	10	5	17	0		59	5	55	0		76	320	18	0		7	287	71	0		930	2457
8:30 AM	8	1	15	0		64	3	64	0		38	277	10	0		10	326	42	0		858	1527
8:45 AM	7	0	13	0		47	6	26	0		15	259	8	0		7	270	10	1		669	669
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	48	24	68	0		256	20	256	0		304	1280	72	0		48	1432	284	0		**4092**	
Heavy Trucks	0	4	0	0		0	4	4	0		8	92	0	0		0	72	0	0		**184**	
Pedestrians		0					0					12					4				**16**	
Bicycles	0	0	0	0		0	0	0	0		0	8	0	0		0	4	0	0		**12**	
Buses																						
Stopped Buses																						

LOCATION: Heritage Park St/Central Winds Dr & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-006
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:30 PM - 05:45 PM



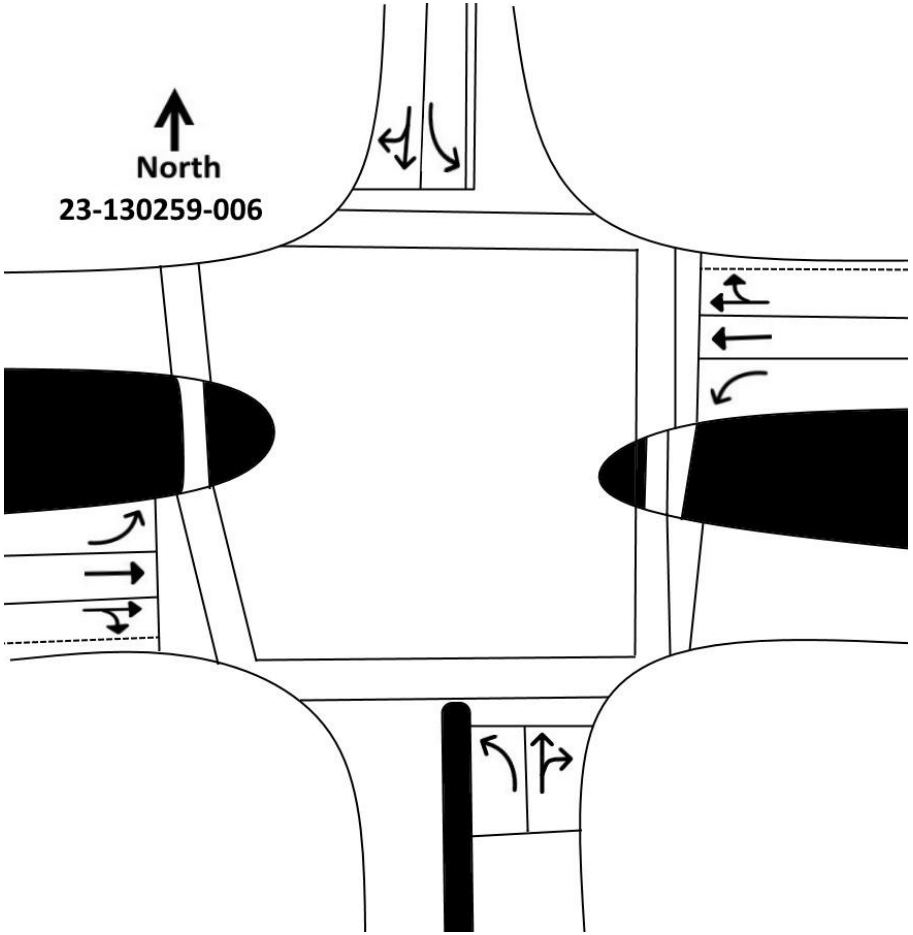
15-Min Count Period Beginning At	Heritage Park St/Central Winds D Northbound					Heritage Park St/Central Winds D Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	5	0	9	0		18	0	34	0		20	335	12	0		8	266	11	0		718	3167
4:15 PM	7	1	10	0		14	0	18	0		31	338	6	0		12	299	28	0		764	3373
4:30 PM	6	0	10	0		29	0	40	0		25	317	9	0		13	336	35	0		820	3486
4:45 PM	1	0	15	0		22	0	21	0		25	362	11	0		13	327	68	0		865	3623
5:00 PM	7	1	10	0		31	2	23	0		45	427	7	0		12	317	42	0		924	3697
5:15 PM	3	1	15	0		19	0	21	0		47	402	7	0		14	301	47	0		877	2773
5:30 PM	5	0	13	0		21	1	32	0		59	409	7	0		16	352	42	0		957	1896
5:45 PM	7	0	18	0		23	3	65	0		59	374	9	0		10	316	55	0		939	939
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	28	4	72	0		124	12	260	0		236	1708	36	0		64	1408	220	0		**4172**	
Heavy Trucks	0	0	0	0		0	0	8	0		4	20	0	0		0	76	0	0		**108**	
Pedestrians		4					4					8					12				**28**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	4	4	0		**8**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

N

N/S Street: **Heritage Park St/Central Winds Dr**

Speed: **N/A**



E/W Street: **SR 434/SR 419**

Speed: **XX**

Site Code: **23-130259-006**

Date: **09/12/2023**

Weather: **Sunny**

City: **Winter Springs**

County: **Seminole**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	**1**	**2**	**3**
NT/ST	00:21	00:25	00:23
WL/WT	00:27	00:21	00:24
ET/WT	01:25	01:26	01:26
EL/ET	00:38	00:39	00:36

2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 7700 SEMINOLE COUNTYWIDE

MOCF: 0.93

WEEK	DATES	SF	PSCF
1	01/01/2022 - 01/01/2022	1.00	1.08
2	01/02/2022 - 01/08/2022	1.03	1.11
3	01/09/2022 - 01/15/2022	1.05	1.13
4	01/16/2022 - 01/22/2022	1.03	1.11
5	01/23/2022 - 01/29/2022	1.01	1.09
6	01/30/2022 - 02/05/2022	0.98	1.05
7	02/06/2022 - 02/12/2022	0.96	1.03
* 8	02/13/2022 - 02/19/2022	0.94	1.01
* 9	02/20/2022 - 02/26/2022	0.93	1.00
*10	02/27/2022 - 03/05/2022	0.93	1.00
*11	03/06/2022 - 03/12/2022	0.92	0.99
*12	03/13/2022 - 03/19/2022	0.91	0.98
*13	03/20/2022 - 03/26/2022	0.92	0.99
*14	03/27/2022 - 04/02/2022	0.92	0.99
*15	04/03/2022 - 04/09/2022	0.93	1.00
*16	04/10/2022 - 04/16/2022	0.93	1.00
*17	04/17/2022 - 04/23/2022	0.94	1.01
*18	04/24/2022 - 04/30/2022	0.94	1.01
*19	05/01/2022 - 05/07/2022	0.95	1.02
*20	05/08/2022 - 05/14/2022	0.95	1.02
21	05/15/2022 - 05/21/2022	0.96	1.03
22	05/22/2022 - 05/28/2022	0.97	1.04
23	05/29/2022 - 06/04/2022	0.98	1.05
24	06/05/2022 - 06/11/2022	0.99	1.06
25	06/12/2022 - 06/18/2022	1.00	1.08
26	06/19/2022 - 06/25/2022	1.00	1.08
27	06/26/2022 - 07/02/2022	1.00	1.08
28	07/03/2022 - 07/09/2022	0.99	1.06
29	07/10/2022 - 07/16/2022	0.99	1.06
30	07/17/2022 - 07/23/2022	0.99	1.06
31	07/24/2022 - 07/30/2022	0.98	1.05
32	07/31/2022 - 08/06/2022	0.98	1.05
33	08/07/2022 - 08/13/2022	0.97	1.04
34	08/14/2022 - 08/20/2022	0.97	1.04
35	08/21/2022 - 08/27/2022	0.99	1.06
36	08/28/2022 - 09/03/2022	1.01	1.09
37	09/04/2022 - 09/10/2022	1.02	1.10
38	09/11/2022 - 09/17/2022	1.04	1.12
39	09/18/2022 - 09/24/2022	1.10	1.18
40	09/25/2022 - 10/01/2022	1.16	1.25
41	10/02/2022 - 10/08/2022	1.22	1.31
42	10/09/2022 - 10/15/2022	1.28	1.38
43	10/16/2022 - 10/22/2022	1.23	1.32
44	10/23/2022 - 10/29/2022	1.18	1.27
45	10/30/2022 - 11/05/2022	1.14	1.23
46	11/06/2022 - 11/12/2022	1.09	1.17
47	11/13/2022 - 11/19/2022	1.04	1.12
48	11/20/2022 - 11/26/2022	1.03	1.11
49	11/27/2022 - 12/03/2022	1.02	1.10
50	12/04/2022 - 12/10/2022	1.01	1.09
51	12/11/2022 - 12/17/2022	1.00	1.08
52	12/18/2022 - 12/24/2022	1.03	1.11
53	12/25/2022 - 12/31/2022	1.05	1.13

* PEAK SEASON

Seminole County Traffic Engineering Timing Sheet
Intersection: Tuskawilla Rd @ (01) Trotwood Blvd

Name	Tuskawilla		Trotwood		Tuskawilla		Trotwood		Ex-Ped								Phase Mode	User		Free Action		254			
Direction	NL	ST	EL	WT	SL	NT	WL	ET	P9								Free Seq	1		Syn Green					
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	InSync			P2P Pattern				
Phase/OL	1	2	3	4	5	6	7	8	9	10	11		13	14	15	16	Comm ID	2580		Node #		7578		
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	OLP	OLP	OLP	OLP	Date	August 16, 2023		Done By		SCTE\JVidal		
	Phase Times																Alt Phase Times 1							
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Phase							
Min Green	6	15	6	8	6	15	6	8									Min Green							
Passage	3	4	3	3	3	4	3	3									Passage							
Max 1	20	45	30	20	20	45	20	30									Max 1							
Max 2	20	100	30	20	20	100	20	30									Max 2							
Yellow Clr	4.8	4.8	3.4	3.4	4.8	4.8	3.4	3.4	3	3							Yel Clr							
Red Clr	2	2	2.6	3.2	2	2	2.2	3.2									Red Clr							
Walk		7		7		7		7	7	7							Walk							
Ped Clear		24		30		21		26	255	255							Ped Clr							
Red Revert	3	3	3	3	3	3	3	3	3	3							Alt Phase Times 2							
Added Init																	Phase							
Max Initial																	Min Green							
Max 3 Limit																	Passage							
Max 3 Step																	Max 1							
Time B-4																	Max 2							
Cars B-4																	Yel Clr							
Time to																	Red Clr							
Reduce By																	Walk							
Min Gap																	Ped Clr							
	Phase Options																	Alt Phase Opt 1						
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Phase	1	2	3	4	5	6	7	8
Enable	✓	✓	✓	✓	✓	✓	✓	✓									Max 2								
Min Recall		✓				✓											Max Inhibit	✓	✓	✓	✓	✓	✓		✓
Max Recall																	Cnf Phase								
Ped Recall																		Alt Phase Opt 2						
Soft Recall																	Phase	1	2	3	4	5	6	7	8
Lock Call		✓				✓											Max 2								
Flash Ent				✓				✓									Max Inhibit		✓				✓		
Flash Exit		✓				✓											Cnf Phase								
Dual Entry		✓		✓		✓		✓	✓	✓								Alt Phase Opt 3						
Sim Gap		✓				✓											Phase								
Cond Serv																	Max2								
Reservice																	Max Inhibit								
Cnf Phase																	Cnf Phase								

	Type	Included Phase						Modifier Phase						FYA	Grn	Yel	Red
Overlap - A																	
Overlap - B																	
Overlap - C																	
Overlap - D																	
Overlap - E																	
Overlap - F																	
Overlap - G	NORMAL	1	2	3	4											3	
Overlap - H	NORMAL	1	2	3	4	9	10									3	
Overlap - I																	
Overlap - J																	
Overlap - K																	
Overlap - L																	
Overlap - M	Ped 1	2	10													4.5	2
Overlap - N	Ped 1	4	10													4.5	2
Overlap - O	Ped 1	6	9													4.5	2
Overlap - P	Ped 1	8	9													4.5	2

Coordination Splits 1-16																	
Split 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	38	17	19	17	37	17	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	40	15	19	17	39	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =100	16	50	15	19	19	47	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =100	17	49	15	19	17	49	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	40	15	19	17	39	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	18	34	17	21	19	33	17	21									
Seq =1		✓															
Mode		MAX				MAX											
Split 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	40	15	19	17	39	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	18	34	17	21	19	33	17	21									
Seq =1		✓															
Mode		MAX				MAX											
Split 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	40	15	19	17	39	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =85	16	35	15	19	17	34	15	19									
Seq =1		✓															
Mode		MAX				MAX											

Day Plans 1-8									
Sunday	1	2	3	4	5				
	Hour		9	11	17	20			
P	Min		30	30	30	30			
L	Action	48	8	18	9	48			
A									
N	Hour								
	Min								
1	Action								
Monday	1	2	3	4	5	6	7		
	Hour		6	10	12	15	19	21	
P	Min		30		30	30		30	
L	Action	48	1	2	3	4	5	48	
A									
N	Hour								
	Min								
2	Action								
Tuesday	1	2	3	4	5	6	7		
	Hour		6	10	12	15	19	21	
P	Min		30		30	30		30	
L	Action	48	1	2	3	4	5	48	
A									
N	Hour								
	Min								
3	Action								
Wednesday	1	2	3	4	5	6	7		
	Hour		6	10	12	15	19	21	
P	Min		30		30	30		30	
L	Action	48	1	2	3	4	5	48	
A									
N	Hour								
	Min								
4	Action								
Thursday	1	2	3	4	5	6	7		
	Hour		6	10	12	15	19	21	
P	Min		30		30	30		30	
L	Action	48	1	2	3	4	5	48	
A									
N	Hour								
	Min								
5	Action								
Friday	1	2	3	4	5	6	7		
	Hour		6	10	11	15	19	21	
P	Min		30		30	30		30	
L	Action	48	1	2	3	4	5	48	
A									
N	Hour								
	Min								
6	Action								
Saturday	1	2	3	4	5				
	Hour		8	10	19	22			
P	Min								
L	Action	48	6	16	7	48			
A									
N	Hour								
	Min								
7	Action								
	Hour								
P	Min								
L	Action								
A									
N	Hour								
	Min								
8	Action								

Coordination Splits 17-32																	Day Plans 9-16	
Split 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =85	16	35	15	19	17	34	15	19									N	Hour
Seq =1		✓																Min
Mode		MAX				MAX											9	Action
Split 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	10	Action
Split 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	11	Action
Split 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	12	Action
Split 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	13	Action
Split 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	14	Action
Split 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	15	Action
Split 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	16	Action

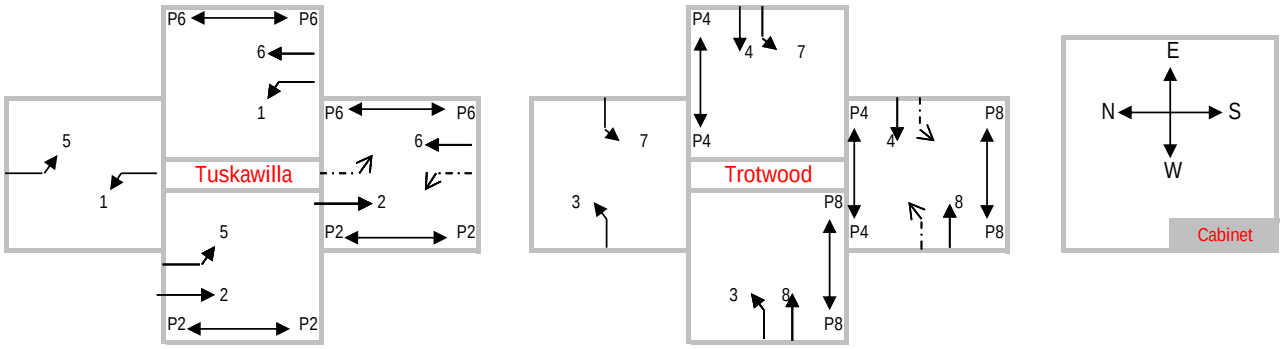
	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 1	90	38	1	1	2		1	1		12	22						✓									✓
Pattern - 2	90	68	2	1	2		1	1		12	22						✓									✓
Pattern - 3	100	12	3	1	2		1	1		12	22						✓									✓
Pattern - 4	100	19	4	1	2		1	1		12	22						✓									✓
Pattern - 5	90	42	5	1	2		1	1		12	22						✓									✓
Pattern - 6	90	42	6	1	2		1	1		12	22						✓									✓
Pattern - 7	90	42	7	1	2		1	1		12	22						✓									✓
Pattern - 8	90	42	8	1	2		1	1		12	22						✓									✓
Pattern - 9	90	42	9	1	2		1	1		12	22						✓									✓
Pattern - 10																										
Pattern - 11																										
Pattern - 12																										
Pattern - 13																										
Pattern - 14																										
Pattern - 15																										
Pattern - 16	85	42	16	1	2		1	1		12	22						✓									✓
Pattern - 17																										
Pattern - 18	85	42	18	1	2		1	1		12	22						✓									✓
Pattern - 19																										
Pattern - 20																										
Pattern - 21																										
Pattern - 22																										
Pattern - 23																										
Pattern - 24																										
Pattern - 25																										
Pattern - 26																										
Pattern - 27																										
Pattern - 28																										
Pattern - 29																										
Pattern - 30																										
Pattern - 31																										
Pattern - 32																										

	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 33																										
Pattern - 34																										
Pattern - 35																										
Pattern - 36																										
Pattern - 37																										
Pattern - 38																										
Pattern - 39																										
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Pattern - 44																										
Pattern - 45																										
Pattern - 46																										
Pattern - 47																										
Pattern - 48																										

BIU-1	Call	Swt	Dly	Lck	Src	BIU-2	Call	Swt	Dly	Lck	Src	BIU-3	Call	Swt	Dly	Lck	Src	BIU-4	Call	Swt	Dly	Lck	Src
Detector 1	1	6				17						33						49					
Detector 2	2					18						34						50					
Detector 3	2					19						35						51					
Detector 4	2					20						36						52					
Detector 5	2					21						37						53					
Detector 6	3	8				22						38						54					
Detector 7	4		8			23						39						55					
Detector 8	5	2				24						40						56					
Detector 9	6					25						41						57					
Detector 10	6					26						42						58					
Detector 11	6					27						43						59					
Detector 12	6					28						44						60					
Detector 13	7	4				29						45						61					
Detector 14	8		8			30						46						62					
Detector 15						31						47						63					
Detector 16						32	3					48						64					

	Enbl	Track Phase				Grn	Track Overlap			Dwell Phase								Dwl	Dwell Overlap				Exit Phase			
Pre Run 1																										
Pre Run 2																										
Pre Run 3	ON									3	8								7	8			4	8		
Pre Run 4	ON									4	7								7	8			4	8		
Pre Run 5	ON									2	5								7	8			2	6		
Pre Run 6	ON									1	6								7	8			2	6		

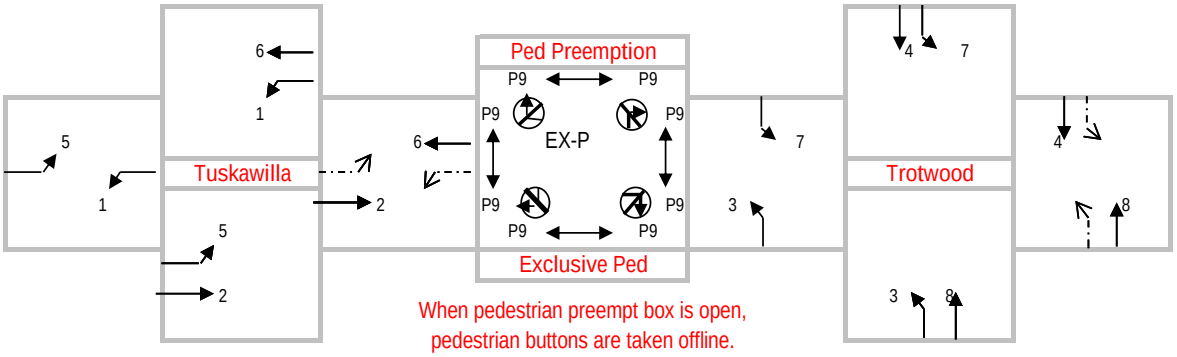
Intersection Notes	T.O.D Notes
Intersection set up with concurrent sides. All left turns are 5-sect. and Det. Switched. Intersection has Ped Pre-emption which brings up Ex-ped movement after ph 2&6. Combination of I/O logic and overlaps used for no right turn signs Ol G & H are used to reset the count downs for the ped crossings	Signal retimed March 2020. Pattern 48 used for normal Free operation. Ped Preemption uses 254. Ped button are taken offline when ped box door is opened. Signal runs coordination, preferred EXP operation is to keep box closed between actuations until EXP is needed every cycle, then leave door open.



Seg 1

Ring 1	1	2	3	4	9
Ring 2	5	6	7	8	10

Exlusive Ped Preemption Operation



When pedestrian preempt box is open, pedestrian buttons are taken offline.

Seminole County Traffic Engineering Timing Sheet
Intersection: SR 434 @ (36) Tuskawilla Rd

Name	SR 434		Tuskawilla		SR 434		Tuskawilla									
Direction	WL	ET		ST	EL	WT		NT								
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase/OL	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED

Phase Mode	STD8	Free Action	254
Free Seq	9	Syn Green	
InSync		P2P Pattern	
Comm ID	1365	Node #	2392
Date	February 7, 2023	Done By	SCTE\JVidal

Phase Times

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	6	15	6	6	6	15	6	6								
Passage	3	4	3	4	3	4	3	4								
Max 1	30	80	50	65	15	95	65	80								
Max 2	15	70	50	65	15	70	65	50								
Yellow Clr	4.9	4.9	4.8	3.4	4.9	4.9	3.4	4.8								
Red Clr	2.9	2.9	4.1	3.9	2.9	2.9	3.9	4.1								
Walk		7		7		7		7								
Ped Clear		33		40		21		41								
Red Revert	3	3	3	3	3	3	3	3								
Added Init																
Max Initial																
Max 3 Limit																
Max 3 Step																
Time B-4																
Cars B-4																
Time to																
Reduce By																
Min Gap																

Alt Phase Times 1

Phase			3	4			7	8
Min Green			6	6			6	6
Passage			6	6			6	6
Max 1			65	65			65	65
Max 2			65	65			65	65
Yel Clr			4.8	3.4			3.4	4.8
Red Clr			4.1	3.9			3.9	4.1
Walk				7				7
Ped Clr				40				41

Alt Phase Times 2

Phase								
Min Green								
Passage								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Phase Options

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable	✓	✓	✓	✓	✓	✓	✓	✓								
Min Recall		✓				✓										
Max Recall																
Ped Recall																
Soft Recall																
Lock Call	✓	✓		✓	✓	✓		✓								
Flash Ent			✓					✓								
Flash Exit		✓				✓										
Dual Entry		✓	✓	✓		✓	✓	✓								
Sim Gap		✓				✓										
Cond Serv																
Reservice																
Cnf Phase			7	8			3	4								

Alt Phase Opt 1

Phase	1	2	3	4	5	6	7	8
Max 2								
Max Inhibit	✓	✓	✓	✓	✓	✓	✓	✓
Cnf Phase			7	8			3	4

Alt Phase Opt 2

Phase	1	2	3	4	5	6	7	8
Max 2								
Max Inhibit		✓				✓		
Cnf Phase			7	8			3	4

Alt Phase Opt 3

Phase								
Max2								
Max Inhibit								
Cnf Phase								

Overlaps

	Type	Included Phase									Modifier Phase					FYA	Grn	Yel	Red
Overlap - A																			
Overlap - B																			
Overlap - C																			
Overlap - D																			
Overlap - E																			
Overlap - F																			
Overlap - G																			
Overlap - H																			
Overlap - I																			
Overlap - J																			
Overlap - K																			
Overlap - L																			
Overlap - M																			
Overlap - N																			
Overlap - O																			
Overlap - P																			

Coordination Splits 1-16																	
Split 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	29	66	57	28	18	77	28	57									
Seq =10		✓															
Mode		MIN				MIN											
Split 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	27	47	40	26	20	54	26	40									
Seq =9		✓															
Mode		MAX				MAX											
Split 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =170	26	78	37	29	18	86	29	37									
Seq =9		✓															
Mode		MAX				MAX											
Split 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	23	46	34	27	19	50	27	34									
Seq =10		✓															
Mode		MAX				MAX											
Split 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	23	40	28	19	18	45	19	28									
Seq =10		✓															
Mode		MAX				MAX											
Split 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	21	38	33	18	18	41	18	33									
Seq =6		✓															
Mode		MAX				MAX											
Split 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	23	40	28	19	18	45	19	28									
Seq =10		✓															
Mode		MAX				MAX											
Split 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	21	38	33	18	18	41	18	33									
Seq =6		✓															
Mode		MAX				MAX											
Split 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	23	45	78	34	20	48	34	78									
Seq =10		✓															
Mode		MIN				MIN											
Split 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	22	37	36	45	19	40	45	36									
Seq =9		✓															
Mode		MAX				MAX											
Split 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	26	38	33	33	18	46	33	33									
Seq =10		✓															
Mode		MAX				MAX											

Day Plans 1-8									
Sunday	1	2	3	4	5				
Hour		9	10	18	19				
P Min		30	30	30	30				
L Action	99	8	18	9	99				
A									
N Hour									
Min									
1 Action									
Monday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	9	14	14	
P Min			45	10	30	30	15	45	
L Action	99	1	11	21	1	3	13	3	
A	9	10	11						
N Hour	15	19	21						
Min	15								
2 Action	4	5	99						
Tuesday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	9	14	14	
P Min			45	10	30	30	15	45	
L Action	99	1	11	21	1	3	13	3	
A	9	10	11						
N Hour	15	19	21						
Min	15								
3 Action	4	5	99						
Wednesday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	9	13	13	
P Min			45	10	30	30	15	45	
L Action	99	1	11	21	1	3	13	3	
A	9	10	11						
N Hour	15	19	21						
Min	15								
4 Action	4	5	99						
Thursday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	9	14	14	
P Min			45	10	30	30	15	45	
L Action	99	1	11	21	1	3	13	3	
A	9	10	11						
N Hour	15	19	21						
Min	15								
5 Action	4	5	99						
Friday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	9	14	14	
P Min			45	10	30	30	15	45	
L Action	99	1	11	21	1	3	13	3	
A	9	10	11						
N Hour	15	19	21						
Min	15								
6 Action	4	5	99						
Saturday	1	2	3	4	5				
Hour		8	9	17	20				
P Min			30	30	30				
L Action	99	6	16	7	99				
A									
N Hour									
Min									
7 Action									
	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	9	11	12	
P Min			45	10	30	30	25	45	
L Action	99	1	11	21	1	3	13	3	
A	9	10	11						
N Hour	15	19	21						
Min	15								
8 Action	4	5	99						

Coordination Splits 17-32																	Day Plans 9-16	
Split 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	25	92	40	33	20	97	33	40										Hour
Seq =6		✓															P	Min
Mode		MAX				MAX											L	Action
Split 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =130	26	38	33	33	18	46	33	33									N	Hour
Seq =10		✓																Min
Mode		MAX				MAX											9	Action
Split 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	25	92	40	33	20	97	33	40										Hour
Seq =9		✓															P	Min
Mode		MAX				MAX											L	Action
Split 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	10	Action
Split 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =180	23	46	55	56	23	46	55	56										Hour
Seq =10		✓															P	Min
Mode		MAX				MAX											L	Action
Split 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	11	Action
Split 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	12	Action
Split 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	13	Action
Split 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	14	Action
Split 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	15	Action
Split 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	16	Action

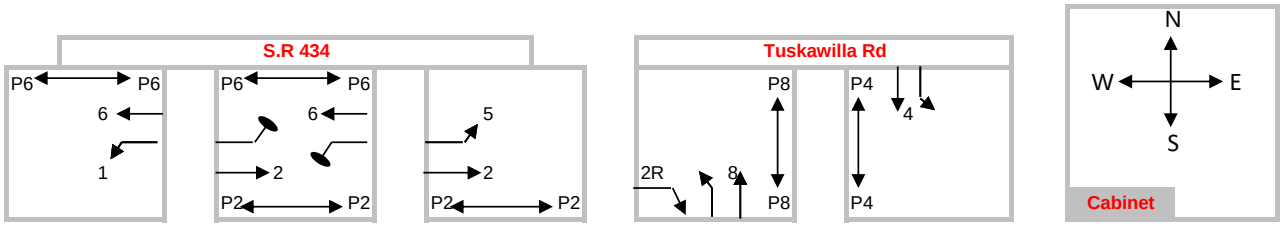
	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 1	180	1	1	10	2		1			12	22			10				✓								
Pattern - 2																										
Pattern - 3	140	13	3	9	2		1			12	22	1					✓	✓								
Pattern - 4	170	77	4	9	2		2			12	22					✓	✓	✓								
Pattern - 5	130	22	5	10	2		1			12	22						✓	✓								
Pattern - 6	110	64	6	10	2		1			12	22						✓	✓								
Pattern - 7	110	58	7	6	2		1			12	22						✓	✓								
Pattern - 8	110	64	8	10	2		1			12	22						✓	✓								
Pattern - 9	110	58	9	6	2		1			12	22						✓	✓								
Pattern - 10																										
Pattern - 11	180	1	11	10	2		1			12	22			10				✓								
Pattern - 12																										
Pattern - 13	140	10	13	9	2	1	2			12	22					✓	✓	✓								
Pattern - 14																										
Pattern - 15																										
Pattern - 16	130	8	16	10	2		2			12	22					✓	✓	✓								
Pattern - 17	190	141	17	6	2		1			12	22						✓	✓								
Pattern - 18	130	8	18	10	2		2			12	22					✓	✓	✓								
Pattern - 19	190	93	19	9	2		1			12	22						✓	✓								
Pattern - 20																										
Pattern - 21	180	1	21	10	2		1			12	22						✓	✓								
Pattern - 22																										
Pattern - 23																										
Pattern - 24																										
Pattern - 25																										
Pattern - 26																										
Pattern - 27																										
Pattern - 28																										
Pattern - 29																										
Pattern - 30																										
Pattern - 31																										
Pattern - 32																										

	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 33																										
Pattern - 34																										
Pattern - 35																										
Pattern - 36																										
Pattern - 37																										
Pattern - 38																										
Pattern - 39																										
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Pattern - 42																										
Pattern - 43																										
Pattern - 44																										
Pattern - 45																										
Pattern - 46																										
Pattern - 47																										
Pattern - 48																										

BIU-1	Call	Swt	Dly	Lck	Src	BIU-2	Call	Swt	Dly	Lck	Src	BIU-3	Call	Swt	Dly	Lck	Src	BIU-4	Call	Swt	Dly	Lck	Src
Detector 1	1					17						33						49					
Detector 2	2					18						34						50					
Detector 3	2					19						35						51					
Detector 4	4					20						36						52					
Detector 5	4					21						37						53					
Detector 6	5					22						38						54					
Detector 7	6					23						39						55					
Detector 8	6					24						40						56					
Detector 9	6					25						41						57					
Detector 10	6					26						42						58					
Detector 11	8					27						43						59					
Detector 12	8					28						44						60					
Detector 13	8					29						45						61					
Detector 14						30						46						62					
Detector 15						31						47						63					
Detector 16						32						48						64					

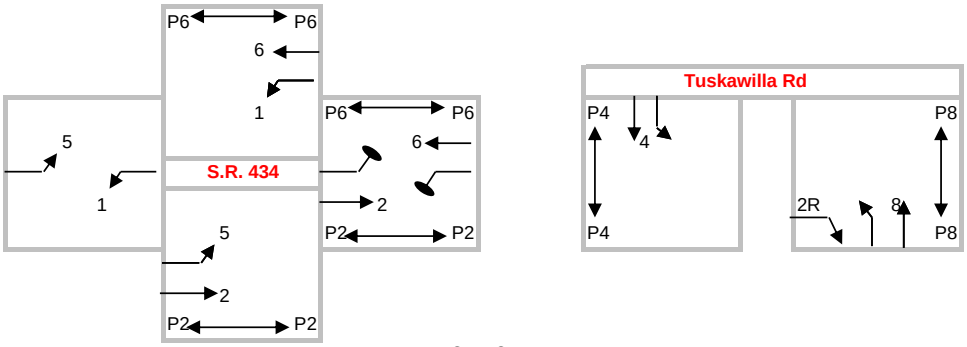
	Enbl	Track Phase				Grn	Track Overlap			Dwell Phase								Dwl	Dwell Overlap				Exit Phase			
Pre Run 1																										
Pre Run 2																										
Pre Run 3	ON									3	8												1	5		
Pre Run 4	ON									4	7												1	5		
Pre Run 5	ON									2	5												2	6		
Pre Run 6	ON									1	6												2	6		

Intersection Notes	T.O.D Notes
Intersection set as concurent sides. But operates as Q-Seq due to set up of controller (phases enabled and conflicting phases). Main street LT's changed to protected Jan 2018 per FDOT. 2R hardwired to Phase 8.	Intersection re-timed February 2020. Patterns 11,13 & 21 are used for High School rush. Alt Time Plan 1 to allow higher extend times to phase 4 for PM school rush time. Pattern 17 and 19 used for SR 417 diversion Route.



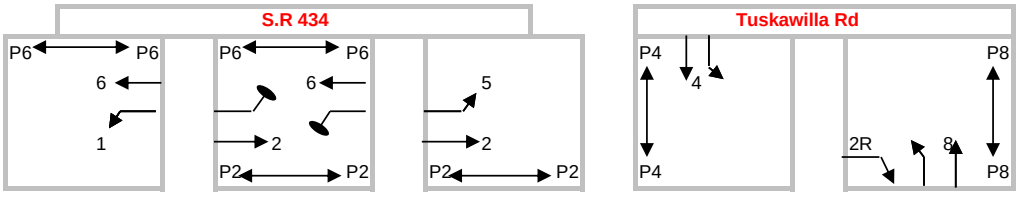
Seq 6

Ring 1	**1**	**2**	3	**4**
Ring 2	**6**	**5**	**8**	7



Seq 9

Ring 1	**1**	**2**	**4**	3
Ring 2	**5**	**6**	7	**8**



Seq 10

Ring 1	**1**	**2**	**4**	3
Ring 2	**6**	**5**	7	**8**

Seminole County Traffic Engineering Timing Sheet
Intersection: SR 434 @ (35) Bear Springs Dr

Name	SR 434		Bear Spgs		SR 434		Bear Spgs									
Direction	WL	ET		ST	EL	WT	SL	NT								
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase/OL	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED

Phase Mode	STD8	Free Action	254
Free Seq	1	Syn Green	
InSync		P2P Pattern	
Comm ID	1360	Node #	12076
Date	February 7, 2023	Done By	SCTE\JVidal

Phase Times

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	6	15		8	6	15	6	8								
Passage	3	5		3	3	5	3	3								
Max 1	30	120		25	30	110	20	20								
Max 2	30	70		20	30	70	20	20								
Yellow Clr	4.8	4.8		3.4	4.8	4.8	3.4	3.4								
Red Clr	2.3	2		3.8	2.1	2	2.9	3.8								
Walk		7		7		7		7								
Ped Clear		19		32		19		31								
Red Revert	3	3		3	3	3	3	3								
Added Init																
Max Initial																
Max 3 Limit																
Max 3 Step																
Time B-4																
Cars B-4																
Time to																
Reduce By																
Min Gap																

Alt Phase Times 1

Phase								
Min Green								
Passage								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt Phase Times 2

Phase								
Min Green								
Passage								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Phase Options

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable	✓	✓		✓	✓	✓	✓	✓								
Min Recall		✓				✓										
Max Recall																
Ped Recall																
Soft Recall																
Lock Call	✓	✓			✓	✓										
Flash Ent				✓				✓								
Flash Exit		✓				✓										
Dual Entry		✓		✓		✓	✓									
Sim Gap		✓				✓										
Cond Serv																
Reservice																
Cnf Phase																

Alt Phase Opt 1

Phase	1	2		4	5	6	7	8
Max 2								
Max Inhibit	✓	✓		✓	✓	✓	✓	✓
Cnf Phase								

Alt Phase Opt 2

Phase	1	2		4	5	6	7	8
Max 2								
Max Inhibit		✓				✓		
Cnf Phase								

Alt Phase Opt 3

Phase								
Max2								
Max Inhibit								
Cnf Phase								

	Type	Included Phase	Modifier Phase	FYA	Grn	Yel	Red
Overlap - A							
Overlap - B							
Overlap - C							
Overlap - D							
Overlap - E							
Overlap - F							
Overlap - G							
Overlap - H							
Overlap - I							
Overlap - J							
Overlap - K							
Overlap - L							
Overlap - M							
Overlap - N							
Overlap - O							
Overlap - P							

Coordination Splits 1-16																	
Split 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	17	123		40	16	124	19	21									
Seq =1		✓															
Mode		MAX				MAX											
Split 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	18	85		37	19	84	18	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =170	19	116		35	24	111	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	19	72		39	18	73	16	23									
Seq =1		✓															
Mode		MAX				MAX											
Split 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	17	58		35	16	59	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	17	58		35	16	59	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	17	58		35	16	59	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	17	58		35	16	59	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	17	76		37	16	77	18	19									
Seq =1		✓															
Mode		MAX				MAX											

Day Plans 1-8									
Sunday	1	2	3	4	5				
Hour		9	10	18	19				
P Min		30	30	30	30				
L Action	254	8	18	9	254				
A									
N Hour									
Min									
1 Action									
Monday	1	2	3	4	5	6			
Hour		6	9	15	19	21			
P Min			30	15					
L Action	254	1	3	4	5	254			
A									
N Hour									
Min									
2 Action									
Tuesday	1	2	3	4	5	6			
Hour		6	9	15	19	21			
P Min			30	15					
L Action	254	1	3	4	5	254			
A									
N Hour									
Min									
3 Action									
Wednesday	1	2	3	4	5	6			
Hour		6	9	15	19	21			
P Min			30	15					
L Action	254	1	3	4	5	254			
A									
N Hour									
Min									
4 Action									
Thursday	1	2	3	4	5	6			
Hour		6	9	15	19	21			
P Min			30	15					
L Action	254	1	3	4	5	254			
A									
N Hour									
Min									
5 Action									
Friday	1	2	3	4	5	6			
Hour		6	9	15	19	21			
P Min			30	15					
L Action	254	1	3	4	5	254			
A									
N Hour									
Min									
6 Action									
Saturday	1	2	3	4	5				
Hour		8	9	17	20				
P Min			30	30	30				
L Action	254	6	16	7	254				
A									
N Hour									
Min									
7 Action									
Hour									
P Min									
L Action									
A									
N Hour									
Min									
8 Action									

Coordination Splits 17-32																	Day Plans 9-16	
Split 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	20	131		39	26	125	20	19										Hour
Seq =1		✓															P	Min
Mode		MAX				MAX											L	Action
Split 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =130	17	76		37	16	77	18	19									N	Hour
Seq =1		✓																Min
Mode		MAX				MAX											9	Action
Split 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	20	131		39	26	125	20	19										Hour
Seq =1		✓															P	Min
Mode		MAX				MAX											L	Action
Split 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	10	Action
Split 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	11	Action
Split 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	12	Action
Split 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	13	Action
Split 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	14	Action
Split 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	15	Action
Split 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	16	Action

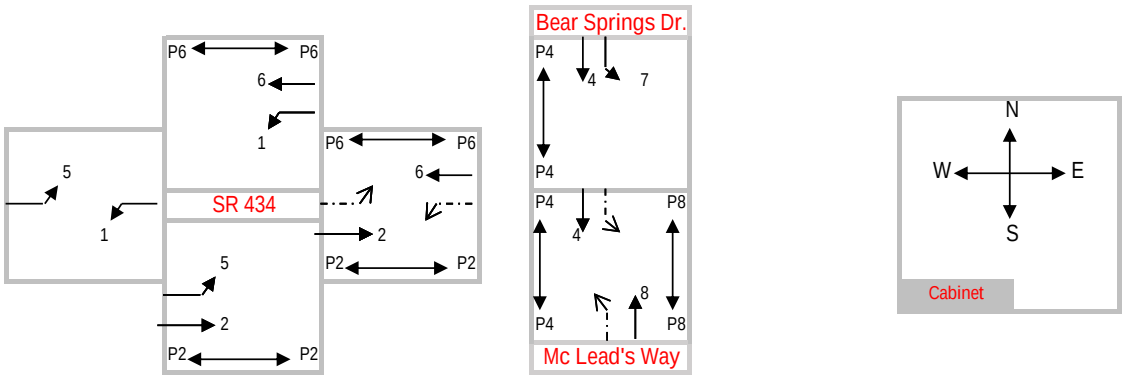
	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 1	180	20	1	1	2		1			12	22						✓	✓								
Pattern - 2																										
Pattern - 3	140	29	3	1	2		2			12	22					✓	✓	✓								
Pattern - 4	170	79	4	1	2		1			12	22						✓	✓								
Pattern - 5	130	11	5	1	2		1			12	22						✓	✓								
Pattern - 6	110	58	6	1	2		1			12	22						✓	✓								
Pattern - 7	110	52	7	1	2		1			12	22						✓	✓								
Pattern - 8	110	58	8	1	2		1			12	22						✓	✓								
Pattern - 9	110	52	9	1	2		1			12	22						✓	✓								
Pattern - 10																										
Pattern - 11																										
Pattern - 12																										
Pattern - 13																										
Pattern - 14																										
Pattern - 15																										
Pattern - 16	130	19	16	1	2		1			12	22						✓	✓								
Pattern - 17	190	155	17	1	2		1			12	22						✓	✓								
Pattern - 18	130	19	18	1	2		1			12	22						✓	✓								
Pattern - 19	190	138	19	1	2		1			12	22						✓	✓								
Pattern - 20																										
Pattern - 21																										
Pattern - 22																										
Pattern - 23																										
Pattern - 24																										
Pattern - 25																										
Pattern - 26																										
Pattern - 27																										
Pattern - 28																										
Pattern - 29																										
Pattern - 30																										
Pattern - 31																										
Pattern - 32																										

	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 33																										
Pattern - 34																										
Pattern - 35																										
Pattern - 36																										
Pattern - 37																										
Pattern - 38																										
Pattern - 39																										
Pattern - 40																										
Pattern - 41																										
Pattern - 42																										
Pattern - 43																										
Pattern - 44																										
Pattern - 45																										
Pattern - 46																										
Pattern - 47																										
Pattern - 48																										

BIU-1	Call	Swt	Dly	Lck	Src	BIU-2	Call	Swt	Dly	Lck	Src	BIU-3	Call	Swt	Dly	Lck	Src	BIU-4	Call	Swt	Dly	Lck	Src
Detector 1	1	6				17						33						49					
Detector 2	2					18						34						50					
Detector 3	2					19						35						51					
Detector 4	2					20						36						52					
Detector 5	2					21						37						53					
Detector 6	8					22						38						54					
Detector 7	4		8			23						39						55					
Detector 8	5	2				24						40						56					
Detector 9	6					25						41						57					
Detector 10	6					26						42						58					
Detector 11	6					27						43						59					
Detector 12	6					28						44						60					
Detector 13	7					29						45						61					
Detector 14	8		8			30						46						62					
Detector 15						31						47						63					
Detector 16						32						48						64					

	Enbl	Track Phase				Grn	Track Overlap			Dwell Phase								Dwl	Dwell Overlap				Exit Phase			
Pre Run 1																										
Pre Run 2																										
Pre Run 3	ON									8													4	8		
Pre Run 4	ON									4	7												4	8		
Pre Run 5	ON									2	5												2	6		
Pre Run 6	ON									1	6												2	6		

Intersection Notes	T.O.D Notes
Intersection set up with concurent sides. Phases 1 & 5 are 5_sec and use Det switching. Phase 7 extended with sourcing if no call on 8.	Intersection re-timed Feb 2020. Patterns 17 and 19 are used for SR 417 Diversion Routes.



Seq 1

Ring 1	1	2	3	4
Ring 2	5	6	7	8

Seminole County Traffic Engineering Timing Sheet
Intersection: SR 434 @ (34) Central Winds

Name	SR 434		Cntrl Wnds		SR 434		Cntrl Wnds									
Direction	WL	ET		ST	EL	WT		NT								
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase/OL	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED

Phase Mode	STD8	Free Action	254
Free Seq	1	Syn Green	
InSync		P2P Pattern	
Comm ID	1355	Node #	10641
Date	February 6, 2023	Done By	SCTE\JVidal

Phase Times

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	6	15		8	6	15		8								
Passage	4	5		5	5	5		4								
Max 1	20	120		35	45	85		35								
Max 2	20	70		35	20	70		20								
Yellow Clr	4.8	4.8		3.4	4.8	4.8		3.4								
Red Clr	2.8	2.8		2.9	2.8	2.8		2.9								
Walk		7		7		7		7								
Ped Clear		28		31		26		32								
Red Revert	3	3		3	3	3		3								
Added Init																
Max Initial																
Max 3 Limit																
Max 3 Step																
Time B-4																
Cars B-4																
Time to																
Reduce By																
Min Gap																

Alt Phase Times 1

Phase				4	5			
Min Green				8	6			
Passage				10	7			
Max 1				80	50			
Max 2				80	50			
Yel Clr				3.4	4.8			
Red Clr				2.9	2.8			
Walk				7				
Ped Clr				31				

Alt Phase Times 2

Phase								
Min Green								
Passage								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Phase Options

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable	✓	✓		✓	✓	✓		✓								
Min Recall		✓				✓										
Max Recall																
Ped Recall																
Soft Recall																
Lock Call	✓	✓		✓	✓	✓		✓								
Flash Ent				✓				✓								
Flash Exit		✓				✓										
Dual Entry		✓		✓		✓		✓								
Sim Gap		✓				✓										
Cond Serv																
Reservice																
Cnf Phase																

Alt Phase Opt 1

Phase	1	2		4	5	6		8
Max 2								
Max Inhibit	✓	✓		✓	✓	✓		✓
Cnf Phase								

Alt Phase Opt 2

Phase	1	2		4	5	6		8
Max 2								
Max Inhibit		✓				✓		
Cnf Phase								

Alt Phase Opt 3

Phase								
Max2								
Max Inhibit								
Cnf Phase								

	Type	Included Phase	Modifier Phase	FYA	Grn	Yel	Red
Overlap - A							
Overlap - B							
Overlap - C							
Overlap - D							
Overlap - E							
Overlap - F							
Overlap - G							
Overlap - H							
Overlap - I							
Overlap - J							
Overlap - K							
Overlap - L							
Overlap - M							
Overlap - N							
Overlap - O							
Overlap - P							

Coordination Splits 1-16																	
Split 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	21	109		50	42	88		50									
Seq =3						✓											
Mode		MAX				MAX											
Split 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	17	96		27	31	82		27									
Seq =1		✓															
Mode		MAX				MAX											
Split 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =170	25	119		26	40	104		26									
Seq =2		✓															
Mode		MAX				MAX											
Split 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	17	68		45	20	65		45									
Seq =2		✓															
Mode		MAX				MAX											
Split 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	19	45		46	21	43		46									
Seq =2		✓															
Mode		MAX				MAX											
Split 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	20	44		46	19	45		46									
Seq =2		✓															
Mode		MAX				MAX											
Split 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	19	45		46	21	43		46									
Seq =2		✓															
Mode		MAX				MAX											
Split 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	20	44		46	19	45		46									
Seq =2		✓															
Mode		MAX				MAX											
Split 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	18	128		34	74	72		34									
Seq =3						✓											
Mode		MAX				MAX											
Split 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	25	55		60	30	50		60									
Seq =1		✓															
Mode		MAX				MAX											
Split 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =170	25	85		60	40	70		60									
Seq =2		✓															
Mode		MAX				MAX											
Split 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	17	67		46	19	65		46									
Seq =3						✓											
Mode		MAX				MAX											

Day Plans 1-8									
Sunday	1	2	3	4	5				
Hour		9	10	18	19				
P Min		30	30	30	30				
L Action	254	8	18	9	254				
A									
N Hour									
Min									
1 Action									
Monday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	14	14	15	15	16	19	21	
Min	30	20	45		15				
2 Action	3	13	3	13	14	4	5	254	
Tuesday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	14	14	15	15	16	19	21	
Min	30	20	45		15				
3 Action	3	13	3	13	14	4	5	254	
Wednesday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	13	13	14	14	15	19	21	
Min	30	15	45		45	15			
4 Action	3	13	3	13	3	4	5	254	
Thursday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	14	14	15	15	16	19	21	
Min	30	20	45		15				
5 Action	3	13	3	13	14	4	5	254	
Friday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	14	14	15	15	16	19	21	
Min	30	20	45		15				
6 Action	3	13	3	13	14	4	5	254	
Saturday	1	2	3	4	5				
Hour		8	9	17	20				
P Min			30	30	30				
L Action	254	6	16	7	254				
A									
N Hour									
Min									
7 Action									
	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	11	12	15	15	16	19	21	
Min	30		45		15				
8 Action	3	13	3	13	14	4	5	2	

Coordination Splits 17-32																	
Split 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =190	21	139		30	29	131		30									
Seq =3						✓											P
Mode		MAX				MAX											L
Split 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A
Cycle =130	17	67		46	19	65		46									N
Seq =3						✓											
Mode		MAX				MAX											9
Split 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =190	21	139		30	29	131		30									
Seq =3						✓											P
Mode		MAX				MAX											L
Split 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A
Cycle =_																	N
Seq =_																	
Mode																	10
Split 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	18	97		65	39	76		65									
Seq =3						✓											P
Mode		MAX				MAX											L
Split 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A
Cycle =_																	N
Seq =_																	
Mode																	11
Split 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	P
Mode																	L
Split 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A
Cycle =_																	N
Seq =_																	
Mode																	12
Split 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	P
Mode																	L
Split 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A
Cycle =_																	N
Seq =_																	
Mode																	13
Split 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	P
Mode																	L
Split 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A
Cycle =_																	N
Seq =_																	
Mode																	14
Split 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	P
Mode																	L
Split 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A
Cycle =_																	N
Seq =_																	
Mode																	15
Split 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	P
Mode																	L
Split 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A
Cycle =_																	N
Seq =_																	
Mode																	16

Day Plans 9-16	
	Hour
P	Min
L	Action
A	
N	Hour
	Min
9	Action
	Hour
P	Min
L	Action
A	
N	Hour
	Min
10	Action
	Hour
P	Min
L	Action
A	
N	Hour
	Min
11	Action
	Hour
P	Min
L	Action
A	
N	Hour
	Min
12	Action
	Hour
P	Min
L	Action
A	
N	Hour
	Min
13	Action
	Hour
P	Min
L	Action
A	
N	Hour
	Min
14	Action
	Hour
P	Min
L	Action
A	
N	Hour
	Min
15	Action
	Hour
P	Min
L	Action
A	
N	Hour
	Min
16	Action

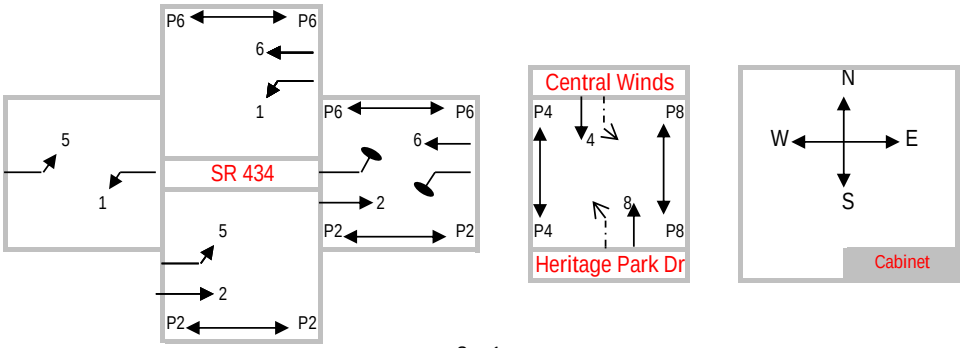
	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 1	180	35	1	3	6		1			12	22						✓	✓								
Pattern - 2																										
Pattern - 3	140	77	3	1	2		1			12	22						✓	✓								
Pattern - 4	170	37	4	2	2		1			12	22						✓	✓								
Pattern - 5	130	90	5	2	2		1			12	22						✓	✓								
Pattern - 6	110	13	6	2	2		2			12	22					✓	✓	✓								
Pattern - 7	110	1	7	2	2		2			12	22					✓	✓	✓								
Pattern - 8	110	13	8	2	2		2			12	22					✓	✓	✓								
Pattern - 9	110	1	9	2	2		2			12	22					✓	✓	✓								
Pattern - 10																										
Pattern - 11	180	35	11	3	6	1	1			12	22						✓	✓								
Pattern - 12																										
Pattern - 13	140	77	13	1	2	1	1			12	22						✓	✓								
Pattern - 14	170	37	14	2	2	1	1			12	22						✓	✓								
Pattern - 15																										
Pattern - 16	130	17	16	3	6		2			12	22					✓	✓	✓								
Pattern - 17	190	146	17	3	6		1			12	22						✓	✓								
Pattern - 18	130	17	18	3	6		2			12	22					✓	✓	✓								
Pattern - 19	190	138	19	3	6		1			12	22						✓	✓								
Pattern - 20																										
Pattern - 21	180	35	21	3	6	1	1			12	22						✓	✓								
Pattern - 22																										
Pattern - 23																										
Pattern - 24																										
Pattern - 25																										
Pattern - 26																										
Pattern - 27																										
Pattern - 28																										
Pattern - 29																										
Pattern - 30																										
Pattern - 31																										
Pattern - 32																										

	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 33																										
Pattern - 34																										
Pattern - 35																										
Pattern - 36																										
Pattern - 37																										
Pattern - 38																										
Pattern - 39																										
Pattern - 40																										
Pattern - 41																										
Pattern - 42																										
Pattern - 43																										
Pattern - 44																										
Pattern - 45																										
Pattern - 46																										
Pattern - 47																										
Pattern - 48																										

BIU-1	Call	Swt	Dly	Lck	Src	BIU-2	Call	Swt	Dly	Lck	Src	BIU-3	Call	Swt	Dly	Lck	Src	BIU-4	Call	Swt	Dly	Lck	Src
Detector 1	1					17						33						49					
Detector 2	2					18						34						50					
Detector 3	2					19						35						51					
Detector 4	2					20						36						52					
Detector 5	2					21						37						53					
Detector 6	8					22						38						54					
Detector 7	4		10			23						39						55					
Detector 8	5					24						40						56					
Detector 9	5					25						41						57					
Detector 10	6					26						42						58					
Detector 11	6					27						43						59					
Detector 12	6					28						44						60					
Detector 13	6					29						45						61					
Detector 14	4					30						46						62					
Detector 15	8		10			31						47						63					
Detector 16						32						48						64					

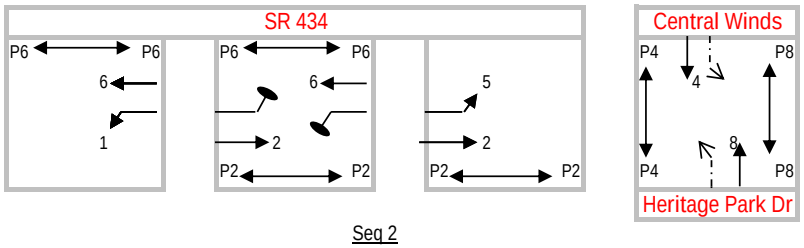
	Enbl	Track Phase				Grn	Track Overlap			Dwell Phase								Dwl	Dwell Overlap				Exit Phase			
Pre Run 1																										
Pre Run 2																										
Pre Run 3	ON									8													4	8		
Pre Run 4	ON									4													4	8		
Pre Run 5	ON									2	5												2	6		
Pre Run 6	ON									1	6												2	6		

Intersection Notes	T.O.D Notes
Intersection set up with concurent sides. Mainstreet LT's are Protected and lock detected. Protected LT's for main street added June 2018.	Patterns 11, 21, 13 & 14 used for schools rush time and use alt time table 1 with 10sec passage extension for phase 4 and 7sec for phase 5 for schools' rush hour traffic. Pattern 17 and 19 are used for SR 417 Diversion Routes. Day Plan 8 used for early dismissal from school at request of principals. Intersection re-timed Feb 2020.



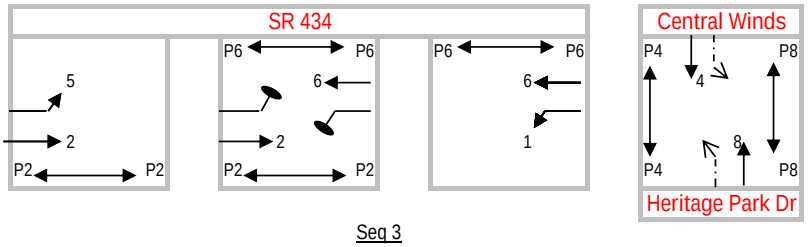
Seq 1

Ring 1	1	2	3	4
Ring 2	5	6	7	8



Seq 2

Ring 1	1	2	3	4
Ring 2	6	5	7	8



Seq 3

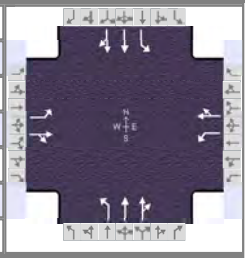
Ring 1	2	1	3	4
Ring 2	5	6	7	8

APPENDIX D

Existing HCS Capacity Worksheets

HCS Signalized Intersection Results Summary

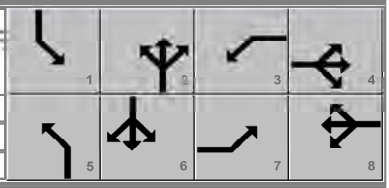
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.92
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskawilla Road & Trot…	File Name	1a Tuskawilla & Trotwood Existing AM Peak.xus		
Project Description	Existing AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	6	70	61	5	128	17	701	10	37	654	62

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.4	1.6	51.5	5.0	2.5	11.1
Yellow	4.8	0.0	4.8	3.4	0.0	3.4
Red	2.0	0.0	2.0	2.2	0.0	3.2



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	13.1	20.2	10.6	17.7	9.2	58.3	10.8	59.9
Change Period, ($Y+R_c$), s	6.0	6.6	5.6	6.6	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	4.3	4.6	4.3	4.6	4.1	0.0	4.1	0.0
Queue Clearance Time (g_s), s	7.4	6.6	5.2	10.9	2.5		3.0	
Green Extension Time (g_e), s	0.0	0.6	0.0	0.3	0.0	0.0	0.0	0.0
Phase Call Probability	0.96	1.00	0.84	1.00	0.40		0.67	
Max Out Probability	1.00	0.04	1.00	1.00	0.00		0.00	

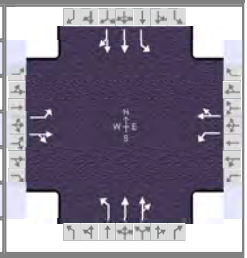
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	112	83		66	145		18	387	385	40	395	383
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1630		1810	1594		1810	1885	1876	1767	1856	1799
Queue Service Time (g_s), s	5.4	4.6		3.2	8.9		0.5	12.5	12.5	1.0	12.7	12.7
Cycle Queue Clearance Time (g_c), s	5.4	4.6		3.2	8.9		0.5	12.5	12.5	1.0	12.7	12.7
Green Ratio (*g/C*)	0.18	0.14		0.16	0.11		0.54	0.52	0.52	0.56	0.53	0.53
Capacity (*c*), veh/h	229	222		257	178		386	971	966	413	986	956
Volume-to-Capacity Ratio (*X*)	0.488	0.373		0.258	0.814		0.048	0.399	0.399	0.097	0.401	0.401
Back of Queue (*Q*), ft/ln (95 th percentile)	113.2	87.3		66.1	196.2		8.1	227.3	225	17.5	228.6	218.4
Back of Queue (*Q*), veh/ln (95 th percentile)	4.5	3.5		2.6	7.7		0.3	9.0	9.0	0.7	8.9	8.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	36.1	39.3		36.5	43.4		11.6	14.8	14.8	10.9	13.9	14.0
Incremental Delay (d_2), s/veh	1.6	1.0		0.5	15.9		0.1	1.2	1.2	0.1	1.2	1.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	37.7	40.4		37.1	59.3		11.7	16.0	16.0	11.0	15.2	15.2
Level of Service (LOS)	D	D		D	E		B	B	B	B	B	B
Approach Delay, s/veh / LOS	38.8	D		52.3	D		15.9	B		15.0	B	
Intersection Delay, s/veh / LOS	21.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	1.90	B	1.89	B
Bicycle LOS Score / LOS	0.81	A	0.84	A	1.14	A	1.16	A

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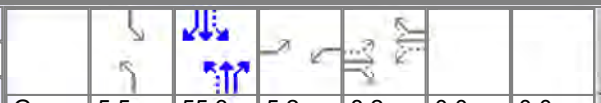
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskawilla Road & Trot…	File Name	1b Tuskawilla & Trotwood Existing PM Peak.xus		
Project Description	Existing PM Peak Hour				

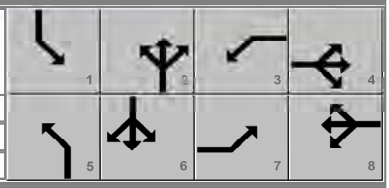


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	56	11	55	70	7	85	80	701	10	86	879	79

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.5	55.3	5.2	8.2	0.0	0.0
Yellow	4.8	4.8	3.4	3.4	0.0	0.0
Red	2.0	2.0	2.2	3.2	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.8	14.8	10.8	14.8	12.2	62.1	12.3	62.2
Change Period, (*Y+R c*), s	6.0	6.6	5.6	6.6	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	4.3	4.5	4.3	4.5	4.1	0.0	4.1	0.0
Queue Clearance Time (*g s*), s	4.9	6.0	5.6	7.8	3.9		4.1	
Green Extension Time (*g e*), s	0.0	0.4	0.1	0.4	0.2	0.0	0.2	0.0
Phase Call Probability	0.80	1.00	0.87	1.00	0.90		0.92	
Max Out Probability	1.00	0.02	1.00	0.05	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	58	69		73	96		83	371	369	90	506	492
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1652		1810	1616		1795	1841	1831	1795	1885	1830
Queue Service Time (*g s*), s	2.9	4.0		3.6	5.8		1.9	11.3	11.3	2.1	16.4	16.4
Cycle Queue Clearance Time (*g c*), s	2.9	4.0		3.6	5.8		1.9	11.3	11.3	2.1	16.4	16.4
Green Ratio (*g/C*)	0.13	0.08		0.13	0.08		0.61	0.55	0.55	0.61	0.55	0.55
Capacity (*c*), veh/h	188	135		196	132		380	1019	1013	490	1045	1014
Volume-to-Capacity Ratio (*X*)	0.310	0.510		0.373	0.727		0.219	0.364	0.365	0.183	0.485	0.485
Back of Queue (*Q*), ft/ln (95 th percentile)	62	79.5		76.6	118.9		31.2	206	198.9	33.2	276.2	268.4
Back of Queue (*Q*), veh/ln (95 th percentile)	2.4	3.2		3.1	4.7		1.2	8.0	8.0	1.3	11.0	10.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	39.3	44.0		39.3	44.8		10.0	12.5	12.5	8.8	13.6	13.6
Incremental Delay (*d 2*), s/veh	0.9	3.0		1.2	7.4		0.3	1.0	1.0	0.2	1.6	1.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	40.3	47.0		40.5	52.3		10.3	13.5	13.5	9.0	15.2	15.2
Level of Service (LOS)	D	D		D	D		B	B	B	A	B	B
Approach Delay, s/veh / LOS	43.9	D		47.2	D		13.2	B		14.7	B	
Intersection Delay, s/veh / LOS	18.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	0.70	A	0.77	A	1.17	A	1.38	A

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HCS Two-Way Stop-Control Report

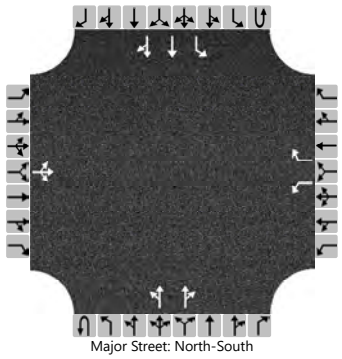
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/22/2023
Analysis Year	2023
Time Analyzed	Existing AM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	Tuskawilla & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd/Milky Way
North/South Street	Tuskawilla Road
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	0	1	0	0	2	0	0	1	2	0
Configuration			LTR			L		R		LT		TR		L	T	TR
Volume (veh/h)		0	0	1		44		14		0	753	57	8	10	695	2
Percent Heavy Vehicles (%)		0	0	0		5		0		0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5		6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.60		6.90		4.10			6.40	4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.55		3.30		2.20			2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1			46		15		0				19		
Capacity, c (veh/h)			640			244		586		886				566		
v/c Ratio			0.00			0.19		0.02		0.00				0.03		
95% Queue Length, Q_{95} (veh)			0.0			0.7		0.1		0.0				0.1		
Control Delay (s/veh)			10.6			23.1		11.3		9.1	0.0			11.6		
Level of Service (LOS)			B			C		B		A	A			B		
Approach Delay (s/veh)	10.6				20.2				0.0				0.3			
Approach LOS	B				C				A				A			

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HCS Two-Way Stop-Control Report

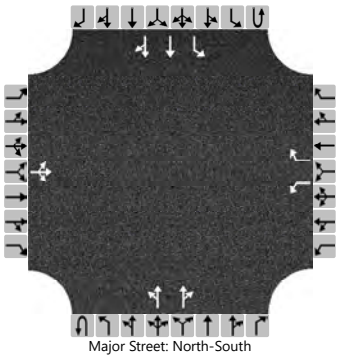
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/22/2023
Analysis Year	2023
Time Analyzed	Existing PM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	Tuskawilla & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd/Milky Way
North/South Street	Tuskawilla Road
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	0	1	0	0	2	0	0	1	2	0
Configuration			LTR			L		R		LT		TR		L	T	TR
Volume (veh/h)		0	0	1		30		4		0	861	85	24	19	1006	0
Percent Heavy Vehicles (%)		0	0	0		3		0		0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5		6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.56		6.90		4.10			6.40	4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.53		3.30		2.20			2.50	2.20		

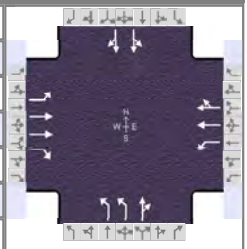
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1			31		4		0				44		
Capacity, c (veh/h)			507			183		531		678				450		
v/c Ratio			0.00			0.17		0.01		0.00				0.10		
95% Queue Length, Q_{95} (veh)			0.0			0.6		0.0		0.0				0.3		
Control Delay (s/veh)			12.1			28.6		11.8		10.3	0.0			13.9		
Level of Service (LOS)			B			D		B		B	A			B		
Approach Delay (s/veh)	12.1				26.6				0.0				0.6			
Approach LOS	B				D				A				A			

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HCS Signalized Intersection Results Summary

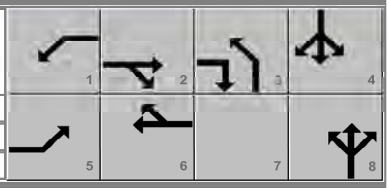
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.96
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskaawilla Road & SR…	File Name	3a Tuskawilla & SR 434 Existing AM Peak.xus		
Project Description	Existing AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	893	400	163	1145	6	621	58	167	46	43	29

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	3.3	55.5	7.2	30.9	0.0	
Yellow	4.9	4.9	4.9	4.8	4.8	0.0	
Red	2.9	2.9	2.9	4.1	4.1	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	3.0	2.0	4.0		10.0		12.0
Phase Duration, s	12.6	63.3	23.7	74.5		39.8		16.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1		4.0
Queue Clearance Time (g_s), s	5.2		15.5			27.5		7.0
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0		3.4		0.3
Phase Call Probability	0.80		1.00			1.00		0.99
Max Out Probability	0.00		0.00			0.04		0.00

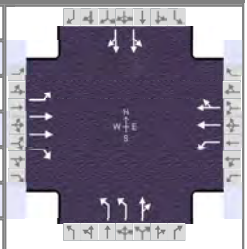
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	41	930	417	170	600	599	647	234		65		58
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1738	1560	1767	1841	1837	1743	1650		1832		1738
Queue Service Time (g_s), s	3.2	32.0	20.6	13.5	36.9	36.9	25.5	18.6		5.0		4.7
Cycle Queue Clearance Time (g_c), s	3.2	32.0	20.6	13.5	36.9	36.9	25.5	18.6		5.0		4.7
Green Ratio (*g/C*)	0.03	0.39	0.60	0.11	0.47	0.47	0.22	0.22		0.05		0.05
Capacity (*c*), veh/h	61	1350	943	197	858	857	754	357		92		87
Volume-to-Capacity Ratio (*X*)	0.668	0.689	0.442	0.862	0.699	0.699	0.857	0.656		0.704		0.667
Back of Queue (*Q*), ft/ln (95 th percentile)	74.2	514.3	302.4	274.6	607.6	588.4	429.2	312.4		114.1		101.7
Back of Queue (*Q*), veh/ln (95 th percentile)	3.0	19.8	11.7	10.7	23.5	23.5	17.0	12.3		4.6		4.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00
Uniform Delay (d_1), s/veh	68.3	36.5	15.2	62.5	30.2	30.2	53.9	51.2		66.9		66.7
Incremental Delay (d_2), s/veh	11.9	2.9	1.5	10.6	4.7	4.7	5.0	2.1		9.4		8.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Control Delay (*d*), s/veh	80.2	39.4	16.7	73.0	34.9	34.9	58.9	53.2		76.3		75.2
Level of Service (LOS)	F	D	B	E	C	C	E	D		E		E
Approach Delay, s/veh / LOS	33.8	C		39.7	D		57.4	E		75.7	E	
Intersection Delay, s/veh / LOS	42.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	1.92	B	2.33	B	2.46	B
Bicycle LOS Score / LOS	1.63	B	1.62	B	1.94	B	0.59	A

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HCS Signalized Intersection Results Summary

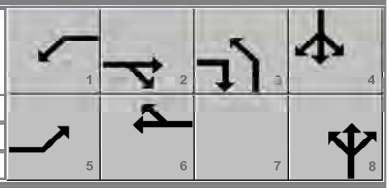
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.98
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskaawilla Road & SR…	File Name	3b Tuskawilla & SR 434 Existing PM Peak.xus		
Project Description	Existing PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	1089	692	192	1115	28	626	115	136	87	110	30

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.1	2.9	72.8	14.1	37.8	0.0
Yellow	4.9	4.9	4.9	4.8	4.8	0.0
Red	2.9	2.9	2.9	4.1	4.1	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	3.0	2.0	4.0		10.0		12.0
Phase Duration, s	18.9	80.6	29.7	91.4		46.7		23.0
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.0		4.0
Queue Clearance Time (g_s), s	11.1		21.4			34.2		13.8
Green Extension Time (g_e), s	0.2	0.0	0.5	0.0		3.6		0.3
Phase Call Probability	0.99		1.00			1.00		1.00
Max Out Probability	0.00		0.00			0.03		0.41

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	91	1111	706	196	586	581	639	256		122		110
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1598	1795	1856	1839	1730	1718		1833		1809
Queue Service Time (g_s), s	9.1	48.1	55.0	19.4	44.5	44.5	32.2	24.9		11.8		10.7
Cycle Queue Clearance Time (g_c), s	9.1	48.1	55.0	19.4	44.5	44.5	32.2	24.9		11.8		10.7
Green Ratio (*g/C*)	0.06	0.40	0.61	0.12	0.46	0.46	0.21	0.21		0.08		0.08
Capacity (*c*), veh/h	110	1452	982	218	861	854	726	361		144		142
Volume-to-Capacity Ratio (*X*)	0.824	0.765	0.719	0.898	0.680	0.680	0.880	0.710		0.846		0.776
Back of Queue (*Q*), ft/ln (95 th percentile)	205.3	744.8	722.3	376.1	726.8	705.8	535	417.1		263.7		233.3
Back of Queue (*Q*), veh/ln (95 th percentile)	8.1	29.6	28.7	14.9	28.4	28.2	21.1	16.6		10.5		9.3
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00
Uniform Delay (d_1), s/veh	83.5	46.2	24.0	78.0	37.7	37.7	68.9	66.0		81.9		81.4
Incremental Delay (d_2), s/veh	14.1	3.9	4.5	15.0	4.3	4.3	6.7	2.7		21.6		12.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Control Delay (*d*), s/veh	97.5	50.1	28.5	93.0	42.0	42.1	75.6	68.7		103.5		94.3
Level of Service (LOS)	F	D	C	F	D	D	E	E		F		F
Approach Delay, s/veh / LOS	44.4	D		49.4	D		73.6	E		99.1	F	
Intersection Delay, s/veh / LOS	54.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	1.93	B	2.34	B	2.47	B
Bicycle LOS Score / LOS	2.06	B	1.61	B	1.96	B	0.68	A

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HCS Two-Way Stop-Control Report

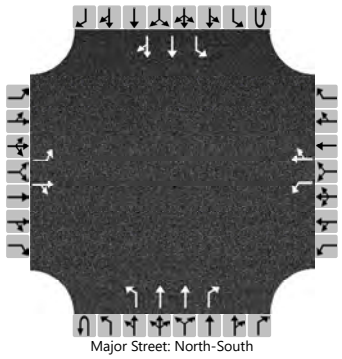
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/22/2023
Analysis Year	2023
Time Analyzed	Existing AM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	SR 434 & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd
North/South Street	SR 434
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	0
Configuration		L		TR		L		TR		L	T	R		L	T	TR
Volume (veh/h)		2	3	70		139	9	81	1	35	1166	74	6	74	1018	7
Percent Heavy Vehicles (%)		0	0	1		0	0	1	0	3			0	1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9	6.4	4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.92		7.50	6.50	6.92	6.40	4.16			6.40	4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3	2.5	2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.31		3.50	4.00	3.31	2.50	2.23			2.50	2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2		74		142		92		37				82		
Capacity, c (veh/h)		95		415		104		336		630				490		
v/c Ratio		0.02		0.18		1.36		0.27		0.06				0.17		
95% Queue Length, Q_{95} (veh)		0.1		0.6		10.0		1.1		0.2				0.6		
Control Delay (s/veh)		43.5		15.6		286.7		19.7		11.1				13.8		
Level of Service (LOS)		E		C		F		C		B				B		
Approach Delay (s/veh)	16.3				181.8				0.3				1.0			
Approach LOS	C				F				A				A			

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HCS Two-Way Stop-Control Report

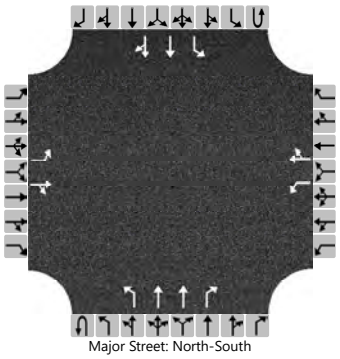
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/22/2023
Analysis Year	2023
Time Analyzed	Existing PM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	SR 434 & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd
North/South Street	SR 434
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	0
Configuration		L		TR		L		TR		L	T	R		L	T	TR
Volume (veh/h)		10	10	99		73	4	53	0	44	1260	111	31	86	1220	18
Percent Heavy Vehicles (%)		0	0	1		0	0	0	0	2			0	2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.92		7.50	6.50	6.90		4.14			6.40	4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.31		3.50	4.00	3.30		2.22			2.50	2.22		

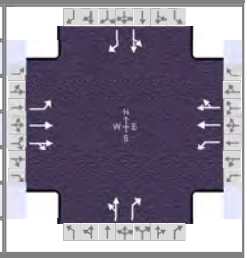
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10		111		74		58		45				119		
Capacity, c (veh/h)		55		219		57		286		546				346		
v/c Ratio		0.18		0.51		1.30		0.20		0.08				0.35		
95% Queue Length, Q_{95} (veh)		0.6		2.6		6.5		0.7		0.3				1.5		
Control Delay (s/veh)		84.2		37.3		338.8		20.8		12.2				20.8		
Level of Service (LOS)		F		E		F		C		B				C		
Approach Delay (s/veh)	41.2				199.4				0.4				1.8			
Approach LOS	E				F				A				A			

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HCS Signalized Intersection Results Summary

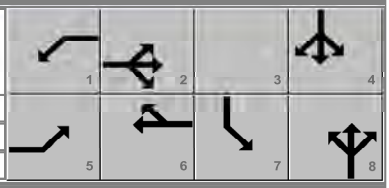
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.92
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Bear Springs/…	File Name	5a SR 434 & Bear Springs Existing AM Peak.xus		
Project Description	Existing AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	27	1252	2	29	1621	86	19	1	18	72	1	43

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	0.2	105.6	8.6	0.0	0.0
Yellow	4.9	0.0	4.9	4.8	0.0	0.0
Red	2.9	0.0	2.9	4.1	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8	7	4
Case Number	1.1	4.0	2.0	4.0		7.3	0.0	13.2
Phase Duration, s	11.9	113.4	12.1	113.5		17.5	0.0	17.5
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9	4.0	8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1	0.0	4.1
Queue Clearance Time (g_s), s	2.6		4.5			4.0		8.2
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0		0.5	0.0	0.5
Phase Call Probability	0.69		0.71			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

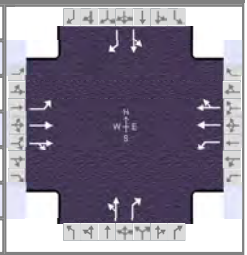
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	29	682	681	32	929	926		22	20		79	47
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1739	1841	1840	1810	1856	1822		1462	1547		1449	1547
Queue Service Time (g_s), s	0.6	22.0	22.0	2.5	37.4	38.5		0.0	1.7		6.0	4.2
Cycle Queue Clearance Time (g_c), s	0.6	22.0	22.0	2.5	37.4	38.5		2.0	1.7		6.2	4.2
Green Ratio (*g/C*)	0.77	0.74	0.74	0.03	0.74	0.74		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	211	1359	1358	54	1372	1347		137	94		138	94
Volume-to-Capacity Ratio (*X*)	0.139	0.502	0.502	0.581	0.677	0.687		0.158	0.209		0.576	0.499
Back of Queue (*Q*), ft/ln (95 th percentile)	12.8	323.5	323.4	56.9	505.4	500.1		34.4	32.6		131.7	81
Back of Queue (*Q*), veh/ln (95 th percentile)	0.5	12.5	12.5	2.3	19.7	20.0		1.4	1.3		5.3	3.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Uniform Delay (d_1), s/veh	10.4	7.8	7.8	68.5	9.7	9.9		64.0	63.9		66.8	65.1
Incremental Delay (d_2), s/veh	0.3	1.3	1.3	9.5	2.7	2.9		0.5	1.1		3.8	4.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	10.7	9.1	9.1	78.0	12.4	12.8		64.6	65.0		70.5	69.2
Level of Service (LOS)	B	A	A	E	B	B		E	E		E	E
Approach Delay, s/veh / LOS	9.1	A		13.7	B		64.8	E		70.0	E	
Intersection Delay, s/veh / LOS	14.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	1.86	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.64	B	2.04	B	0.56	A	0.70	A

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HCS Signalized Intersection Results Summary

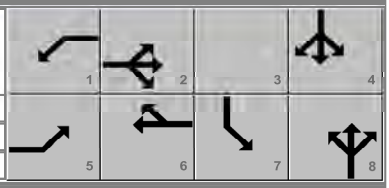
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.98
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Bear Springs/…	File Name	5b SR 434 & Bear Springs Existing PM Peak.xus		
Project Description	Existing PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	1718	15	29	1529	122	11	3	21	72	1	37

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	1.7	104.5	8.2	0.0	0.0	
Yellow	4.9	0.0	4.9	4.8	0.0	0.0	
Red	2.9	0.0	2.9	4.1	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8	7	4
Case Number	1.1	4.0	2.0	4.0		7.3	0.0	13.2
Phase Duration, s	13.7	114.0	11.9	112.3		17.1	0.0	17.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9	4.0	8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1	0.0	4.1
Queue Clearance Time (g_s), s	3.8		4.3			3.9		7.8
Green Extension Time (g_e), s	0.3	0.0	0.1	0.0		0.4	0.0	0.4
Phase Call Probability	0.98		0.69			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

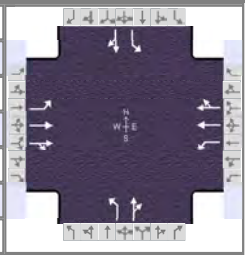
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	94	885	884	30	848	837		14	21		74	38
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1850	1810	1856	1807		1543	1547		1447	1547
Queue Service Time (g_s), s	1.8	33.5	33.7	2.3	32.4	33.2		0.0	1.9		5.8	3.4
Cycle Queue Clearance Time (g_c), s	1.8	33.5	33.7	2.3	32.4	33.2		1.1	1.9		5.8	3.4
Green Ratio (*g/C*)	0.77	0.74	0.74	0.03	0.73	0.73		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	267	1378	1374	52	1356	1320		133	88		133	88
Volume-to-Capacity Ratio (*X*)	0.351	0.642	0.643	0.564	0.625	0.634		0.107	0.242		0.561	0.427
Back of Queue (*Q*), ft/ln (95 th percentile)	39	457.8	462.7	53.3	451.3	442.5		22.5	36.1		6.1	65.1
Back of Queue (*Q*), veh/ln (95 th percentile)	1.5	17.9	17.9	2.1	17.6	17.7		0.9	1.4		0.2	2.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Uniform Delay (d_1), s/veh	9.7	9.1	9.1	68.5	9.6	9.7		64.1	64.5		67.0	65.2
Incremental Delay (d_2), s/veh	0.8	2.3	2.3	9.1	2.2	2.3		0.4	1.4		3.7	3.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	10.4	11.4	11.4	77.7	11.7	12.0		64.4	65.9		70.7	68.4
Level of Service (LOS)	B	B	B	E	B	B		E	E		E	E
Approach Delay, s/veh / LOS	11.3	B		13.0	B		65.3	E		69.9	E	
Intersection Delay, s/veh / LOS	14.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	1.86	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	2.02	B	1.90	B	0.55	A	0.67	A

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HCS Signalized Intersection Results Summary

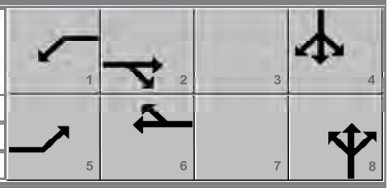
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.90
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Heritage Park…	File Name	6a SR 434 & Heritage Park Existing AM Peak.xus		
Project Description	Existing AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	208	1143	45	43	1357	199	43	15	57	159	15	191

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.2	11.5	94.8	35.2	0.0	0.0	
Yellow	4.9	4.9	4.9	4.8	0.0	0.0	
Red	2.9	2.9	2.9	4.1	0.0	0.0	



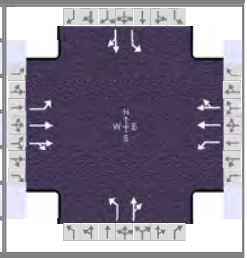
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	4.0	2.0	4.0		6.0		6.0
Phase Duration, s	33.3	121.9	14.0	102.6		44.1		44.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.2		4.2
Queue Clearance Time (g_s), s	24.8		6.7			34.0		32.7
Green Extension Time (g_e), s	0.6	0.0	0.1	0.0		1.2		1.4
Phase Call Probability	1.00		0.91			1.00		1.00
Max Out Probability	0.00		0.00			0.35		0.22

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	231	664	656	48	872	857	48	80		177	229	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1826	1801	1810	1841	1759	1170	1598		1339	1565	
Queue Service Time (g_s), s	22.8	37.6	37.7	4.7	76.7	80.8	7.2	7.6		23.1	24.8	
Cycle Queue Clearance Time (g_c), s	22.8	37.6	37.7	4.7	76.7	80.8	32.0	7.6		30.7	24.8	
Green Ratio (*g/C*)	0.14	0.63	0.63	0.03	0.53	0.53	0.20	0.20		0.20	0.20	
Capacity (*c*), veh/h	254	1158	1142	62	970	927	108	313		246	306	
Volume-to-Capacity Ratio (*X*)	0.910	0.573	0.574	0.772	0.900	0.924	0.442	0.256		0.719	0.748	
Back of Queue (*Q*), ft/ln (95 th percentile)	434.4	588	578.5	112.7	1206.8	1194.8	101.3	146.2		327.7	409.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	17.2	22.6	22.4	4.5	46.8	47.8	4.1	5.6		13.1	15.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	76.1	18.9	19.0	86.2	38.3	39.3	83.2	61.3		74.3	68.2	
Incremental Delay (d_2), s/veh	17.1	2.1	2.1	18.1	12.9	16.1	2.8	0.4		6.9	7.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	93.2	21.0	21.1	104.3	51.2	55.4	86.1	61.7		81.2	75.4	
Level of Service (LOS)	F	C	C	F	D	E	F	E		F	E	
Approach Delay, s/veh / LOS	31.8	C		54.7	D		70.8	E		77.9	E	
Intersection Delay, s/veh / LOS	48.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	1.92	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.77	B	1.95	B	0.70	A	1.16	A

HCS Signalized Intersection Results Summary

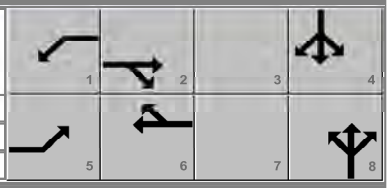
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.97
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Heritage Park…	File Name	6b SR 434 & Heritage Park Existing PM Peak.xus		
Project Description	Existing PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	218	1676	31	54	1337	199	23	2	58	98	6	147

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.1	10.0	107.1	23.5	0.0	0.0	
Yellow	4.9	4.9	4.9	4.8	0.0	0.0	
Red	2.9	2.9	2.9	4.1	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	4.0	2.0	4.0		6.0		6.0
Phase Duration, s	32.7	132.7	14.9	114.9		32.4		32.4
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.2		4.2
Queue Clearance Time (g_s), s	24.2		7.5			22.3		21.2
Green Extension Time (g_e), s	0.7	0.0	0.1	0.0		1.1		1.2
Phase Call Probability	1.00		0.94			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	225	881	879	56	803	781	24	62		101	158	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1873	1810	1870	1786	1248	1618		1362	1607	
Queue Service Time (g_s), s	22.2	48.4	48.8	5.5	54.9	56.7	3.4	6.2		13.0	17.0	
Cycle Queue Clearance Time (g_c), s	22.2	48.4	48.8	5.5	54.9	56.7	20.3	6.2		19.2	17.0	
Green Ratio (*g/C*)	0.14	0.69	0.69	0.04	0.59	0.59	0.13	0.13		0.13	0.13	
Capacity (*c*), veh/h	249	1307	1298	72	1112	1062	86	212		172	211	
Volume-to-Capacity Ratio (*X*)	0.904	0.674	0.677	0.776	0.722	0.735	0.275	0.292		0.588	0.749	
Back of Queue (*Q*), ft/ln (95 th percentile)	412.8	704.2	722.3	129.3	837.1	817.2	50.3	117.5		206	295.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	16.4	27.9	28.0	5.2	33.0	32.7	2.0	4.7		8.2	11.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	76.4	15.9	16.0	85.6	25.9	26.3	85.1	70.7		79.3	75.4	
Incremental Delay (d_2), s/veh	11.6	2.8	2.8	16.2	4.1	4.5	1.7	0.8		3.2	5.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	88.0	18.7	18.8	101.8	30.0	30.8	86.8	71.4		82.5	80.6	
Level of Service (LOS)	F	B	B	F	C	C	F	E		F	F	
Approach Delay, s/veh / LOS	26.6	C		32.8	C		75.7	E		81.3	F	
Intersection Delay, s/veh / LOS	33.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.88	B	1.91	B	2.33	B	2.33	B
Bicycle LOS Score / LOS	2.12	B	1.84	B	0.63	A	0.91	A

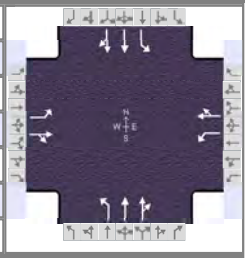
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APPENDIX E

Projected HCS Capacity Worksheets

HCS Signalized Intersection Results Summary

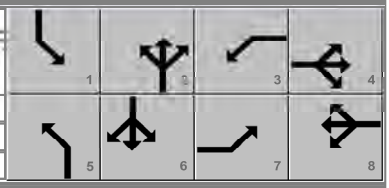
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 25, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.92
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskawilla Road & Trot…	File Name	1a Tuskawilla & Trotwood Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	6	70	61	5	128	17	768	10	37	712	62

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.4	1.6	51.5	5.0	2.5	11.1
Yellow	4.8	0.0	4.8	3.4	0.0	3.4
Red	2.0	0.0	2.0	2.2	0.0	3.2



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	13.1	20.2	10.6	17.7	9.2	58.3	10.8	59.9
Change Period, (*Y+R c*), s	6.0	6.6	5.6	6.6	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	4.3	4.6	4.3	4.6	4.1	0.0	4.1	0.0
Queue Clearance Time (*g s*), s	7.4	6.6	5.2	10.9	2.5		3.0	
Green Extension Time (*g e*), s	0.0	0.6	0.0	0.3	0.0	0.0	0.0	0.0
Phase Call Probability	0.96	1.00	0.84	1.00	0.40		0.67	
Max Out Probability	1.00	0.04	1.00	1.00	0.00		0.00	

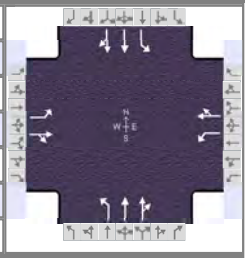
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	112	83		66	145		18	424	422	40	427	415
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1630		1810	1594		1810	1885	1876	1767	1856	1803
Queue Service Time (*g s*), s	5.4	4.6		3.2	8.9		0.5	14.1	14.1	1.0	14.0	14.0
Cycle Queue Clearance Time (*g c*), s	5.4	4.6		3.2	8.9		0.5	14.1	14.1	1.0	14.0	14.0
Green Ratio (*g/C*)	0.18	0.14		0.16	0.11		0.54	0.52	0.52	0.56	0.53	0.53
Capacity (*c*), veh/h	229	222		257	178		362	971	967	385	986	958
Volume-to-Capacity Ratio (*X*)	0.488	0.373		0.258	0.814		0.051	0.436	0.436	0.104	0.433	0.433
Back of Queue (*Q*), ft/ln (95 th percentile)	113.2	87.3		66.1	196.2		8.2	249.3	246.8	17.6	247.8	236.9
Back of Queue (*Q*), veh/ln (95 th percentile)	4.5	3.5		2.6	7.7		0.3	9.9	9.9	0.7	9.7	9.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	36.1	39.3		36.5	43.4		11.8	15.2	15.2	11.2	14.3	14.3
Incremental Delay (*d 2*), s/veh	1.6	1.0		0.5	15.9		0.1	1.4	1.4	0.1	1.4	1.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	37.7	40.4		37.1	59.3		11.8	16.6	16.6	11.3	15.6	15.7
Level of Service (LOS)	D	D		D	E		B	B	B	B	B	B
Approach Delay, s/veh / LOS	38.8	D		52.3	D		16.5	B		15.5	B	
Intersection Delay, s/veh / LOS	21.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	1.90	B	1.89	B
Bicycle LOS Score / LOS	0.81	A	0.84	A	1.20	A	1.21	A

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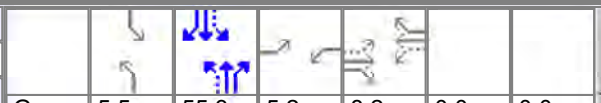
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 25, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskawilla Road & Trot…	File Name	1b Tuskawilla & Trotwood Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				

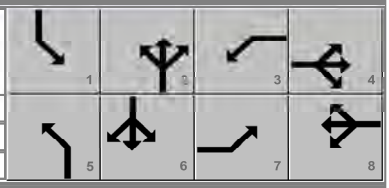


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	56	11	55	70	7	85	80	771	10	86	944	79

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.5	55.3	5.2	8.2	0.0	0.0
Yellow	4.8	4.8	3.4	3.4	0.0	0.0
Red	2.0	2.0	2.2	3.2	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.8	14.8	10.8	14.8	12.2	62.1	12.3	62.2
Change Period, (*Y+R c*), s	6.0	6.6	5.6	6.6	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	4.3	4.5	4.3	4.5	4.1	0.0	4.1	0.0
Queue Clearance Time (*g s*), s	4.9	6.0	5.6	7.8	3.9		4.1	
Green Extension Time (*g e*), s	0.0	0.4	0.1	0.4	0.2	0.0	0.2	0.0
Phase Call Probability	0.80	1.00	0.87	1.00	0.90		0.92	
Max Out Probability	1.00	0.02	1.00	0.05	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	58	69		73	96		83	408	406	90	540	525
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1652		1810	1616		1795	1841	1832	1795	1885	1833
Queue Service Time (*g s*), s	2.9	4.0		3.6	5.8		1.9	12.7	12.7	2.1	17.9	17.9
Cycle Queue Clearance Time (*g c*), s	2.9	4.0		3.6	5.8		1.9	12.7	12.7	2.1	17.9	17.9
Green Ratio (*g/C*)	0.13	0.08		0.13	0.08		0.61	0.55	0.55	0.61	0.55	0.55
Capacity (*c*), veh/h	188	135		196	132		359	1019	1014	459	1045	1016
Volume-to-Capacity Ratio (*X*)	0.310	0.510		0.373	0.727		0.232	0.400	0.400	0.195	0.517	0.517
Back of Queue (*Q*), ft/ln (95 th percentile)	62	79.5		76.6	118.9		31.3	226.3	219	33.2	298	289.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.4	3.2		3.1	4.7		1.2	8.8	8.8	1.3	11.8	11.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	39.3	44.0		39.3	44.8		10.4	12.8	12.8	9.0	13.9	13.9
Incremental Delay (*d 2*), s/veh	0.9	3.0		1.2	7.4		0.3	1.2	1.2	0.2	1.8	1.9
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	40.3	47.0		40.5	52.3		10.7	14.0	14.0	9.2	15.8	15.8
Level of Service (LOS)	D	D		D	D		B	B	B	A	B	B
Approach Delay, s/veh / LOS	43.9	D		47.2	D		13.7	B		15.3	B	
Intersection Delay, s/veh / LOS	18.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	0.70	A	0.77	A	1.23	A	1.44	A

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HCS Two-Way Stop-Control Report

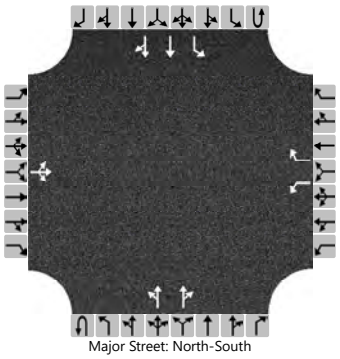
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/25/2023
Analysis Year	2023
Time Analyzed	Projected AM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	Tuskawilla & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd/Milky Way
North/South Street	Tuskawilla Road
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	0	1	0	0	2	0	0	1	2	0
Configuration			LTR			L		R		LT		TR		L	T	TR
Volume (veh/h)		0	0	1		95		14		0	820	63	8	28	707	2
Percent Heavy Vehicles (%)		0	0	0		5		0		0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5		6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.60		6.90		4.10			6.40	4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.55		3.30		2.20			2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1			99		15		0				38		
Capacity, c (veh/h)			634			216		554		877				611		
v/c Ratio			0.00			0.46		0.03		0.00				0.06		
95% Queue Length, Q_{95} (veh)			0.0			2.2		0.1		0.0				0.2		
Control Delay (s/veh)			10.7			35.1		11.7		9.1	0.0			11.3		
Level of Service (LOS)			B			E		B		A	A			B		
Approach Delay (s/veh)	10.7				32.1				0.0				0.5			
Approach LOS	B				D				A				A			

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HCS Two-Way Stop-Control Report

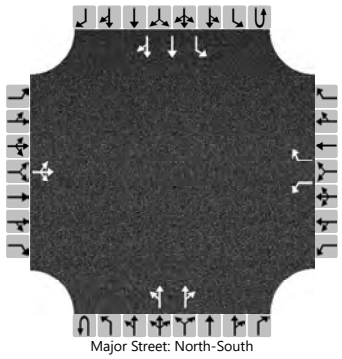
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/25/2023
Analysis Year	2023
Time Analyzed	Projected PM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	Tuskawilla & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd/Milky Way
North/South Street	Tuskawilla Road
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	0	1	0	0	2	0	0	1	2	0
Configuration			LTR			L		R		LT		TR		L	T	TR
Volume (veh/h)		0	0	1		80		4		0	931	91	24	37	1027	0
Percent Heavy Vehicles (%)		0	0	0		3		0		0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5		6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.56		6.90		4.10			6.40	4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.53		3.30		2.20			2.50	2.20		

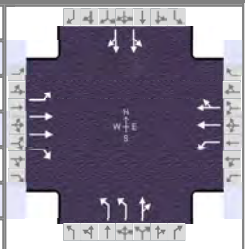
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1			82		4		0				63		
Capacity, c (veh/h)			499			161		501		666				459		
v/c Ratio			0.00			0.51		0.01		0.00				0.14		
95% Queue Length, Q_{95} (veh)			0.0			2.5		0.0		0.0				0.5		
Control Delay (s/veh)			12.2			48.9		12.2		10.4	0.0			14.1		
Level of Service (LOS)			B			E		B		B	A			B		
Approach Delay (s/veh)	12.2				47.2				0.0				0.8			
Approach LOS	B				E				A				A			

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HCS Signalized Intersection Results Summary

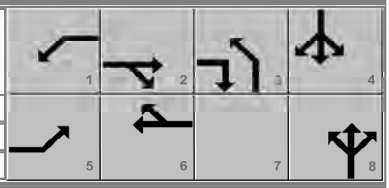
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 25, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.96
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskaawilla Road & SR…	File Name	3a Tuskawilla & SR 434 Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	933	418	168	1175	6	672	60	170	48	43	29

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	3.7	52.9	7.3	33.1	0.0
Yellow	4.9	4.9	4.9	4.8	4.8	0.0
Red	2.9	2.9	2.9	4.1	4.1	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	3.0	2.0	4.0		10.0		12.0
Phase Duration, s	12.6	60.7	24.1	72.2		42.0		16.2
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1		4.0
Queue Clearance Time (g_s), s	5.2		15.9			29.6		7.1
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0		3.5		0.3
Phase Call Probability	0.80		1.00			1.00		0.99
Max Out Probability	0.00		0.00			0.09		0.00

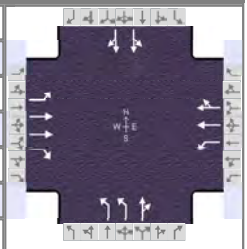
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	41	972	435	175	616	615	700	240		66		59
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1738	1560	1767	1841	1837	1743	1651		1830		1740
Queue Service Time (g_s), s	3.2	35.0	22.1	13.9	39.5	39.5	27.6	18.7		5.1		4.8
Cycle Queue Clearance Time (g_c), s	3.2	35.0	22.1	13.9	39.5	39.5	27.6	18.7		5.1		4.8
Green Ratio (*g/C*)	0.03	0.37	0.60	0.11	0.45	0.45	0.23	0.23		0.05		0.05
Capacity (*c*), veh/h	61	1286	938	202	829	828	807	382		93		89
Volume-to-Capacity Ratio (*X*)	0.668	0.756	0.464	0.867	0.743	0.743	0.867	0.627		0.707		0.668
Back of Queue (*Q*), ft/ln (95 th percentile)	74.2	562.8	320.9	281.6	652.1	631.1	460.5	312.3		115.9		103.4
Back of Queue (*Q*), veh/ln (95 th percentile)	3.0	21.6	12.4	11.0	25.3	25.2	18.3	12.3		4.6		4.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00
Uniform Delay (d_1), s/veh	68.3	39.4	15.8	62.3	32.5	32.5	52.8	49.4		66.8		66.7
Incremental Delay (d_2), s/veh	11.9	4.2	1.7	10.7	6.0	6.0	6.0	1.7		9.4		8.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Control Delay (*d*), s/veh	80.2	43.6	17.4	72.9	38.4	38.4	58.9	51.1		76.2		75.0
Level of Service (LOS)	F	D	B	E	D	D	E	D		E		E
Approach Delay, s/veh / LOS	36.8	D		42.7	D		56.9	E		75.7	E	
Intersection Delay, s/veh / LOS	45.0						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	1.92	B	2.33	B	2.46	B
Bicycle LOS Score / LOS	1.68	B	1.65	B	2.04	B	0.59	A

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HCS Signalized Intersection Results Summary

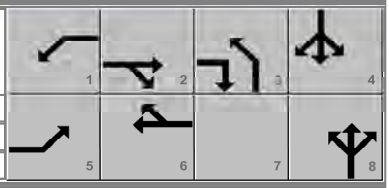
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 25, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.98
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskaawilla Road & SR…	File Name	3b Tuskawilla & SR 434 Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	1131	710	197	1146	28	679	116	139	89	110	30

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.1	3.4	69.4	14.2	40.6	0.0
Yellow	4.9	4.9	4.9	4.8	4.8	0.0
Red	2.9	2.9	2.9	4.1	4.1	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	3.0	2.0	4.0		10.0		12.0
Phase Duration, s	18.9	77.2	30.1	88.5		49.5		23.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.0		4.0
Queue Clearance Time (g_s), s	11.1		21.9			36.9		13.9
Green Extension Time (g_e), s	0.2	0.0	0.5	0.0		3.7		0.3
Phase Call Probability	0.99		1.00			1.00		1.00
Max Out Probability	0.00		0.00			0.06		0.44

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	91	1154	724	201	601	597	693	260		123		111
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1598	1795	1856	1840	1730	1717		1832		1810
Queue Service Time (g_s), s	9.1	52.4	58.1	19.9	47.6	47.7	34.9	24.9		11.9		10.8
Cycle Queue Clearance Time (g_c), s	9.1	52.4	58.1	19.9	47.6	47.7	34.9	24.9		11.9		10.8
Green Ratio (*g/C*)	0.06	0.39	0.61	0.12	0.45	0.45	0.23	0.23		0.08		0.08
Capacity (*c*), veh/h	110	1385	977	223	832	825	780	387		145		143
Volume-to-Capacity Ratio (*X*)	0.826	0.833	0.742	0.902	0.723	0.723	0.888	0.672		0.847		0.776
Back of Queue (*Q*), ft/ln (95 th percentile)	205.4	814.3	760.7	392.2	779.7	756.4	576.1	415.3		266		235.1
Back of Queue (*Q*), veh/ln (95 th percentile)	8.1	32.3	30.2	15.6	30.5	30.3	22.7	16.5		10.6		9.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00
Uniform Delay (d_1), s/veh	83.5	50.0	24.9	77.7	40.5	40.6	67.5	63.6		81.8		81.3
Incremental Delay (d_2), s/veh	14.2	6.0	5.1	19.3	5.4	5.5	7.9	2.2		22.0		13.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Control Delay (*d*), s/veh	97.7	56.1	30.0	97.0	46.0	46.0	75.4	65.9		103.8		94.4
Level of Service (LOS)	F	E	C	F	D	D	E	E		F		F
Approach Delay, s/veh / LOS	48.4	D		53.3	D		72.8	E		99.4	F	
Intersection Delay, s/veh / LOS	57.6						E					

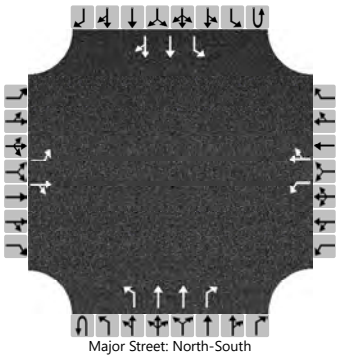
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	1.93	B	2.34	B	2.47	B
Bicycle LOS Score / LOS	2.11	B	1.64	B	2.06	B	0.68	A

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HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	TPD/jd	Intersection	SR 434 & Michael Blake
Agency/Co.	Seminole County	Jurisdiction	Seminole County
Date Performed	9/25/2023	East/West Street	Michale Blake Blvd
Analysis Year	2023	North/South Street	SR 434
Time Analyzed	Projected AM Peak	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Ace Hardware Winter Spring TPD # 5824		

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	0
Configuration		L		TR		L		TR		L	T	R		L	T	TR
Volume (veh/h)		2	3	83		139	9	81	1	79	1197	74	10	74	1071	7
Percent Heavy Vehicles (%)		0	0	1		0	0	1	0	3			0	1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9	6.4	4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.92		7.50	6.50	6.92	6.40	4.16			6.40	4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3	2.5	2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.31		3.50	4.00	3.31	2.50	2.23			2.50	2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2		88		142		92		82				86		
Capacity, c (veh/h)		73		385		76		289		612				445		
v/c Ratio		0.03		0.23		1.86		0.32		0.13				0.19		
95% Queue Length, Q_{95} (veh)		0.1		0.9		12.5		1.3		0.5				0.7		
Control Delay (s/veh)		55.6		17.1		525.4		23.2		11.8				15.0		
Level of Service (LOS)		F		C		F		C		B				C		
Approach Delay (s/veh)	18.0				328.0				0.7				1.1			
Approach LOS	C				F				A				A			

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HCS Two-Way Stop-Control Report

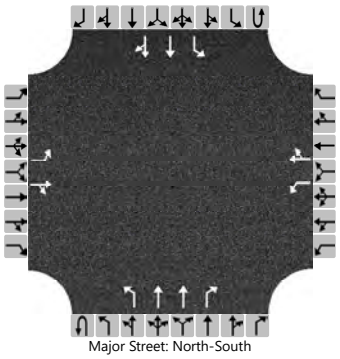
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/25/2023
Analysis Year	2023
Time Analyzed	Projected PM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	SR 434 & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd
North/South Street	SR 434
Peak Hour Factor	0.99
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	0
Configuration		L		TR		L		TR		L	T	R		L	T	TR
Volume (veh/h)		10	10	112		73	4	53	0	87	1292	111	35	86	1276	18
Percent Heavy Vehicles (%)		0	0	1		0	0	0	0	2			0	2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.92		7.50	6.50	6.90		4.14			6.40	4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.31		3.50	4.00	3.30		2.22			2.50	2.22		

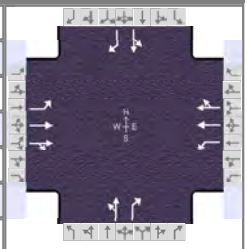
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10		123		74		58		88				122		
Capacity, c (veh/h)		42		132		27		172		525				330		
v/c Ratio		0.24		0.93		2.74		0.33		0.17				0.37		
95% Queue Length, Q_{95} (veh)		0.8		6.3		8.9		1.4		0.6				1.7		
Control Delay (s/veh)		115.2		125.6		1092.6		36.0		13.2				22.2		
Level of Service (LOS)		F		F		F		E		B				C		
Approach Delay (s/veh)	124.8				629.3				0.8				1.9			
Approach LOS	F				F				A				A			

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HCS Signalized Intersection Results Summary

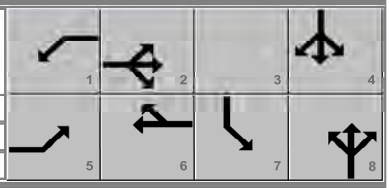
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 25, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.92
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Bear Springs/…	File Name	5a SR 434 & Bear Springs Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	27	1310	2	29	1678	86	19	1	18	72	1	43

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	0.2	105.6	8.6	0.0	0.0
Yellow	4.9	0.0	4.9	4.8	0.0	0.0
Red	2.9	0.0	2.9	4.1	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8	7	4
Case Number	1.1	4.0	2.0	4.0		7.3	0.0	13.2
Phase Duration, s	11.9	113.4	12.1	113.5		17.5	0.0	17.5
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9	4.0	8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1	0.0	4.1
Queue Clearance Time (g_s), s	2.6		4.5			4.0		8.2
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0		0.5	0.0	0.5
Phase Call Probability	0.69		0.71			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

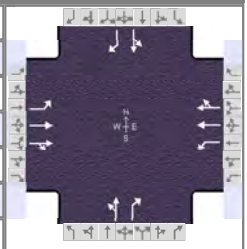
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	29	713	713	32	959	958		22	20		79	47
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1739	1841	1840	1810	1856	1824		1462	1547		1449	1547
Queue Service Time (g_s), s	0.6	23.7	23.7	2.5	39.9	41.3		0.0	1.7		6.0	4.2
Cycle Queue Clearance Time (g_c), s	0.6	23.7	23.7	2.5	39.9	41.3		2.0	1.7		6.2	4.2
Green Ratio (*g/C*)	0.77	0.74	0.74	0.03	0.74	0.74		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	200	1359	1358	54	1372	1348		137	94		138	94
Volume-to-Capacity Ratio (*X*)	0.147	0.525	0.525	0.581	0.699	0.711		0.158	0.209		0.576	0.499
Back of Queue (*Q*), ft/ln (95 th percentile)	14.1	343.7	343.6	56.9	534.8	531.8		34.4	32.6		131.7	81
Back of Queue (*Q*), veh/ln (95 th percentile)	0.5	13.3	13.3	2.3	20.9	21.3		1.4	1.3		5.3	3.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Uniform Delay (d_1), s/veh	11.4	8.0	8.0	68.5	10.1	10.2		64.0	63.9		66.8	65.1
Incremental Delay (d_2), s/veh	0.3	1.5	1.5	9.5	3.0	3.2		0.5	1.1		3.8	4.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	11.8	9.5	9.5	78.0	13.0	13.4		64.6	65.0		70.5	69.2
Level of Service (LOS)	B	A	A	E	B	B		E	E		E	E
Approach Delay, s/veh / LOS	9.5	A		14.3	B		64.8	E		70.0	E	
Intersection Delay, s/veh / LOS	14.9						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	1.86	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.69	B	2.10	B	0.56	A	0.70	A

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HCS Signalized Intersection Results Summary

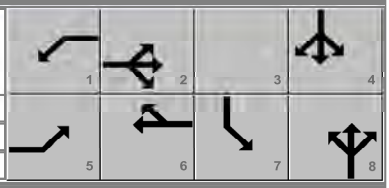
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 25, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.98
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Bear Springs/…	File Name	5b SR 434 & Bear Springs Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	1778	15	29	1581	122	11	3	21	72	1	37

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	1.7	104.5	8.2	0.0	0.0	
Yellow	4.9	0.0	4.9	4.8	0.0	0.0	
Red	2.9	0.0	2.9	4.1	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8	7	4
Case Number	1.1	4.0	2.0	4.0		7.3	0.0	13.2
Phase Duration, s	13.7	114.0	11.9	112.3		17.1	0.0	17.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9	4.0	8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1	0.0	4.1
Queue Clearance Time (g_s), s	3.8		4.3			3.9		7.8
Green Extension Time (g_e), s	0.3	0.0	0.1	0.0		0.4	0.0	0.4
Phase Call Probability	0.98		0.69			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

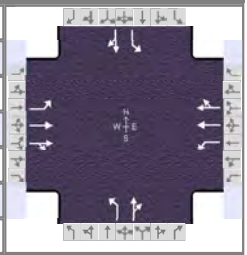
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	94	915	914	30	873	865		14	21		74	38
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1850	1810	1856	1809		1543	1547		1447	1547
Queue Service Time (g_s), s	1.8	35.8	36.0	2.3	34.2	35.3		0.0	1.9		5.8	3.4
Cycle Queue Clearance Time (g_c), s	1.8	35.8	36.0	2.3	34.2	35.3		1.1	1.9		5.8	3.4
Green Ratio (*g/C*)	0.77	0.74	0.74	0.03	0.73	0.73		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	256	1378	1374	52	1356	1321		133	88		133	88
Volume-to-Capacity Ratio (*X*)	0.366	0.664	0.666	0.564	0.644	0.654		0.107	0.242		0.561	0.427
Back of Queue (*Q*), ft/ln (95 th percentile)	44	485.6	490.2	53.3	474.1	466.5		22.5	36.1		6.1	65.1
Back of Queue (*Q*), veh/ln (95 th percentile)	1.7	19.0	19.0	2.1	18.5	18.7		0.9	1.4		0.2	2.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Uniform Delay (d_1), s/veh	10.5	9.4	9.4	68.5	9.8	9.9		64.1	64.5		67.0	65.2
Incremental Delay (d_2), s/veh	0.9	2.5	2.6	9.1	2.4	2.5		0.4	1.4		3.7	3.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	11.4	11.9	11.9	77.7	12.2	12.5		64.4	65.9		70.7	68.4
Level of Service (LOS)	B	B	B	E	B	B		E	E		E	E
Approach Delay, s/veh / LOS	11.9	B		13.4	B		65.3	E		69.9	E	
Intersection Delay, s/veh / LOS	14.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	1.86	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	2.07	B	1.95	B	0.55	A	0.67	A

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HCS Signalized Intersection Results Summary

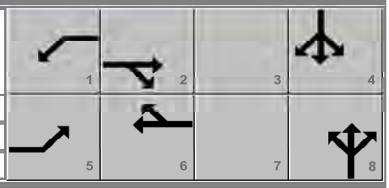
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 25, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.90
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Heritage Park…	File Name	6a SR 434 & Heritage Park Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	208	1199	45	43	1412	199	43	15	57	159	15	191

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.2	11.5	94.8	35.2	0.0	0.0
Yellow	4.9	4.9	4.9	4.8	0.0	0.0
Red	2.9	2.9	2.9	4.1	0.0	0.0



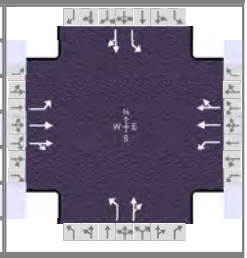
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	4.0	2.0	4.0		6.0		6.0
Phase Duration, s	33.3	121.9	14.0	102.6		44.1		44.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.2		4.2
Queue Clearance Time (g_s), s	24.8		6.7			34.0		32.7
Green Extension Time (g_e), s	0.6	0.0	0.1	0.0		1.2		1.4
Phase Call Probability	1.00		0.91			1.00		1.00
Max Out Probability	0.00		0.00			0.35		0.22

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	231	695	687	48	901	889	48	80		177	229	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1826	1802	1810	1841	1762	1170	1598		1339	1565	
Queue Service Time (g_s), s	22.8	40.5	40.6	4.7	81.6	86.8	7.2	7.6		23.1	24.8	
Cycle Queue Clearance Time (g_c), s	22.8	40.5	40.6	4.7	81.6	86.8	32.0	7.6		30.7	24.8	
Green Ratio (*g/C*)	0.14	0.63	0.63	0.03	0.53	0.53	0.20	0.20		0.20	0.20	
Capacity (*c*), veh/h	254	1158	1143	62	970	928	108	313		246	306	
Volume-to-Capacity Ratio (*X*)	0.910	0.600	0.601	0.772	0.929	0.958	0.442	0.256		0.719	0.748	
Back of Queue (*Q*), ft/ln (95 th percentile)	434.4	626.6	617	112.7	1293.9	1301.2	101.3	146.2		327.7	409.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	17.2	24.1	23.9	4.5	50.2	52.0	4.1	5.6		13.1	15.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	76.1	19.5	19.5	86.2	39.5	40.7	83.2	61.3		74.3	68.2	
Incremental Delay (d_2), s/veh	17.1	2.3	2.3	18.1	16.1	21.0	2.8	0.4		6.9	7.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	93.2	21.8	21.8	104.3	55.6	61.6	86.1	61.7		81.2	75.4	
Level of Service (LOS)	F	C	C	F	E	E	F	E		F	E	
Approach Delay, s/veh / LOS	32.0	C		59.8	E		70.8	E		77.9	E	
Intersection Delay, s/veh / LOS	50.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	1.92	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.82	B	2.00	B	0.70	A	1.16	A

HCS Signalized Intersection Results Summary

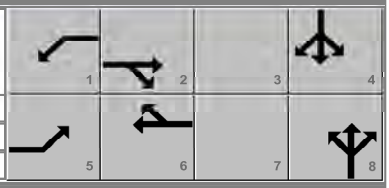
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 25, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.97
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Heritage Park…	File Name	6b SR 434 & Heritage Park Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	218	1734	31	54	1387	199	23	2	58	98	6	147

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.1	10.0	107.1	23.5	0.0	0.0	
Yellow	4.9	4.9	4.9	4.8	0.0	0.0	
Red	2.9	2.9	2.9	4.1	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	4.0	2.0	4.0		6.0		6.0
Phase Duration, s	32.7	132.7	14.9	114.9		32.4		32.4
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.2		4.2
Queue Clearance Time (g_s), s	24.2		7.5			22.3		21.2
Green Extension Time (g_e), s	0.7	0.0	0.1	0.0		1.1		1.2
Phase Call Probability	1.00		0.94			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	225	910	909	56	827	808	24	62		101	158	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1873	1810	1870	1789	1248	1618		1362	1607	
Queue Service Time (g_s), s	22.2	51.6	52.1	5.5	57.9	60.1	3.4	6.2		13.0	17.0	
Cycle Queue Clearance Time (g_c), s	22.2	51.6	52.1	5.5	57.9	60.1	20.3	6.2		19.2	17.0	
Green Ratio (*g/C*)	0.14	0.69	0.69	0.04	0.59	0.59	0.13	0.13		0.13	0.13	
Capacity (*c*), veh/h	249	1307	1299	72	1112	1063	86	212		172	211	
Volume-to-Capacity Ratio (*X*)	0.904	0.697	0.700	0.776	0.744	0.760	0.275	0.292		0.588	0.749	
Back of Queue (*Q*), ft/ln (95 th percentile)	412.8	744.9	765.3	129.3	879.4	863.8	50.3	117.5		206	295.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	16.4	29.6	29.7	5.2	34.6	34.6	2.0	4.7		8.2	11.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	76.4	16.4	16.5	85.6	26.5	27.0	85.1	70.7		79.3	75.4	
Incremental Delay (d_2), s/veh	11.6	3.1	3.2	16.2	4.5	5.1	1.7	0.8		3.2	5.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	88.0	19.5	19.6	101.8	31.1	32.1	86.8	71.4		82.5	80.6	
Level of Service (LOS)	F	B	B	F	C	C	F	E		F	F	
Approach Delay, s/veh / LOS	27.1	C		33.9	C		75.7	E		81.3	F	
Intersection Delay, s/veh / LOS	34.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.88	B	1.91	B	2.33	B	2.33	B
Bicycle LOS Score / LOS	2.17	B	1.88	B	0.63	A	0.91	A

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HCS Two-Way Stop-Control Report

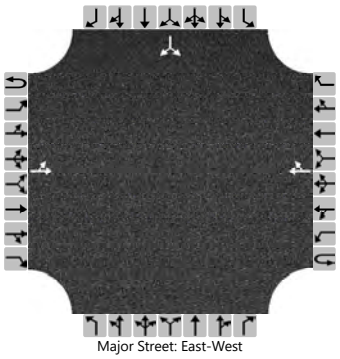
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/25/2023
Analysis Year	2023
Time Analyzed	Projected AM Peak
Intersection Orientation	East-West
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	Michael Blake & South D/W
Jurisdiction	Seminole County
East/West Street	Michael Blake Blvd
North/South Street	South Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		30	61				53	49						19		56
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33													82	
Capacity, c (veh/h)		1492													913	
v/c Ratio		0.02													0.09	
95% Queue Length, Q_{95} (veh)		0.1													0.3	
Control Delay (s/veh)		7.5	0.2												9.3	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	2.6												9.3			
Approach LOS	A												A			

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HCS Two-Way Stop-Control Report

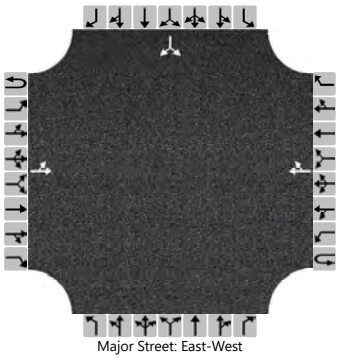
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/25/2023
Analysis Year	2023
Time Analyzed	Projected PM Peak
Intersection Orientation	East-West
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	Michael Blake & South D/W
Jurisdiction	Seminole County
East/West Street	Michael Blake Blvd
North/South Street	South Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		34	94				31	46						23		53
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		37													83	
Capacity, c (veh/h)		1526													910	
v/c Ratio		0.02													0.09	
95% Queue Length, Q_{95} (veh)		0.1													0.3	
Control Delay (s/veh)		7.4	0.2												9.3	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	2.1												9.3			
Approach LOS	A												A			

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HCS Two-Way Stop-Control Report

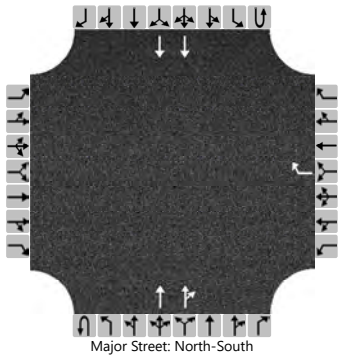
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/25/2023
Analysis Year	2023
Time Analyzed	Projected AM Peak Hour
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	Tuskawilla & West D/W
Jurisdiction	Seminole County
East/West Street	West Side Driveway
North/South Street	Tuskawilla Road
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	0	0	0	2	0
Configuration								R			T	TR			T	
Volume (veh/h)								80			731	95			613	
Percent Heavy Vehicles (%)								0								
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.90								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.30								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								87								
Capacity, c (veh/h)								563								
v/c Ratio								0.15								
95% Queue Length, Q_{95} (veh)								0.5								
Control Delay (s/veh)								12.6								
Level of Service (LOS)								B								
Approach Delay (s/veh)						12.6										
Approach LOS						B										

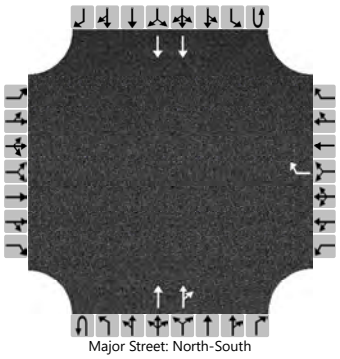
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HCS Two-Way Stop-Control Report

General Information

Analyst	TPD/jd	Intersection	Tuskawilla & West D/W
Agency/Co.	Seminole County	Jurisdiction	Seminole County
Date Performed	9/25/2023	East/West Street	West Side Driveway
Analysis Year	2023	North/South Street	Tuskawilla Road
Time Analyzed	Projected PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Ace Hardware Winter Springs TPD# 5824		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	0	0	0	2	0
Configuration								R			T	TR			T	
Volume (veh/h)								76			902	94			1067	
Percent Heavy Vehicles (%)								0								
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.90								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.30								

Delay, Queue Length, and Level of Service

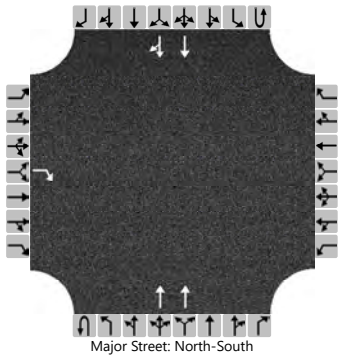
Flow Rate, v (veh/h)								83								
Capacity, c (veh/h)								490								
v/c Ratio								0.17								
95% Queue Length, Q_{95} (veh)								0.6								
Control Delay (s/veh)								13.8								
Level of Service (LOS)								B								
Approach Delay (s/veh)						13.8										
Approach LOS						B										

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HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	TPD/jd	Intersection	SR 434 & East D/W
Agency/Co.	Seminole County	Jurisdiction	Seminole County
Date Performed	9/25/2023	East/West Street	East Side Driveway
Analysis Year	2023	North/South Street	SR 434
Time Analyzed	Projected AM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Ace Hardware Winter Springs TPD# 5824		

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration				R							T				T	TR
Volume (veh/h)				109							1340				1056	118
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.90												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				118												
Capacity, c (veh/h)				424												
v/c Ratio				0.28												
95% Queue Length, Q_{95} (veh)				1.1												
Control Delay (s/veh)				16.7												
Level of Service (LOS)				C												
Approach Delay (s/veh)		16.7														
Approach LOS		C														

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HCS Two-Way Stop-Control Report

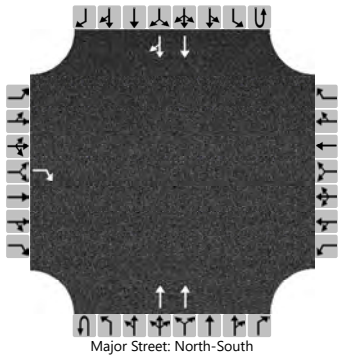
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/25/2023
Analysis Year	2023
Time Analyzed	Projected PM Peak Hour
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	SR 434 & East D/W
Jurisdiction	Seminole County
East/West Street	East Side Driveway
North/South Street	SR 434
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration				R							T				T	TR
Volume (veh/h)				105							1371				1266	115
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.90												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				114												
Capacity, c (veh/h)				358												
v/c Ratio				0.32												
95% Queue Length, Q_{95} (veh)				1.3												
Control Delay (s/veh)				19.7												
Level of Service (LOS)				C												
Approach Delay (s/veh)		19.7														
Approach LOS		C														

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Mary L. Edwards
Consulting Arborist Services

March 3, 2025

Wess McMillian
Ace Hardware
Central Florida

Dear Wess,

I would like to summarize the timeline and requirements for the Statistical Survey that was approved by the City of Winter Springs in March 2022. This survey was conducted for the adjacent parcel located at the southeast corner of Tuscawilla Road and Michael Blake Boulevard, which is now referred to as Sutton Crossing Development.

On March 7, 2022, I emailed Kevin Maddox, the Landscape Manager at that time for the City of Winter Springs, to make the following request:

- The tree survey identified a total of 706 trees on the property, with 400 trees having a diameter of 4"–9" and 306 trees ranging from 10"–30" in diameter. However, the survey did not include the necessary species identification, which is required for development.
- I proposed that, instead of identifying the species of all 706 trees, it would be acceptable to conduct a Statistical Survey for the 400 trees with diameters between 4" and 9" and provide an individual assessment for the 306 trees with diameters between 10" and 30".

That same day, March 7, 2022, Mr. Maddox responded, confirming that after consulting with the Community Development Director, this approach was deemed acceptable. With this approval, we scheduled the final assessment for May 24, 2023. The results of the statistical survey assessment are provided below, along with supporting images and site characteristics.

Statistical Tree Survey Results for Sutton Crossing Development:

- 100% of trees under 10" in diameter appear to be volunteer trees. There were very few mature trees for the size of the parcel. The area consists of vines, volunteer trees, invasive species, and Palmetto ground cover. These are trees/plants that were not planted with purpose and tend to be less than a desirable species with poor form and lack of value.

- The species outline for this tree canopy consists of.
    1. 10% - (40 trees) *Quercus virginiana* – Live Oak – 50% Poor and 50% Moderate, the same as the full inventory assessment
    2. 10% - (40 trees) *Quercus laurifolia* - Laurel Oak – Poor condition, stretched canopies, and heavy vines.
    3. 55%- (220 trees) Invasive Species and Palmettos – Poor Invasive Species
    4. 1% (4 trees) *Prunus laurocerasus* - Cherry Laurel – Poor – Poor Form and Weak Structures
    5. 23% (92 trees) *Pinus elliottii* – Slash Pine – Poor Heavily encroached by surrounding vines
    6. 1% (4 trees) *Prunus serotina* – Black Cherry – Poor most of this species was dead or in a state of

decline



Examples of volunteer trees under ten inches in diameter

Supporting Characteristics for Health Assessments:

Health ratings for individual trees will be based on the following criteria:

Excellent – Specimen tree good health
Good – Tree that meets available points for good structure, viable canopy and without decay.
Moderate – Tree that does not meet either good structure, viable canopy or has internal decay present.
Poor – Tree that meets multiple stress items and should be considered for removal also includes Invasive Species– Removal Only

The underbrush and heavy forestation were consistent throughout the entire site, resulting in poor trunk and canopy form primarily due to the heavy encroachment from neighboring trees, heavy vines, and insufficient sunlight for proper development. This site had large openings with little to no tree cover giving the vine and Palmetto population an opportunity to mature which has completely engulf the neighboring tree canopies. (Pictures below).



Heavily encroached canopies with vines

Other characteristics such as trunk wounding, advanced decay, and Pine decline was evident throughout the property. There was excessive utility pruning along the east property line leaving one-sided canopies with poor form, dead trees, high stretched canopies competing for sunlight and branch bark inclusions on the co- dominant and tri-dominant trunk structures. There was also storm damage along the southeast corner of the property, where trees were broken and damaged from high winds. These circumstances play a significant role in determining if a tree is in good health and suitable for preservation (Example Pictures below).







Large deadwood, broken branches, and damaged trees.

We also conducted the individual species identification and health assessment for all of the (306) trees 10" diameter and greater. The result of this assessment is attached to this summary report.

Again Wess, thank you for the opportunity to submit this Consulting Arborist report. Please let me know if you have any questions regarding this information.

Sincerely,
Mary

Mary L. Edwards
Registered Consulting Arborist RCA #451
ISA Certified Arborist FL-0116- ISA Qualified Tree Risk Assessor
mary@maryedwardsarborist.com
321-303-4714

City of Winter Springs
Public Works & Arborist Department
1126 E State Road 434
Winter Springs, FL 32708

Subject: Tree Mitigation Credit Summary for Sutton Crossings Development

Dear **City of Winter Springs**,

I am writing to formally confirm the tree mitigation credit calculations for the Sutton Crossings Development, based on previous correspondence and the approved arborist report.

Per an email from the **City of Winter Springs Arborist,** it was confirmed that a total of **89 tree mitigation credits** were required for the removal of trees from the existing site. This requirement was calculated using the **arborist reports conducted by Mary Edwards**, an approved **Arborist Consulting Company for the City of Winter Springs**.

As part of the **Phase 1 development** for the **Ace Hardware Shopping Center**, the current approved **landscaping plans** include the following:

- **27 Live Oak trees** (2 mitigation credits each) → **54 mitigation credits**
- **6 Magnolia trees** (3 mitigation credits each) → **18 mitigation credits**
- **Total Phase 1 Mitigation Credits Provided: 72**

Since **Phase 1 represents approximately 30% of the overall site**, the remaining **17 mitigation credits** will be addressed in future development phases. The additional credits will be met and exceeded through the **remaining streetscape frontage** along **Tuskawilla Road and SR 434**.

Additionally, any areas that are **disturbed** on the property during development will be **seeded or sodded** in accordance with the approved site plans under the City's review. A **final tree credit summary** can be provided upon completion of each phase of the project to ensure compliance with the City's mitigation requirements.

Please let me know if any further documentation or clarification is needed. I appreciate your time and look forward to continued collaboration with the City of Winter Springs.

Sincerely,

John McMillan

Signature: Date: March 6th 2025

EPB Engineering & Construction, PLLC
PO Box 1013
Oakland, Florida 34760
wessmcmillan@centralfloridaace.com
407-509-7098

Appendix

- Arborist Report – Sutton Crossings West Parcel (Part of August 2023 Submittal)
- Arborist Report – Sutton Crossings East Parcel (Part of August 2023 Submittal)
- Tree Location Survey – Sutton Crossings Parcel (Part of August 2023 Submittal)

Mary L. Edwards
Consulting Arborist Services

April 3, 2022

Wes McMillian
Ace Hardware
Central Florida

Dear Wess,

Thank you for the opportunity to provide a Statistical Tree Survey along with a tree identification and health assessment at the future Ace Hardware site in Winter Springs, FL.

This report includes the following.

- Summary of the tree cover at the property for all tree under ten inch in diameter.
- Individual tree health assessments with supportive characteristics for all trees ten-inch diameter and greater.
- Tree number coincide with the number on the original survey.
- Highlight observations of pertinent information that may offer additional insight for preservation within the report.

Statistical Tree Survey Observations

- 100% of trees under ten inch in diameter appear to be volunteer trees. These are trees that were not planted with purpose. They tend to be less than a desirable species with poor form and lack of value
- The species outline for this tree canopy consists of.
    1. 40% *Quercus virginiana* – Live Oak
    2. 45% *Quercus laurifolia* - Laurel Oak
    3. 5% *Prunus laurocerasus* - Cherry Laurel
    4. 5% *Pinus elliottii* – Slash Pine
    5. 2% *Celtis occindentalis* - Hackberry
    6. 2% *Prunus serotina* – Black Cherry
    7. 1% *Entrolobium cyclocarpum* – Ear Tree



Examples of volunteer trees under ten inches in diameter

Supporting Characteristics for Health Assessments:

Health ratings for individual trees will be based on the following criteria:

Excellent – Specimen tree good health

Good – Tree that meets available points for good structure, viable canopy and without decay.

Moderate – Tree that doesn't meet either good structure, viable canopy or has internal decay present.

Poor – Tree that meets multiple stress items and should be considered for removal also includes Invasive Species– Removal Only

The underbrush and heavy forestation were consistent throughout the entire site. Many of the trees had poor trunk and canopy form primarily due to the heavy encroachment from neighboring trees, heavy vines and insufficient sunlight for proper development. (Pictures below)





Other characteristics such as trunk wounding, advanced decay, heavy vine infestation, Hypoxolyn Canker on dead trees, high stretched canopies competing for sunlight and branch bark inclusions on many of the co-dominant and tri-dominant trunk structures. All of these play a significant roll in determining if a tree is in good health and suitable for preservation (Example Pictures below)





Trees are dynamic, living organisms which change over time. The observations made herein will reflect the opinion of the Arborist at the time of inspection and do not guarantee the condition of the trees anytime in the future. Trees or parts can fail at any time; these failures cannot always be predicted. Inspections of these trees will be based on a ground level visual observation only, I did not perform sound testing, advanced Arboricultural testing or gather any forensic samples for further examination on the site. The assessment does not take into consideration any information unknown, not visible or detectable at the time of the inspection.

Again Wess, thank you for the opportunity to submit this report for Consulting Arborist Services. Please let me know if you have any questions regarding this report, statistical survey and inventory with health assessment

Sincerely,
Mary

Mary L. Edwards
Registered Consulting Arborist RCA #451
ISA Certified Arborist FL-0116
ISA Qualified Tree Risk Assessor
321-303-4714
mary@maryedwardsarborist.com

Ace Hardware - Winter Springs

Tree #	DBH	Species	Supporting Characteristics for Health Assessment & Recommendations
586	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, decay present, broken canopy
592	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, decay present, broken canopy
1	16"/14"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate structure with low inclusion, crack forming
619	14"/10"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay throughout canopy
615	Cluster	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate structure, in parent trunk 16"/16"16"
610	16"/10"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate structure with major inclusion, full canopy
611	12"	*Quercus laurifolia* - Laurel Oak	Poor - one-sided canopy, significant lean
618	18"	*Quercus laurifolia* - Laurel Oak	Moderate - some broken branches, minor decay
622	10"	*Quercus laurifolia* - Laurel Oak	Poor - decay present, heavily forested, poor form
629	12"/14"	*Quercus laurifolia* - Laurel Oak	Poor - broken canopy with decay, significant lean, wounded trunks
628	12"	*Quercus laurifolia* - Laurel Oak	Poor - high suckering canopy, no lateral branches
656	18"	*Quercus virginiana* - Live Oak	Moderate - major deadwood, broken branches
654	12"	*Quercus virginiana* - Live Oak	Poor - significant lean, no lateral branches
644	12"	*Quercus laurifolia* - Laurel Oak	Poor - high canopy with decay in upper trunk
660	12"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, lateral branching
2	16"/10"	*Quercus virginiana* - Live Oak	Moderate - lean, heavily forested leave as cluster, no good stand alone trees
669	Cluster	*Quercus virginiana* - Live Oak	Moderate - low bend in canopy, heavily forested leave as cluster 10"/10"/10"
657	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, poor form
655	12"/12"	*Quercus virginiana* - Live Oak	Moderate - (2) trees, perimeter trees only, not good stand alone trees
674	16"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, decay in canopy
675	10"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, broken canopy
676	12"	*Quercus laurifolia* - Laurel Oak	Poor - high canopy, heavy suckering
670	12"	*Quercus virginiana* - Live Oak	Poor - poor structure, high canopy, no lateral branches
672	10"	*Quercus virginiana* - Live Oak	Poor - poor structure, high canopy, no lateral branches
649	10"	*Quercus virginiana* - Live Oak	Poor - poor structure, high canopy, no lateral branches
3	16"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, some broken branches
678	16"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, decay present, broken canopy
690	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavily forested canopy
686	10"	*Quercus virginiana* - Live Oak	Dead Tree
678	16"	*Quercus laurifolia* - Laurel Oak	Poor - damaged trunk with decay, upper canopy disfigured
686	10"	*Quercus virginiana* - Live Oak	Poor - significant lean no lateral branches, heavily forested
690	10"	*Quercus virginiana* - Live Oak	Poor - significant lean no lateral branches, heavily forested
1230	14"	*Quercus virginiana* - Live Oak	Poor - significant lean, no good stand alone tree

Ace Hardware - Winter Springs

4	14"	*Quercus virginiana* - Live Oak	Moderate- poor - good health, poor form, not good stand alone tree
1228	10"	*Pinus Elliottii* - Slash Pine	Moderate - high canopy, minor deadwood
1234	12"	*Quercus virginiana* - Live Oak	Poor - significant lean, wounding neighboring Live Oak, no lateral branching
1225	10"	*Quercus virginiana* - Live Oak	Dead tree
1226	14"	*Quercus laurifolia* - Laurel Oak	Moderate - full upper canopy, minor decay, suckering
1250	12"	*Quercus virginiana* - Live Oak	Poor - advanced decay in trunk for wounding
1249	12"	*Quercus laurifolia* - Laurel Oak	Dead Tree
1222	14"	*Quercus laurifolia* - Laurel Oak	Moderate - full upper canopy, minor decay, suckering
1215	20"	*Quercus virginiana* - Live Oak	Good - upper co-dominate no inclusion, no visible decay
1221	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, no lateral branching
1255	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, no lateral branching, decay in trunk
1254	10"	*Quercus virginiana* - Live Oak	Poor - damaged trunk from fallen tree, with no lateral branches
1307	13"	*Quercus virginiana* - Live Oak	Poor - on corner, significant lean over sidewalk, heavy vines
1309	14"	*Quercus laurifolia* - Laurel Oak	Dead Tree
1311	22"	*Quercus virginiana* - Live Oak	Good - nice structure, no visible decay
1308	10"	*Quercus laurifolia* - Laurel Oak	Moderate - good buffering tree only, no good stand alone tree
1304	10"	*Quercus laurifolia* - Laurel Oak	Moderate - low canopy, full upper canopy
706	14"	*Pinus Elliottii* - Slash Pine	Dead Tree
708	14"	*Quercus laurifolia* - Laurel Oak	Poor - upper co-dominate with inclusion, decay in canopy
1268	20"/18"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate with inclusion, advanced decay throughout structured canopy
1265	16"	*Quercus laurifolia* - Laurel Oak	Poor - damaged canopy, heavy vines, decay
1260	10"	*Quercus laurifolia* - Laurel Oak	Poor - decay in upper trunk, poor form
1233	20"	*Quercus laurifolia* - Laurel Oak	Poor - wounded from neighboring tree, advanced decay
1258	10"	*Quercus laurifolia* - Laurel Oak	Moderate - full upper canopy, suckering
1240	10"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate lower inclusion, vines, decay in canopy
1239	16"	*Quercus virginiana* - Live Oak	Fallen tree dead
1312	14"	*Quercus laurifolia* - Laurel Oak	Poor - one-sided canopy, heavy vines, broken branches
1283	14"	*Quercus laurifolia* - Laurel Oak	Poor - wounded trunk from encroaching tree
1281	14"	*Quercus virginiana* - Live Oak	Moderate - co-dominate, full canopy, some decay
1279	12"	*Quercus laurifolia* - Laurel Oak	Moderate - one-sided canopy, good buffering tree only
1274	12"	*Quercus laurifolia* - Laurel Oak	Moderate - one-sided canopy, good buffering tree only
1273	14"/10"	*Quercus virginiana* - Live Oak	Moderate - heavy vines, limited lateral branching, good buffer tree
1271	12"	*Quercus laurifolia* - Laurel Oak	Poor - suckering trunk, no lateral branches, decay
1272	12"	*Quercus laurifolia* - Laurel Oak	Poor - broken top, advanced decay

Ace Hardware - Winter Springs

1277	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, significant lean, heavy vines
1256	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, not good stand alone tree
1288	10"	*Quercus laurifolia* - Laurel Oak	Moderate - upright canopy, good buffer tree only
1313	12"	*Quercus laurifolia* - Laurel Oak	Poor - decay, poor form
1319	16"	*Quercus virginiana* - Live Oak	Moderate - balanced canopy, heavy vines
1315	14"	*Quercus virginiana* - Live Oak	Poor - limited lateral branching, heavy vines, lean
1316	14"	*Quercus virginiana* - Live Oak	Poor - limited lateral branching, heavy vines, lean
1317	14"	*Quercus virginiana* - Live Oak	Poor - significant lean, poor form
1321	10"/12"	*Quercus virginiana* - Live Oak	Moderate - minor deadwood, minor decay
1289	16"	*Quercus virginiana* - Live Oak	Moderate - heavy vines some deadwood
1202	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, lean, poor form
1296	12"	*Quercus virginiana* - Live Oak	Poor - heavily forested, lean, poor form
1297	12"	*Quercus virginiana* - Live Oak	Poor - heavily forested, lean, poor form
1325	12"	*Quercus virginiana* - Live Oak	Poor - heavily forested, vines, trunk damaged from encroaching tree
1336	12"	*Quercus virginiana* - Live Oak	Poor - 1/2 canopy dead
1338	12"	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, no lateral branches
1340	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, upright canopy, no lateral branches
1339	12"	*Quercus virginiana* - Live Oak	Poor - advanced decay on parent trunk
1344	10"	*Quercus virginiana* - Live Oak	Moderate, upright canopy, some vines
1342	10"	*Quercus virginiana* - Live Oak	Poor - advanced decay in trunk from wound, upright canopy
1335	12"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, some deadwood
1329	10"	*Quercus virginiana* - Live Oak	Poor - advanced decay, poor form
1354	10"	*Quercus virginiana* - Live Oak	Moderate - co-dominate, upright canopy good together with #1355
1355	16"	*Quercus virginiana* - Live Oak	Moderate - upright canopy good with #1354 good balance
1299	12"	*Quercus virginiana* - Live Oak	Poor - significant lean, advanced decay, broken branches
1361	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, advanced decay, broken branches
1362	14"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, some deadwood
1363	10"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, good with #1364 no good stand alone tree
1364	12"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, good with #1363 no good stand alone tree
1365	12"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, vines, good with #1365 no good stand alone tree
1365	12"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, vines, good with #1365 no good stand alone tree
1349	10"	*Quercus virginiana* - Live Oak	Poor - upright canopy, vines, not good stand alone tree
1350	10"	*Quercus virginiana* - Live Oak	Poor - 1/2 canopy dead, vines
1351	12"	*Quercus virginiana* - Live Oak	Poor - significant lean in canopy, poor form

Ace Hardware - Winter Springs

1348	14"	*Quercus virginiana* - Live Oak	Poor - decay in trunk, heavy vines
1345	16"	*Quercus virginiana* - Live Oak	Poor - broken top, heavy vines, poor form
1343	12"	*Quercus virginiana* - Live Oak	Poor - heavy vines, broken lateral branching, poor form
1356	16"	*Quercus virginiana* - Live Oak	Poor - significant lean over sidewalk, heavy vines, poor form
1387	28"/22"	*Quercus virginiana* - Live Oak	Good - minor deadwood, vines, nice perimeter tree
1388	12"	*Quercus virginiana* - Live Oak	Poor - low trunk, 4"- 5" lateral growth only
1389	30"/30"	*Quercus virginiana* - Live Oak	Poor - half tree fallen , advanced decay, heavy vines
1375	16"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, heavy vines, deadwood
1382	18"	*Quercus virginiana* - Live Oak	Poor - heavy vines, major deadwood, some decay
1381	12"	*Quercus virginiana* - Live Oak	Poor - heavy vines, major deadwood, some decay
1376	14"	*Quercus virginiana* - Live Oak	Poor - heavy vines, major deadwood, some decay
1377	12"	*Quercus virginiana* - Live Oak	Poor - heavy vines, major deadwood, some decay
1372	18"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, heavy vines, deadwood
1369	14"	*Pinus clausa* - Sand Pine	Moderate - character bend in tree, upright canopy
1384	14"	*Quercus virginiana* - Live Oak	Poor - upright canopy, heavy vines, major deadwood
1385	10"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, heavy vines
1368	12"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, deadwood, vines
1371	16"	*Quercus virginiana* - Live Oak	Poor - lean, heavy vines, deadwood
1162	18"	*Quercus virginiana* - Live Oak	Good - upright canopy, well balanced, vines
1165	12"	*Quercus virginiana* - Live Oak	Poor - significant bend in canopy, major deadwood, decay in trunk
1164	10"	*Quercus virginiana* - Live Oak	Poor - heavy vines, broken lateral branching with decay
1161	12"	*Quercus virginiana* - Live Oak	Poor - heavy vines, broken lateral branching with decay
1159	20"	*Quercus virginiana* - Live Oak	Poor - 1/2 of canopy damaged, advanced decay, heavy vines
1156	12"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, minor decay
1158	12"	*Quercus virginiana* - Live Oak	Poor - 1/2 canopy dead, decay
1157	14"	*Quercus virginiana* - Live Oak	Moderate - one-sided canopy, vines, deadwood
1155	10"	*Quercus virginiana* - Live Oak	Poor - 75% of canopy dead
1152	16"/12"	*Quercus virginiana* - Live Oak	Poor - heavy forested, vines, major deadwood, decay
1153	16"/10"	*Quercus virginiana* - Live Oak	Good - upright canopy, lateral branching, vines, minor deadwood
1084	10"	*Quercus virginiana* - Live Oak	Poor - advanced decay in trunk, 50% dead
1148	16"	*Quercus virginiana* - Live Oak	Dead Tree
1147	12"	*Quercus virginiana* - Live Oak	Poor - advanced decay, poor form
1144	12"	*Quercus laurifolia* - Laurel Oak	Moderate - upright canopy, vines, deadwood
1141	12"	*Quercus virginiana* - Live Oak	Poor - broken canopy, advanced decay

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1099	16"	*Quercus virginiana* - Live Oak	Moderate - Good - slight lean, good with #1096
1096	20"	*Quercus virginiana* - Live Oak	Good - upright canopy, vines, good with #1099
1093	12"	*Quercus virginiana* - Live Oak	Poor - high co-dominate, poor form
1137	10"	*Quercus virginiana* - Live Oak	Poor - lateral growth 4"-5" from ground, poor form
1136	20"	*Quercus virginiana* - Live Oak	Poor - advanced decay in parent trunk
1138	14"	*Quercus virginiana* - Live Oak	Poor - significant bend, laying on ground
1140	12"	*Quercus laurifolia* - Laurel Oak	Good - upright canopy, minor deadwood
1139	12"	*Quercus virginiana* - Live Oak	Dead Tree
1116	10"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, heavy vines, deadwood
1117	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavy vines, encroached canopy
1109	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavy vines, encroached canopy
1101	12"	*Quercus virginiana* - Live Oak	Poor - co-dominate, heavy vines, decay in trunk
1107	16"/12"	*Quercus laurifolia* - Laurel Oak	Poor - flare has uprooted, heavy vines, decay
1105	13"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, vines, decay
1104	10"/12"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate with inclusion, heavy vines, multiple branching
907	12"	*Quercus laurifolia* - Laurel Oak	Poor - trunk girdled by tree, heavy vines
905	16"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, broken lateral branches
904	24"	*Pinus Elliottii* - Slash Pine	Good - upright canopy, good balanced canopy
907	14"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, broken top
906	10"	*Pinus Elliottii* - Slash Pine	Good - upright canopy, balanced
916	14"	*Quercus laurifolia* - Laurel Oak	Poor - Advanced decay in trunk, heavy vines
5	30"	*Enterolobium cyclocarpum* - Ear Tree	Invasive species
928	12"	*Quercus laurifolia* - Laurel Oak	Poor - tri-dominate with inclusion, heavy vines, poor form
929	14"	*Quercus laurifolia* - Laurel Oak	Poor - 1/2 tree advanced decay, suckers, significant lean
935	10"	*Quercus laurifolia* - Laurel Oak	Poor - broken top, suckering growth, vines
937	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, upright canopy, vines
940	12"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, broken canopy, decay
891	14"/10"	*Quercus virginiana* - Live Oak	Poor - co-dominate low inclusion, vines, poor form
958	14"	*Quercus laurifolia* - Laurel Oak	Poor - high co-dominate with inclusion, poor form
887	10"	*Quercus laurifolia* - Laurel Oak	Poor - high canopy, no lateral branching, vines
889	14"	*Quercus virginiana* - Live Oak	Moderate - one-sided canopy, vines, deadwood
890	12"	*Quercus virginiana* - Live Oak	Poor - significant lean, one-sided canopy, major deadwood
888	16"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, slightly one-sided, minor deadwood, good with #886
886	12"	*Quercus virginiana* - Live Oak	Moderate - upright canopy, slightly one-sided, minor deadwood, good with #888

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885	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavy vines, decay
877	8"/12"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate, advanced decay
878	20"	*Pinus Elliottii* - Slash Pine	Good - upright canopy, balanced
855	18"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay in trunk, lateral branching
853	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, broken branches, decay
869	10"	*Quercus virginiana* - Live Oak	Poor - 1/2 tree dead, decay
828	10"	*Quercus virginiana* - Live Oak	Poor - damaged by encroaching tree, decay
821	12"	*Quercus virginiana* - Live Oak	Poor - heavily forested, broken canopy, decay
995	14"	*Pinus Elliottii* - Slash Pine	Poor - bend in trunk, poor form
994	10"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay in trunk, broken canopy
990	12"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, decay in trunk, lateral branching
785	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, broken canopy, major deadwood
762	10"	*Quercus laurifolia* - Laurel Oak	Poor - high co-dominate, advanced decay, poor form
763	12"	*Quercus virginiana* - Live Oak	Poor - high co-dominate, heavily forested, no lateral branching
768	12"	*Quercus virginiana* - Live Oak	Poor - high co-dominate with inclusion, heavily forested, no lateral branching
777	10"	*Quercus virginiana* - Live Oak	Poor - high canopy, deadwood, poor form
769	10"	*Quercus virginiana* - Live Oak	Poor - broken canopy, sucker growth, poor form
775	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, bend in trunk, poor form
980	16"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, advanced decay in trunk
981	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, 1/2 dead, broken canopy
748	12"/12"	*Quercus virginiana* - Live Oak	Moderate -Poor- co-dominate, deadwood, broken canopy
743	12"	*Quercus laurifolia* - Laurel Oak	Poor - broken canopy, advanced decay
973	12"	*Quercus virginiana* - Live Oak	Poor - advanced decay in trunk, 50% dead
976	Cluster	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, broken canopy, poor form 8"/8"/10"
971	10"	*Quercus virginiana* - Live Oak	Poor - advanced decay, major dieback in canopy
969	10"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate, with decay in parent trunk, broken canopy
727	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, one-sided canopy, broken lateral branching
731	10"	*Quercus virginiana* - Live Oak	Poor - high co-dominate, advanced decay in trunk
715	10"	*Quercus virginiana* - Live Oak	Poor - high canopy, heavy vines, poor form
719	14"	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, major deadwood
722	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, major deadwood
724	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, major deadwood
938	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, major deadwood
961	10"/6"	*Quercus virginiana* - Live Oak	Poor - low co-dominate with inclusion

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960	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, major deadwood
959	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, upright canopy, heavy vines, basal decay
1242	16"	*Quercus laurifolia* - Laurel Oak	Poor - slight lean, broken top of canopy with decay
1189	14"	*Quercus virginiana* - Live Oak	Poor - decay in parent trunk at union and below
1186	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, basal decay, with decay
1187	12"/8"	*Quercus virginiana* - Live Oak	Poor - 1/2 tree dead, vines, deadwood
1208	12"	*Quercus virginiana* - Live Oak	Poor - heavily forested, high co-dominate, heavy vines
1204	10"	*Quercus virginiana* - Live Oak	Poor - trunk wounding from leaning tree, heavily forested, poor form
1205	12"	*Quercus virginiana* - Live Oak	Poor - co-dominate, 1/2 tree dead, vines
1212	12"	*Quercus virginiana* - Live Oak	Moderate - slight lean, upright canopy, deadwood
1211	10"	*Quercus virginiana* - Live Oak	Poor - 1/2 tree dead, major deadwood, vines
1210	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, 75%tree dead
1220	10"	*Quercus laurifolia* - Laurel Oak	Poor - high co-dominate, advanced decay in trunk
1228	10"	*Pinus Elliottii* - Slash Pine	Poor - wounded trunk from encroaching Oak, high canopy
1229	12"	*Quercus virginiana* - Live Oak	Poor - significant lean, major deadwood, poor form
684	10"	*Quercus virginiana* - Live Oak	Poor - high co-dominate with decay, 1/2 canopy dead
681	10"	*Quercus virginiana* - Live Oak	Poor - high co-dominate with decay, broken upper branches
1197	10"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, sucker growth only, poor form
1192	16"	*Quercus virginiana* - Live Oak	Poor - co-dominate, 1/2 canopy dead, major deadwood
1194	10"	*Quercus virginiana* - Live Oak	Poor - 75% deadwood
1195	12"	*Quercus virginiana* - Live Oak	Poor - heavily forested, high co-dominate, vines
1199	14"	*Quercus virginiana* - Live Oak	Poor - significant lean, 1/2 canopy dead, poor form
1190	12"	*Quercus virginiana* - Live Oak	Poor - high canopy, broken branches, heavy vines
1175	16"	*Quercus virginiana* - Live Oak	Poor - co-dominate, heavy vines, broken canopy
1008	Cluster	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, major deadwood , broken canopy 14"/14"/14
1024	10"	*Quercus laurifolia* - Laurel Oak	Moderate -high canopy, balanced lateral branching
1016	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavy vines, poor form
1013	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavy vines, poor form
1015	10"/18"	*Quercus virginiana* - Live Oak	Poor - advanced decay in trunks, broken lateral branching, vines
1019	10"	*Quercus virginiana* - Live Oak	Poor - 75% dead, no lateral branching
1001	10"	*Quercus virginiana* - Live Oak	Poor - heavily forested broken lateral branching, poor form
1000	12"	*Quercus virginiana* - Live Oak	Poor - high co-dominate with inclusion, significant lean, poor form
998	12"	*Quercus virginiana* - Live Oak	Dead Tree
996	10"	*Quercus laurifolia* - Laurel Oak	Poor - broken canopy, advanced decay

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1007	10"	*Pinus clausa* - Sand Pine	Poor - bend in trunk, poor form
1036	10"	*Quercus laurifolia* - Laurel Oak	Poor - lean in trunk, heavy vines, deadwood
1034	10"/12"	*Quercus virginiana* - Live Oak	Poor - heavy vines, 75% tree dead
1041	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, vines, decay in trunk
1052	12"	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, major deadwood, 1/2 dead
1169	10"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, broken canopy, suckering growth, poor form
1032	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily forested, decay in trunk, vines
1166	Cluster	*Quercus virginiana* - Live Oak	Poor - 8" lead dead , heavy vines, poor form 8"/12"/12"
1040	10"	*Pinus clausa* - Sand Pine	Poor - heavily forested, trunk bend, poor form
1030	12"	*Quercus virginiana* - Live Oak	Poor - upright canopy, no lateral branching, poor form
1028	12"	*Quercus virginiana* - Live Oak	Poor - high co-dominate, major deadwood, no lateral branching, poor form
1051	10"	*Quercus laurifolia* - Laurel Oak	Poor - upper canopy damaged by neighboring tree, advanced decay
1048	12"	*Quercus laurifolia* - Laurel Oak	Poor - upright canopy, trunk encroachment, decay
1049	14"	*Quercus virginiana* - Live Oak	Poor - upper canopy, damaged by neighboring tree, decay
1056	10"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, girdled roots, sucker growth
1074	10"	*Quercus virginiana* - Live Oak	Dead Tree
1071	10"	*Quercus virginiana* - Live Oak	Dead Tree
1073	10"	*Quercus laurifolia* - Laurel Oak	Poor - high co-dominate, advanced trunk decay
794	14"	*Quercus virginiana* - Live Oak	Poor - dead tree, Hypoxylon canker
808	10"	*Quercus virginiana* - Live Oak	Poor - high co-dominate, high canopy, no lateral branching
792	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavy vines, deadwood
800	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavy vines, deadwood
799	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavy vines, deadwood
796	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavy vines, deadwood
805	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, heavy vines, deadwood
1067	14"	*Quercus laurifolia* - Laurel Oak	Moderate - high canopy, slight bend in trunk
1065	10"	*Quercus virginiana* - Live Oak	Poor -significant lean, no lateral branches, cull
898	14"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, decay, poor form
899	14"	*Quercus virginiana* - Live Oak	Dead Tree
900	12"	*Quercus virginiana* - Live Oak	Dead Tree
897	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, broken canopy, decay
896	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, broken canopy, decay
894	10"	*Quercus virginiana* - Live Oak	Poor - significant lean, broken canopy, decay
1072	10"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay in trunk and upper canopy

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1077	12"	*Quercus virginiana* - Live Oak	Poor - high canopy, no lateral branching, poor form
1079	12"	*Quercus virginiana* - Live Oak	Poor - high canopy, no lateral branching, poor form
1068	10"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate, decay in trunk, deadwood
1088	Cluster	*Quercus virginiana* - Live Oak	Poor - heavily forested, heavy vines, major deadwood, decay, poor form 6"/12"/12"

Mary L. Edwards
Consulting Arborist Services

May 24,2023

Wess McMillian
Ace Hardware
Central Florida

Dear Wess,

Thank you for the opportunity to provide a Statistical Tree Survey along with a tree identification and health assessment for the additional parcel adjacent to the original proposed Ace Hardware site in Winter Springs, FL.

This report includes the following.

- Summary of the tree cover at the property for all tree under ten inch in diameter.
- Individual tree health assessments with supportive characteristics for all trees ten-inch diameter and greater.
- Tree number coincide with the number on the original survey.
- Highlight observations of pertinent information that may offer additional insight for preservation within the report.

Statistical Tree Survey Observations

- 100% of trees under ten inch in diameter appear to be volunteer trees. There were very few mature trees for the size of the parcel. The area consists of vines, volunteer trees, invasive species, and Palmetto ground cover. These are trees/plants that were not planted with purpose and tend to be less than a desirable species with poor form and lack of value.

- The species outline for this tree canopy consists of.
    1. Ten percent *Quercus virginiana* – Live Oak
    2. Ten percent *Quercus laurifolia* - Laurel Oak
    3. Fifty-five percent Invasive Species and Palmettos
    4. One percent *Prunus laurocerasus* - Cherry Laurel
    5. Twenty-three percent *Pinus elliottii* – Slash Pine
    6. One percent *Prunus serotina* – Black Cherry



Examples of volunteer trees under ten inches in diameter

Supporting Characteristics for Health Assessments:

Health ratings for individual trees will be based on the following criteria:

Excellent – Specimen tree good health

Good – Tree that meets available points for good structure, viable canopy and without decay.

Moderate – Tree that does not meet either good structure, viable canopy or has internal decay present.

Poor – Tree that meets multiple stress items and should be considered for removal also includes Invasive Species– Removal Only

The underbrush and heavy forestation were consistent throughout the entire site, resulting in poor trunk and canopy form primarily due to the heavy encroachment from neighboring trees, heavy vines, and insufficient sunlight for proper development. This site had large openings with little to no tree cover giving the vine and Palmetto population an opportunity to mature which has completely engulf the neighboring tree canopies. (Pictures below).





Other characteristics such as trunk wounding, advanced decay, and Pine decline was evident throughout the property. There was excessive utility pruning along the east property line leaving one-sided canopies with poor form, dead trees, high stretched canopies competing for sunlight and branch bark inclusions on the co-dominant and tri-dominant trunk structures. There was also storm damage along the southeast corner of the property, where trees were broken and damaged from high winds. These circumstances play a significant role in determining if a tree is in good health and suitable for preservation (Example Pictures below).







Trees are dynamic, living organisms which change over time. The observations made herein will reflect the opinion of the Arborist at the time of inspection and do not guarantee the condition of the trees anytime in the future. Trees or parts can fail at any time; these failures cannot always be predicted. Inspections of these trees was based on a ground level visual observation only, I did not perform sound testing, advanced Arboricultural testing or gather any forensic samples for further examination on the site. The assessment did not take into consideration any information unknown, not visible or detectable at the time of the inspection.

Again Wess, thank you for the opportunity to submit this report for Consulting Arborist Services. Please let me know if you have any questions regarding this report, statistical survey, and inventory with health assessment

Sincerely,
Mary

Mary L. Edwards
Registered Consulting Arborist RCA #451
ISA Certified Arborist FL-0116
ISA Qualified Tree Risk Assessor
321-303-4714
mary@maryedwardsarborist.com

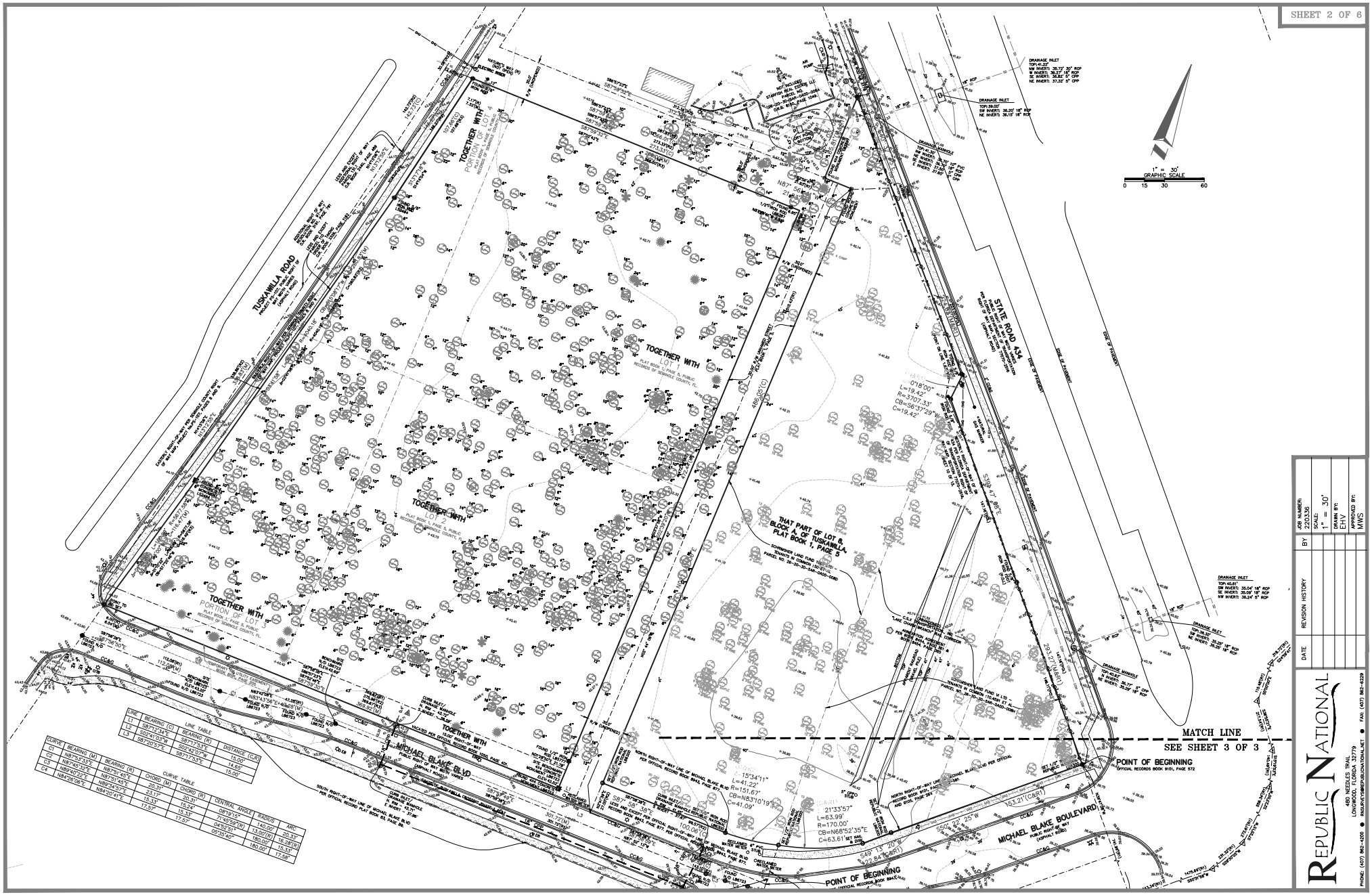
Ace Hardware Additional Parcel - Winter Springs

Tree #	DBH	Species	Supporting Characteristics for Health Assessment & Recommendations
8132	28"	*Quercus virginiana* - Live Oak	Poor - co-dominate structure with inclusion, good buffer tree only, poor form
8130	10"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, poor form, significant lean
8131	26"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, poor form, significant lean, vines
8126	20"	*Quercus laurifolia* - Laurel Oak	Dead tree
8125	12"	*Quercus laurifolia* - Laurel Oak	Poor - girdled roots, one-sided canopy
8128	20"	*Quercus laurifolia* - Laurel Oak	Moderate - upright canopy, good buffer tree only
8124	12"	*Quercus laurifolia* - Laurel Oak	Poor - co-dominate structure, damaged canopy, poor form
7900	20"	*Quercus laurifolia* - Laurel Oak	Moderate - upright canopy, good buffer tree only
8119	19"	*Quercus laurifolia* - Laurel Oak	Poor - high co-dominate structure, secondary growth only, poor form
8117	18"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, canopy dieback
8115	10"	*Quercus laurifolia* - Laurel Oak	Poor - cull tree, no viable structure, save as pair with #8113
8113	14"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, significant lean, one-sided canopy, save as pair with #8115
8112	22"	*Quercus virginiana* - Live Oak	Moderate - encroached by pine
8114	16"	*Pinus elliottii* - Slash Pine	Moderate - upright canopy, deadwood
8107	30"	*Quercus virginiana* - Live Oak	Good - co-dominate structure with minor inclusion, balanced canopy
8102	12"	*Pinus elliottii* - Slash Pine	Poor - poor form, deadwood
8109	18"	*Pinus elliottii* - Slash Pine	Poor - high co-dominate structure with inclusion, high rise structure
8104	24"	*Pinus elliottii* - Slash Pine	Poor - heavy vines, poor form, excessive deadwood
8100	16"	*Pinus elliottii* - Slash Pine	Poor - heavy vines, poor form, excessive deadwood
8108	14"	*Pinus elliottii* - Slash Pine	Poor - heavy vines, poor form, excessive deadwood
8106	16"	*Pinus elliottii* - Slash Pine	Poor - heavy vines, poor form, excessive deadwood
8105	12"	*Pinus elliottii* - Slash Pine	Poor - 75% dead
8103	16"	*Pinus elliottii* - Slash Pine	Poor - one-sided canopy, heavy vines, lean
8090	10"	*Quercus laurifolia* - Laurel Oak	Poor - heavily encroached tree, poor form
8096	14"	*Quercus laurifolia* - Laurel Oak	Poor - high tri-dominate structure with multiple inclusions, one-sided canopy, poor form
8093	14"	*Pinus elliottii* - Slash Pine	Poor - one-sided canopy, deadwood, high narrow canopy
8088	10"	*Pinus elliottii* - Slash Pine	Poor - broken top, one-sided canopy
8094	14"	*Pinus elliottii* - Slash Pine	Poor - significant lean into #8088, one-sided canopy
8091	10"	*Pinus elliottii* - Slash Pine	Dead tree
8077	20"	*Pinus elliottii* - Slash Pine	Poor - heavy vines, ,broken canopy, deadwood
8078	12"	*Pinus elliottii* - Slash Pine	Poor - heavy vines, ,broken canopy, deadwood
8075	12"	*Pinus elliottii* - Slash Pine	Poor - heavy vines, ,broken canopy, deadwood
8080	25"	*Pinus elliottii* - Slash Pine	Poor - heavy vines, stunted canopy, broken top
8095	14"	*Pinus elliottii* - Slash Pine	Poor - high co-dominate structure, heavy vines,
8067	16"	*Pinus elliottii* - Slash Pine	Poor - significant lean into adjacent small pine
8065	16"	*Pinus elliottii* - Slash Pine	Dead tree
8068	10"	*Pinus elliottii* - Slash Pine	Poor - tree #8067 is leaning into canopy, poor form
8081	10"	*Pinus elliottii* - Slash Pine	Poor - wound on trunk, sap ooze, poor form
8085	16"	*Pinus elliottii* - Slash Pine	Poor - co-dominate structure, advanced decay, lead failure, poor form
8073	12"	*Quercus virginiana* - Live Oak	Moderate - smaller oak, balanced structure, minor deadwood, palm too close needs to be removed
8058	24"	*Pinus elliottii* - Slash Pine	Poor - high co-dominate structure, major broken branches, poor form
8061	18"	*Quercus laurifolia* - Laurel Oak	Poor - one-sided canopy, poor form, heavy vines
8052	10"	*Quercus virginiana* - Live Oak	Moderate - vines, minor deadwood, natural form
8051	12"	*Quercus laurifolia* - Laurel Oak	Poor - significant lea, decay, poor form
8050	10"	*Quercus virginiana* - Live Oak	Poor - damaged from tree #8051
8057	10"	*Quercus virginiana* - Live Oak	Poor - encroached canopy, decay, poor form
8044	14"	*Quercus laurifolia* - Laurel Oak	Poor - high co-dominate structure with inclusion, slight lean
8040	18"	*Quercus laurifolia* - Laurel Oak	Poor - one-sided canopy, heavy vines, major deadwood
8041	12"	*Quercus laurifolia* - Laurel Oak	Poor - high co-dominate structure, totally encroached with vines
8038	12"	*Quercus laurifolia* - Laurel Oak	Poor - high co-dominate structure, totally encroached with vines
8031	24"	*Quercus laurifolia* - Laurel Oak	Moderate - upright canopy, deadwood, balanced canopy
8024	24"	*Quercus laurifolia* - Laurel Oak	Poor - encroached at base with #8023, one-sided canopies
8023	16"	*Pinus elliottii* - Slash Pine	Poor - fused with #8024, one-sided canopy
8030	16"	*Quercus laurifolia* - Laurel Oak	Poor - upright canopy, deadwood, vines, wound at mid-level trunk area
8032	10"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, heavily encroached, poor form

Tree #	DBH	Species	Supporting Characteristics for Health Assessment & Recommendations
8028	10"	*Quercus virginiana* - Live Oak	Poor - high co-dominate structure, small canopy, deadwood
8033	12"	*Quercus laurifolia* - Laurel Oak	Poor - broken top of canopy, canopy dieback, vines
8029	10"	*Quercus laurifolia* - Laurel Oak	Dead tree
8034	10"	*Quercus virginiana* - Live Oak	Poor - 75% dead, significant lean, heavily encroached
8036	10"	*Quercus virginiana* - Live Oak	Poor - 75% dead, significant lean, heavily encroached
8037	10"	*Quercus virginiana* - Live Oak	Poor - 75% dead, significant lean, heavily encroached
8035	10"	*Quercus virginiana* - Live Oak	Poor - 75% dead, significant lean, heavily encroached
8039	12"	*Quercus virginiana* - Live Oak	Poor - significant lean in heavily encroached area
8017	14"	*Quercus virginiana* - Live Oak	Poor - one-sided canopy, heavy vines, heavily encroached
8013	14"	*Quercus virginiana* - Live Oak	Poor - co-dominate structure, one-sided canopy, heavy vines, heavily encroached
8012	10"	*Quercus virginiana* - Live Oak	Poor - one-sided canopy, heavy vines, heavily encroached
8011	10"	*Prunus caroliniana* - Cherry Laurel	Poor - significant lean, heavy vines
8015	12"	*Quercus laurifolia* - Laurel Oak	Poor - mistletoe, broken top, heavy vines
8018	12"	*Quercus virginiana* - Live Oak	Poor - significant lean into #8015, heavy vines
8020	12"	*Quercus virginiana* - Live Oak	Poor - high co-dominate structure, broken canopy, heavy vines
8008	12"	*Quercus laurifolia* - Laurel Oak	Poor - canopy broken, utility pruning, heavy vines
8007	16"	*Quercus laurifolia* - Laurel Oak	Poor - heavy vines, one-sided canopy, utility lines
8001	14"	*Quercus virginiana* - Live Oak	Poor - excessive vines, utility pruning canopy tops. Poor form
8002	16"	*Quercus virginiana* - Live Oak	Poor - excessive vines, utility pruning canopy tops. Poor form
8003	16"	*Quercus virginiana* - Live Oak	Poor - excessive vines, utility pruning canopy tops. Poor form
8004	10"	*Quercus virginiana* - Live Oak	Poor - excessive vines, utility pruning canopy tops. Poor form
8010	10"	*Quercus laurifolia* - Laurel Oak	Dead fallen tree
8021	10"	*Quercus laurifolia* - Laurel Oak	Poor - under utility lines, 50% upper canopy missing
8026	10"	*Liquidambar styraciflua* - Sweet Gum	Poor - one-sided canopy due to utility pruning, vines
8025	22"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay in trunk, one-sided canopy due to utility pruning, vines
8027	26"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay in trunk, one-sided canopy due to utility pruning, vines
8062	16"	*Quercus virginiana* - Live Oak	Poor - 75% dead at utility pole, heavy vines
8059	10"	*Quercus virginiana* - Live Oak	Poor - 75% dead at utility pole, heavy vines
8092	10"	*Quercus virginiana* - Live Oak	Moderate - in cluster only, buffer tree only, not good stand alone trees
8089	12"	*Quercus virginiana* - Live Oak	Moderate - in cluster only, buffer tree only, not good stand alone trees
8087	10"	*Quercus virginiana* - Live Oak	Moderate - in cluster only, buffer tree only, not good stand alone trees
8084	12"	*Quercus virginiana* - Live Oak	Moderate - in cluster only, buffer tree only, not good stand alone trees
8099	12"	*Quercus laurifolia* - Laurel Oak	Moderate - upright canopy, minor deadwood
8076	10"	*Quercus virginiana* - Live Oak	Moderate - in cluster, only buffer edge, not a good stand alone tree
8079	10"	*Quercus virginiana* - Live Oak	Moderate - in cluster, only buffer edge, not a good stand alone tree
8069	10"	*Quercus virginiana* - Live Oak	Poor - high canopy, poor form
8071	10"	*Quercus virginiana* - Live Oak	Poor - high canopy, poor form
8082	12"	*Quercus virginiana* - Live Oak	Poor - heavy vines, encroached canopy, deadwood
8083	20"	*Quercus virginiana* - Live Oak	Poor - large basil wound with vertical crack, 50% dead
8070	16"	*Quercus laurifolia* - Laurel Oak	Poor - heavy vines, poor form deadwood
8086	10"	*Prunus caroliniana* - Cherry Laurel	Poor - heavy vines, poor form deadwood
8098	14"	*Quercus laurifolia* - Laurel Oak	Poor - tri-dominate structure with inclusions, heavy vines, poor form
8101	12"	*Quercus laurifolia* - Laurel Oak	Poor - one-sided canopy, poor form, heavy vines
8062	16"	*Quercus laurifolia* - Laurel Oak	Dead broken tree
8066	14"	*Quercus laurifolia* - Laurel Oak	Dead broken tree
8064	12"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, heavy vines, one-sided canopy
8059	10"	*Quercus laurifolia* - Laurel Oak	Dead broken tree
8060	12"	*Quercus laurifolia* - Laurel Oak	Dead broken tree
8063	12"	*Quercus laurifolia* - Laurel Oak	Dead broken tree
8049	24"	*Quercus laurifolia* - Laurel Oak	Moderate - slightly one-sided, good property line buffer tree
8055	10"	*Quercus laurifolia* - Laurel Oak	Moderate - high co-dominate structure with inclusion, upright canopy
8042	10"	*Quercus laurifolia* - Laurel Oak	Dead tree
8046	22"	*Pinus elliottii* - Slash Pine	Moderate - vines, upright structure
8043	14"	*Pinus elliottii* - Slash Pine	Dead tree
8053	42"	*Quercus virginiana* - Live Oak	Good - upright canopy, canopy deadwood

Ace Hardware Additional Parcel - Winter Springs

Tree #	DBH	Species	Supporting Characteristics for Health Assessment & Recommendations
8056	24"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, broken canopy, vines
8054	16"	*Quercus laurifolia* - Laurel Oak	Poor - advanced decay, broken canopy, vines
8048	18"	*Pinus elliottii* - Slash Pine	Dead tree
8045	10"	*Quercus virginiana* - Live Oak	Poor - heavily encroached with vines, no viable canopy
8047	24"	*Pinus elliottii* - Slash Pine	Moderate - deadwood, minor dieback
8074	22"	*Quercus virginiana* - Live Oak	Poor - vines, deadwood, broken top, sucker growth
8107	30"	*Quercus virginiana* - Live Oak	Moderate - tri-dominate structure with inclusion, upright structure, balanced canopy
8111	10"	*Prunus caroliniana* - Cherry Laurel	Poor - heavily encroached with vines, poor form
8116	10"	*Quercus virginiana* - Live Oak	Moderate - as cluster in buffer only, vines, not good stand alone trees
8118	12"	*Quercus virginiana* - Live Oak	Moderate - as cluster in buffer only, vines, not good stand alone trees
8122	14"	Cinnamomum camphora - Camphor	Invasive species
8130	10"	*Quercus laurifolia* - Laurel Oak	Poor - significant lean, heavy vines, poor form



LINE TABLE			
LINE	BEARING (C)	BEARING (M)	DISTANCE (C&M)
L1	S82°31'34"E	S87°12'57"E	14.00'
L2	S82°31'34"E	S87°12'57"E	14.00'
L3	S87°20'57"E	S87°17'57"E	15.00'

CURVE TABLE						
CURVE	BEARING (M)	BEARING (R)	CHORD (M)	CHORD (R)	CENTRAL ANGLE	RADIUS	ARC
C1	N87°40'57"E	N87°51'45"E	20.31'	20.31'	08°03'15"	140.00'(M)	20.33'
C2	N89°40'57"E	N89°51'45"E	15.24'	15.24'	07°48'00"	112.00'(M)	15.25'
C3	N89°40'57"E	N89°51'45"E	15.33'	15.33'	07°50'15"	112.00'(R)	15.35'
C4	N83°36'08"E	N83°25'41"E	17.57'	17.57'	08°35'40"	180.00'(R)	17.58'

DATE	REVISION HISTORY	BY

JOB NUMBER: 22-045
SCALE: 1" = 30'
DRAWN BY: EHV
APPROVED BY: MWS

REPUBLIC NATIONAL
480 NEEDLES TRAIL
LONGWOOD, FLORIDA 32779
PHONE: (407) 862-4005 • RNSURVEYORS@REPUBLICNATIONAL.NET • FAX: (407) 862-4229

SUTTON CROSSINGS

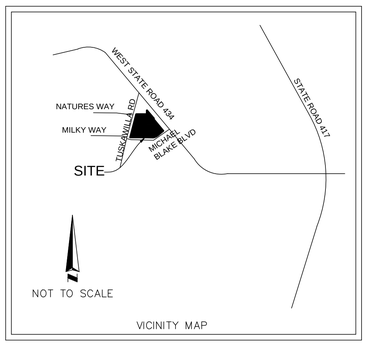
A REPLAT OF LOTS 1, 2, A PORTION OF LOTS 3 & 4, A PORTION OF LOT 8, BLOCK A, AND A 30 FEET RIGHT OF WAY, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, PLAT BOOK 1, PAGE 5, BEING IN SECTION 16, TOWNSHIP 21 SOUTH, RANGE 32 EAST, CITY OF WINTER SPRINGS, SEMINOLE COUNTY, FLORIDA,

LEGAL DESCRIPTION

LOTS 1, 2, A PORTION OF LOTS 3 AND 4, A PORTION OF LOT 8, BLOCK A, AND A 30 FEET RIGHT OF WAY, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGE 5, IN THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE INTERSECTION OF THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MICHAEL BLAKE BOULEVARD, AS RECORDED IN OFFICIAL RECORDS BOOK 10181, PAGE 1010, OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA AND THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF STATE ROAD 434, PER RIGHT OF WAY MAP SECTION 77070-2516; THENCE ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE OF SAID MICHAEL BLAKE BOULEVARD, THE FOLLOWING FOUR COURSES: (1) SOUTH 50°22'25" WEST, A DISTANCE OF 153.21 FEET; (2) THENCE SOUTH 49°13'20" WEST, A DISTANCE OF 22.84 FEET, TO A POINT OF CURVATURE OF A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 21°34'04" AND A CHORD DISTANCE OF 63.61 FEET WHICH BEARS SOUTH 68°52'38" WEST; (3) THENCE SOUTHWESTERLY, ALONG THE ARC OF SAID CURVE, A DISTANCE OF 63.99 FEET, TO A POINT ON THE FORMER WEST RIGHT OF WAY LINE OF CSX RAILROAD, SAID POINT BEING ON A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°03'47" AND A CHORD DISTANCE OF 4.09 FEET WHICH BEARS SOUTH 01°43'08" EAST; (4) THENCE SOUTHERLY, ALONG SAID WEST LINE AND THE ARC OF A CURVE, A DISTANCE OF 4.09 FEET TO A POINT ON THE NORTH LINE OF MICHAEL BLAKE BOULEVARD, AS RECORDED IN OFFICIAL RECORDS BOOK 8943, PAGE 877, OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, SAID POINT BEING THE POINT OF CURVATURE OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 151.67 FEET, A CENTRAL ANGLE OF 15°35'16", AND A CHORD DISTANCE OF 41.14 FEET, WHICH BEARS SOUTH 83°10'40" WEST; THENCE WESTERLY, ALONG THE ARC OF SAID CURVE, A DISTANCE OF 41.26 FEET; THENCE CONTINUE ALONG SAID NORTHERLY RIGHT OF WAY LINE, NORTH 87°58'43" WEST, A DISTANCE OF 99.59 FEET, TO A POINT ON THE EAST RIGHT OF WAY LINE, 30.00 FEET IN WIDTH, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGE 5, IN THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE ALONG SAID EAST LINE, SOUTH 02°39'13"WEST, A DISTANCE OF 12.36 FEET; THENCE DEPARTING SAID EAST LINE, NORTH 87°17'27" WEST, A DISTANCE OF 15.00 FEET, TO A POINT ON THE NORTH LINE RIGHT OF WAY LINE OF MICHAEL BLAKE DRIVE, TUSCAWILLA CROSSINGS, PHASE 1, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 83, PAGES 75 THRU 89, INCLUSIVE, OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE ALONG THE NORTH LINE, NORTH 87°17'27" WEST, A DISTANCE OF 15.00 FEET, TO A POINT ON THE WEST RIGHT OF WAY LINE OF AFORESAID RIGHT OF WAY , 30.00 FEET IN WIDTH; THENCE CONTINUING ALONG SAID NORTH RIGHT OF WAY LINE OF MICHAEL BLAKE DRIVE, NORTH 87°58'12" WEST, A DISTANCE OF 369.65 FEET, TO A POINT ON A CURVE ON THE EAST RIGHT OF WAY LINE OF TUSCAWILLA ROAD, ACCORDING TO SEMINOLE COUNTY RIGHT OF WAY MAP, PROJECT NO. PS-107, SAID POINT ALSO BEING THE NORTHWEST CORNER OF MICHAEL BLAKE BOULEVARD PER THE AFORESAID PLAT OF TUSCAWILLA CROSSINGS, SAID POINT ALSO BEING ON A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 5677.58 FEET, A CENTRAL ANGLE OF 1°10'21, AND A CHORD DISTANCE OF 116.18 WHICH BEARS NORTH 16°18'25"EAST; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE AND SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 116.18 FEET TO THE POINT OF A REVERSE CURVE. CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 4040.18 FEET, A CHORD DISTANCE OF 260.82 FEET AND A CHORD THAT BEARS NORTH 15°08'17" EAST; THENCE ALONG THE ARC OF SAID CURVE AND SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 260.86 FEET, TO A POINT OF TANGENCY; THENCE NORTH 13°17'18" EAST, A DISTANCE OF 107.66 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE, 30.00 FEET IN WIDTH, ACCORDING TO AFORESAID PLAT OF , D.R. MITCHELL'S SURVEY; THENCE NORTH 19°56'30" EAST, A DISTANCE OF 15.76 FEET, ALONG THE EAST LINE OF TUSCAWILLA ROAD TO A POINT IN THE CENTERLINE OF SAID 30.00 FOOT RIGHT OF WAY; THENCE, ALONG SAID CENTERLINE, SOUTH 87°59'01" EAST, A DISTANCE OF 269.39 FEET; THENCE DEPARTING SAID CENTERLINE, NORTH 02°00'59"EAST, A DISTANCE OF 15.00 FEET, TO A POINT ON THE NORTH RIGHT OF WAY LINE AND THE SOUTHEAST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 8150, PAGE 1049; THENCE ALONG THE EAST LINE OF SAID LANDS, NORTH 02°11'57" EAST, A DISTANCE OF 65.79 FEET, TO THE SOUTHWESTERLY RIGHT OF WAY LINE OF STATE ROAD 434; THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY LINE, THE FOLLOWING THREE COURSES: (1) SOUTH 40°38'14" EAST, A DISTANCE OF 223.39 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF THE FORMER CSX RAILROAD, SAID POINT BEING ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 0°18'53", A CHORD DISTANCE OF 20.37 FEET, AND A CHORD THAT BEARS SOUTH 04°03'09" WEST; (2) THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE AND THE FORMER RIGHT OF WAY LINE, A DISTANCE OF 20.37 FEET; THENCE DEPARTING SAID WESTERLY RIGHT OF WAY LINE, SOUTH 39°46'41" EAST, A DISTANCE OF 293.34 FEET TO THE POINT OF BEGINNING.

CONTAINING 267,190 SQUARE FEET OR 6.134 ACRES, MORE OR LESS.



VICINITY MAP

SURVEYOR'S NOTES:

1. BEARINGS ARE BASED ON THE EAST RIGHT OF WAY LINE OF TUSCAWILLA ROAD, AS BEING, N13°17'18"E, PER FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE 901, NAD 83, PER SEMINOLE COUNTY

2. THE FLORIDA STATE PLANE COORDINATES SHOWN HEREON ARE RELATIVE TO FLORIDA EAST ZONE (901), NAD 83 DATUM, (2011 ADJUSTMENT). DISTANCES ARE IN U.S. SURVEY FEET.

3. PERMANENT REFERENCE MONUMENTS AND LOT CORNERS SET IN ACCORDANCE WITH FLORIDA STATUTES CHAPTER 177, PART 1. THERE ARE NO PERMANENT CONTROL POINTS ASSOCIATED WITH THIS PLAT.

4. ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES. THIS SECTION SHALL NOT APPLY TO THOSE PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.

5. ALL LINES ARE NON-RADIAL UNLESS MARKED AS RADIAL (RAD)

6. ALL LOT CORNERS ARE TO BE 1/2" IRON RODS LB6300 (SET AFTER CONSTRUCTION)

7. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

REPUBLIC NATIONAL
480 NEEDLES TRAIL
LONGWOOD, FLORIDA 32779
RNSURVEYS@REPUBLICNATIONAL.NET
PHONE: (407) 862-4200 FAX: (407) 862-6229

NOTICE:
THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREON AND WILL IN ON CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

PLAT BOOK PAGE

SUTTON CROSSINGS
DEDICATION

KNOW ALL MEN BY THESE PRESENTS that _____, is the lawful owner of the lands described in the caption hereon, hereafter referred to as "Owner", and that he has caused the same to be surveyed, and this plat, made in accordance with said survey, is here by adopted as the true and correct plat of said lands. The Owner dedicates said lands and plat for the uses and purposes therein expressed and dedicates the drainage easements, utility easements, unless otherwise noted, to the perpetual use of the public.

IN WITNESS WHEREOF, the undersigned, _____ has caused these presents to be executed and acknowledged by its undersigned _____thereunto duly authorized on this _____ day of _____, 2024.

Owner

By: _____

Print Name: _____

Title: _____

Signed and sealed in the presence of:

_____ _____
Witness signature Witness signature

_____ _____
Witness printed name Witness printed name

STATE OF FLORIDA
COUNTY OF SEMINOLE

The foregoing instrument was acknowledged before me this _____ day of _____, 2024, by _____, as _____ of _____
in its capacity as the managing partner of _____
said person ( ) is personally known to me or ( ) has produced_____as identification.

Printed Name_____
Notary Public
Commission Number_____

My Commission Expires _____

CERTIFICATE OF APPROVAL BY MUNICIPALITY

THIS IS TO CERTIFY, That on _____ the forgoing plat was approved by the City of Winter Springs, Florida

By: _____

_____

ATTEST: _____

CERTIFICATE OF REVIEW BY CITY SURVEYOR

I have reviewed this plat and find it to be in conformity with Chapter 177 Florida Statutes

By: _____ Date: _____, 2024

_____
Florida Registration No._____
City Surveyor for the City of Winter Springs, Florida

CERTIFICATE OF CLERK OF CIRCUIT COURT

I hereby certify, that I have examined the foregoing plat and find that it complies in form with all the requirements of Chapter 177, Florida Statutes, and was filed for record on _____, 2024, File No._____

_____
Clerk of the Circuit Court in and for
Seminole County, Florida

CERTIFICATE OF SURVEYOR

This plat was prepared under my direction and supervision. This plat complies with all of the survey requirements of Chapter 177, Florida Statutes.

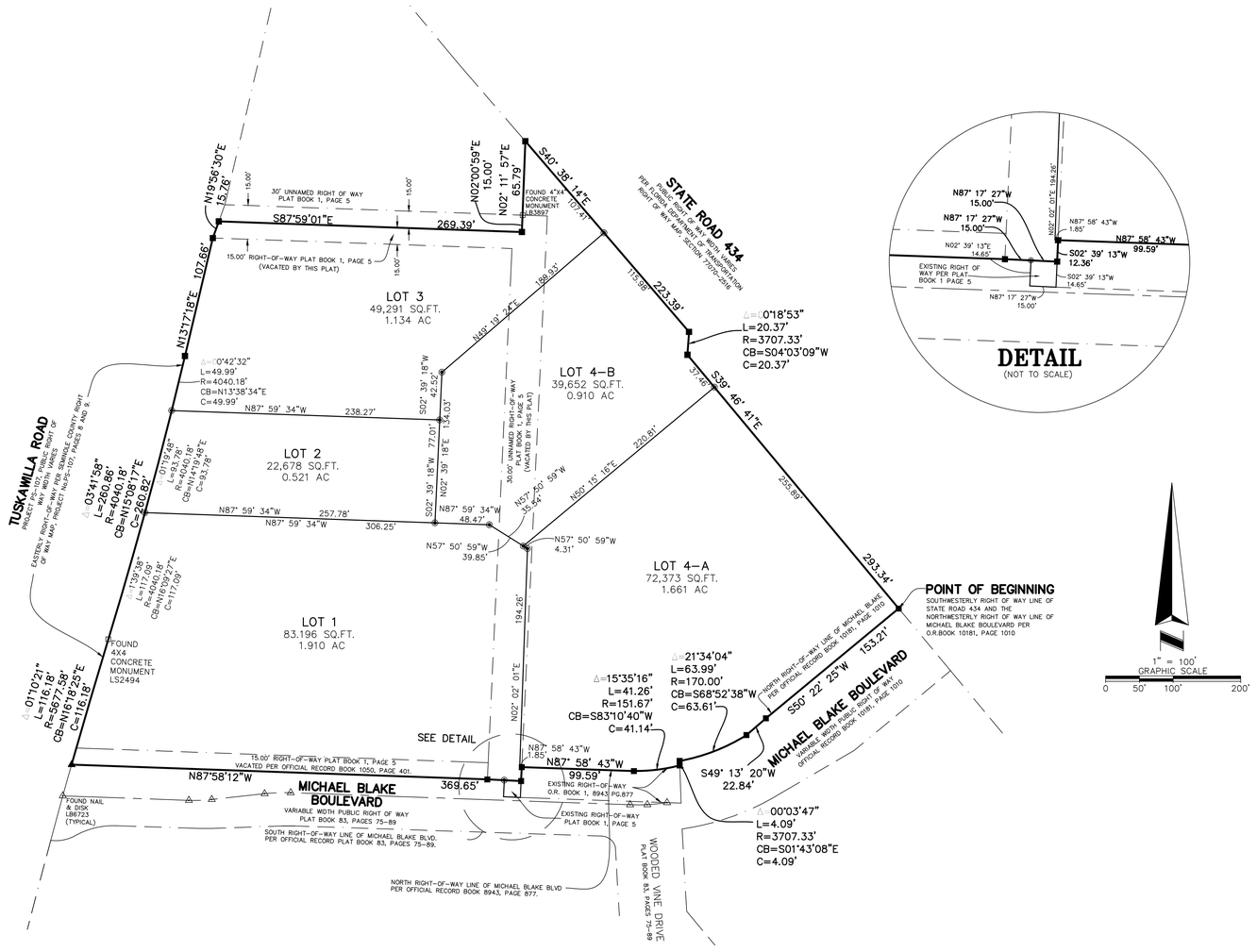
_____
Surveyor's name: Michael W. Solitro Date:
Registration Number: LS4458
Professional Land Surveyor
Registration Number of Legal Entity: LB6300
Republic National Inc.
480 Needles Trail
Longwood, Florida 32779

SHEET 2 OF 2

PLAT BOOK PAGE

SUTTON CROSSINGS

A REPLAT OF LOTS 1, 2, A PORTION OF LOTS 3 & 4, A PORTION OF LOT 8, BLOCK A, AND A 30 FEET RIGHT OF WAY, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, PLAT BOOK 1, PAGE 5, BEING IN SECTION 16, TOWNSHIP 21 SOUTH, RANGE 32 EAST, CITY OF WINTER SPRINGS, SEMINOLE COUNTY, FLORIDA.



DETAIL
(NOT TO SCALE)

REPUBLIC NATIONAL
480 NEEDLES TRAIL
LONGWOOD, FLORIDA 32779
RNSURVEYS@REPUBLICNATIONAL.NET
PHONE: (407) 862-4200 FAX: (407) 862-6229

LEGEND:

- FOUND 4"X4" CONCRETE MONUMENT AS NOTED
- SET 4"X4" CONCRETE MONUMENT PERMANENT REFERENCE MONUMENT LB6300, 24" IN LENGTH
- SET 1/2" IRON ROD & CAP "REPUBLIC NATIONAL" LB6300
- FOUND MONUMENT FOUND AS DESCRIBED
- FOUND NAIL & DISK LB6723
- SET NAIL & DISK LB6300
- LB LICENSED BUSINESS
- C.C.R. CERTIFIED CORNER RECORD

PUBLIC HEARINGS AGENDA ITEM 401

PLANNING AND ZONING BOARD/LOCAL PLANNING AGENCY AGENDA | APRIL 24, 2025 SPECIAL MEETING

TITLE

Chick-Fil-A, S.R. 434 and Michael Blake Boulevard – Final Engineering and Development Plans, Aesthetic Review, Waivers, and Development Agreement.

SUMMARY

The Community Development Department requests that the Planning & Zoning Board hold a Public Hearing to consider Site Plan/Final Engineering, aesthetic review, waivers, and Development Agreement regarding the applicant's request to build a 5,576-square foot Chick-Fil-A quick service restaurant with drive-thru in the Town Center District, Transect 5.

FUNDING SOURCE

RECOMMENDATION

The Community Development Department requests that the Planning & Zoning Board hold a Public Hearing to consider Site Plan/Final Engineering, aesthetic review, waivers, and Development Agreement regarding the applicant's request to build a 5,576-square foot Chick-Fil-A quick service restaurant with drive-thru in the Town Center District, Transect 5.

PUBLIC HEARINGS AGENDA ITEM

PLANNING & ZONING BOARD
THURSDAY, APRIL 24, 2025
REGULAR MEETING

TITLE

Chick-Fil-A, S.R. 434 and Michael Blake Boulevard – Final Engineering and Site Plan, Aesthetic Review, Waivers, and First Modification to Development Agreement.

SUMMARY

The Community Development Department requests that the Planning & Zoning Board hold a Public Hearing to consider Site Plan/Final Engineering, aesthetic review, waivers, and First Modification to Development Agreement regarding the applicant's request to build a 5,576- square foot Chick-Fil-A quick service restaurant with drive-thru in the Town Center District, Transect 5.

General Information			
Applicant	Ferber Construction Management, LLC; Paul Ferber		
Property Owner(s)	Blue Orange Holdings, LLC		
Location	Southeast of and adjacent to S.R. 434 and northwest of and adjacent to Michael Blake Boulevard		
Tract Size	±1.73 Acres		
Parcel ID Number	26-20-30-5AR-0A00-008D and 26-20-30-5AR-0A00-008H		
Zoning Designation	Town Center District, T-5 Transect		
FLUM Designation	Town Center District		
Adjacent Land Use	North: Vacant (across S.R. 434) East: Multi-family		South: Vacant West: Vacant
Height	2 stories minimum		
Setbacks	Front: 25 ft, minimum, 50 ft. maximum	Rear: 15 ft. minimum	Side: 5 ft. minimum, 100 ft. maximum
Development Standards	Lot Coverage: 100%		
Development Permits	Not applicable		
Development Agreement	Development Agreement | Pending		
Code Enforcement	Not applicable		

City Liens	Not applicable

Background Data:
The development site consists of two contiguous lots, the proposed Lots 4-A and 4(B) of the under review Sutton Crossings subdivision, totaling ±1.73 acres. The development site is located at the southwest corner of S.R. 434 and Michael Blake Boulevard. The applicant is proposing a 5,576-square foot quick service restaurant with drive-thru. The proposed use of a quick service restaurant with a drive-thru is a permitted use in the Town Center District, Transect 5 (T5). Upon receipt of the Planning and Zoning Board's recommendation, the City Commission shall make a final decision on the application, to approve, approve with conditions, or deny the project within the Town Center district.

Public Notices:
Notices were mailed to all owners of real property adjacent to and within approximately five-hundred feet (500) of the subject property and all Homeowner's Associations on file with the City of Winter Springs (42 notices) on April 15, 2025.

A Community Workshop was held on October 15, 2024, at 6:00 PM at the Indian Trails Middle School Library. There were no objections raised at the Community Workshop regarding the proposed development. Please see "Figure 1" Community Workshop Flyer and Figure "2" Community Workshop Attendance.

Analysis of Final Engineering Plans (Sec. 20-33.1) Criteria:
The criteria for Final Engineering Plans are provided and analyzed below:

(a) Site and final engineering plans and the subdivision of land shall also be subject to the technical requirements set forth in Chapter 9 of the City Code. It is the intent of this section to apply to applications for site and final engineering plans and to any subdivision of land requiring a plat, if applicable, and does not include review and approval of a lot split application.

Please see the discussion below regarding technical requirements of Chapter 9. The Final Engineering Plans have been reviewed by the City's contract engineer, who concluded that the Plans satisfy the technical requirements. provided the conditions of approval set forth below are met.

(b) Except in situations involving one (1) single-family home, the Planning and Zoning Board shall be required to review all site and final engineering plan and subdivision of land applications and make a written recommendation to the city commission. Such recommendation shall include the reasons for the board's recommendation and show the board has considered the applicable criteria set forth in this section.

(c) Upon receipt of the planning and zoning board's recommendation, the city commission shall make a final decision on the application. If the city commission determines that the planning and zoning board has not made a recommendation

on an application within a reasonable period of time, the city commission may, at its discretion, consider an application without the planning and zoning board's recommendation.

Except in situations involving one (1) single-family home, all site and final engineering plan and subdivision recommendations and final decisions shall be based on whether the site and final engineering plan and subdivision of land complies with all the technical requirements set forth in chapter 9 of the City Code and the following criteria to the extent applicable:

(1) Whether the applicant has demonstrated the site and final engineering plan and subdivision of land, including its proposed density, height, scale and intensity, hours of operation, building and lighting design, setbacks, buffers, noise, refuse, odor, particulates, smoke, fumes and other emissions, parking and traffic-generating characteristics, number of persons anticipated using, residing or working under the plan, and other off-site impacts, is compatible and harmonious with adjacent land uses, and will not adversely impact land use activities in the immediate vicinity.

Analysis: Subject to the Conditions of Approval, Staff finds that the proposed Development is compatible and harmonious with adjacent land uses, and will not adversely impact land use activities in the immediate vicinity. The application proposes a 5,576 square-foot Chick-fil-a restaurant with a double drive through lane. The location of the restaurant provides ample setbacks from the only existing nearby use, the Savoy senior living facility located across Michael Blake Boulevard. The restaurant is not expected to produce significant noise, refuse, odor, smoke, or fumes that would impact adjacent land uses. With regard to traffic generation, the applicant has submitted an expert report from Palm Traffic Engineering & Planning, dated July 2024, which analyzes the traffic produced by an existing, similar-sized (5,113 square-foot) Chick-fil-a in Manatee County. The restaurant there produced, approximately, the following trips:

- AM Peak Hour - Attracts 222 trip ends with 115 inbound and 107 outbound
- Mid-Day Peak Hour - Attracts 550 trip ends with 278 inbound and 272 outbound.
- PM peak hour, Attracts 336 trip ends with 169 inbound and 167 outbound

However, the Traffic Impact Analysis for the entire Sutton Crossings project included trip generation for the subject site and estimated that three fast food restaurants would produce a total of 5,657 daily trips, which well exceeds the Manatee County estimates provided in the queueing study. Even with the expected traffic from three fast food restaurants combined, the TIA showed all roadway segments within the analysis being at a satisfactory level of service (LOS) of C.

(2) Whether the applicant has demonstrated the size and shape of the site, the proposed access and internal circulation, and the design enhancements to be

adequate to accommodate the proposed density, scale and intensity of the site and final engineering plan requested. The site shall be of sufficient size to accommodate design amenities such as screening, buffers, landscaping, open space, off-street parking, safe and convenient automobile, bicycle, and pedestrian mobility at the site, and other similar site plan improvements needed to mitigate against potential adverse impacts of the proposed use.

Analysis: Staff finds that the Applicant has demonstrated that the size and shape of the site, the proposed access and internal circulation, and the design enhancements to be adequate to accommodate the proposed density, scale, and intensity of the site and final engineering plan requested for the reasons described above. In addition, the applicant is providing the SR 434 streetscape (subject to the waivers below) and provides ample buffers and screening. Convenient bicycle and pedestrian access is achieved by the placement of bike racks on the east side of the building and concrete sidewalks on SR 434 and Michael Blake connect to interior sidewalks with crosswalk connections to store front sidewalk.

(3) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on the local economy, including governmental fiscal impact, employment, and property values.

Analysis: Staff finds that the proposed site and final engineering plan and subdivision of land will not have an adverse impact on the local economy, including governmental fiscal impact, employment, and property values. Rather, the addition of this popular restaurant chain will add employment opportunities while providing increased tax revenues for the City. This shall be documented under the Fiscal Impact Report required for the Town Center District, which shall be submitted, reviewed, and approved by Staff prior to the project going before the City Commission.

(4) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on the natural environment, including air, water, and noise pollution, vegetation and wildlife, open space, noxious and desirable vegetation, and flood hazards.

Analysis: Staff finds that the proposed site and final engineering plan will not have an adverse impact on the natural environment, including air, water, and noise pollution, vegetation and wildlife, open space, noxious and desirable vegetation, and flood hazards, subject to the Condition of Approval regarding an apparently abandoned eagle's next and destruction of a small wetland. The project is located outside of the special flood hazard area. Adequate stormwater detention will be provided for the project both on-site and through the stormwater system for the Sutton Crossings subdivision/development, of which this development is a part. Please see Figure "3", Drainage Report for Sutton Crossings.

A Stage 1 Environmental Site Assessment was provided for the site. It noted a past leak from a gas storage tank at the gas station located to the west of the Sutton Crossings project, as well as possible contamination from a railroad that formerly

crossed the site. Staff have reviewed this report, and found minimal risk associated with this leak and the proposed project as evidenced by previous environmental studies carried out regarding the impact of these past events and/or structures. Please see Figure "6", the Phase I Environmental Site Assessment for the Sutton Crossings property.

The Sutton Crossings project will be responsible for tree mitigation payments.

(5) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on historic, scenic, and cultural resources, including views and vistas, and loss or degradation of cultural and historic resources.

Analysis: The only known historic resource known to have existed on this property were tracks from a railway known to have ceased usage since at least 1999. This track is not considered to be of historic significance. Thus, the proposed site and final engineering plan will have no impact on historical resources. No additional scenic or cultural resources. Including scenic views or vistas, will be impacted by this site and final engineering plan.

(6) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on public services, including water, sewer, stormwater and surface water management, police, fire, parks and recreation, streets, public transportation, marina and waterways, and bicycle and pedestrian facilities.

Analysis: City Staff have reviewed this project from a planning and engineering perspective. Staff did not find any adverse impact on any of the public services listed above. A Traffic Impact Analysis (TIA) was submitted and reviewed. It showed all roadway segments within the analysis being at a satisfactory level of service (LOS) of C. Please see the TIA, included as Figure "7". The City Public Works Department has confirmed available water and sewer capacity.

(7) Whether the site and final engineering plan and subdivision of land, and related traffic report and plan provided by the applicant, details safe and efficient means of ingress and egress into and out of the neighborhood and adequately addresses the impact of projected traffic on the immediate neighborhood, traffic circulation pattern for the neighborhood, and traffic flow through immediate intersections and arterials.

Analysis: Staff has reviewed the TIA, (Figure "7") and finds that the site and final engineering plan depicts safe and efficient means of ingress and egress into and out of the neighborhood and adequately addresses the impact of projected traffic on the immediate neighborhood, traffic circulation patterns for the neighborhood, and traffic flow through immediate intersections and arterials.

(8) Whether the proposed site and final engineering plan and subdivision of land will have an adverse impact on housing and social conditions, including variety of housing unit types and prices, and neighborhood quality.

Analysis: As a commercial project, the proposed site and final engineering plan will not have an adverse impact on the variety of housing unit types and prices. As for neighborhood quality, subject to the Conditions of Approval, the proposed site and final engineering plan development will not have an adverse impact on neighborhood quality. See Exhibit "8", Chick-Fil-A Final Engineering and Development Plan.

(9) Whether the proposed site and final engineering plan and subdivision of land avoids significant adverse odor, emission, noise, glare, and vibration impacts on adjacent and surrounding lands regarding refuse collection, service delivery, parking and loading, signs, lighting, and other site elements.

Analysis: Staff finds that proposed site and final engineering plan avoids significant adverse odor, emissions, noise, glare and vibration impacts on adjacent and surrounding lands regarding refuse collection, service delivery, parking and loading, signs, lighting, and other site elements. The dumpster will meet Town Center requirements, being located away from view from S.R. 434, will be fully enclosed in a gated facility, and be buffered from view along Michael Blake Boulevard by landscaping and vehicles in the drive-thru stacking. A note has been added to the plans that all deliveries shall be made after business hours, limiting these impacts on restaurant customers and the surrounding commercial uses. Please see site and final engineering plan, Figure "8".

(10) Whether the applicant has provided an acceptable security plan for the proposed establishment to be located on the site and final engineering plan and subdivision of land that addresses the safety and security needs of the establishment and its users and employees and minimizes impacts on the neighborhood, if applicable.

Analysis: The adequate window views from the building along S.R. 434, as well as adequate lighting at night, will provide sufficient security for restaurant patrons and employees. Site lighting has been designed to minimize impacts on the adjoining neighborhood.

(11) Whether the applicant has provided on the site and final engineering plan and subdivision of land an acceptable plan for the mass delivery of merchandise for new large footprint buildings (greater than twenty thousand (20,000) square feet) including the hours of operation for delivery trucks to come into and exit the property and surrounding neighborhood, if applicable.

Analysis: Not applicable. The project does not involve a large footprint building.

(12) Whether the applicant has demonstrated that the site and final engineering plan and subdivision of land have been designed to incorporate mitigative techniques and plans needed to prevent adverse impacts addressed in the criteria stated herein or to adjacent and surrounding uses and properties.

Analysis: Staff finds that subject to the Conditions of Approval, the site and final engineering plans have been designed to incorporate mitigative techniques and plans needed to prevent the adverse impacts mentioned in the criteria on adjacent and surrounding uses and properties.

(13) If the proposed conditional use is a residential use, whether the elementary, middle and high schools (K—12) that will be initially assigned to the residential project by the school district at the time the city commission considers final approval of the conditional use have both sufficient capacity, are in close proximity to the project so as to make each of the assigned schools accessible and convenient (e.g., walking distance, travel time, private and public transportation, and quality of route environment) to the majority of the school population that will be drawn from the project, and promote and support the integration of future residents of the project into the existing city of Winter Springs community in a sustainable manner.

Analysis: Not applicable. This is not a residential development.

(14) Whether the applicant has agreed to execute a binding development agreement required by city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code.

Analysis: The applicant has agreed to and is working on a binding development agreement with the City addressing terms and conditions deemed necessary by the City Commission. Please see Figure "9", Draft/Final Development Agreement.

Water and Sewer: Utility Department Staff have confirmed that sufficient water and sewer capacity exists for this project.

Stormwater:
The applicant has submitted a Drainage Report depicting how the stormwater management capacity for proposed runoff from the project is to be handled. Staff have reviewed and approved the information necessary from this development. Please see Figure "3", Drainage Report for Sutton Crossings.

Transportation:
The applicant has provided a Traffic Impact Analysis (see Figure "7"), which has been reviewed by City staff. It was Staff's finding that sufficient roadway capacity exists for this project. The project will not cause the impacted roadway segments to exceed their adopted level of service (LOS) under the Comprehensive Plan.

Parking:
City Staff is awaiting a formal study from the applicant based on other company stores and their standards as to how they arrived at the number of parking spaces which were provided. Under the Conditions of Approval, this document shall be reviewed and approved prior to issuance of a Building Permit.

Aesthetic Review:

Pursuant to Section 9-603, which sets forth guidelines and minimum standards for Aesthetic Review packages, staff have utilized the below criteria in Section 9-603 to determine the following. The attached Aesthetic Review package (Figure 2) includes all of the submittal requirements for aesthetic review as set forth in Section 9-600 through 9-607 and include the following: (a) a site plan; (b) elevations illustration all sides of structures facing public streets or spaces; (c) illustrations of all walls, fences, and other accessory structures and the indication of height and their associated materials; (d) elevation of proposed exterior permanent signs or other constructed elements other than habitable space, if any; (e) illustrations of materials, texture, and colors to be used on all buildings, accessory structures, exterior signs; and (f) other architectural and engineering data as may be required. The procedures for review and approval are set forth in Section 9-603.

Aesthetic Review	
1.	The plans and specifications of the proposed project indicate that the setting, landscaping, proportions, materials, colors, texture, scale, unity, balance, rhythm, contrast, and simplicity are coordinated in a harmonious manner relevant to the project, surrounding area and cultural character of the community. **Analysis:** Staff finds that subject to the approval of the physical landscaping/streetscaping within the area 28-foot area depicted within the streetscape waiver request, all architectural and landscaping elements are coordinated in a harmonious manner relevant to the particular proposal, the surrounding area, and cultural character of the community.
2.	The plans for the proposed project are in harmony with any future development which has been formally approved by the city within the surrounding area. **Analysis:** Staff finds that subject to the Conditions of Approval, the plans for the proposed project are in harmony with the Town Center District Code.
3.	The plans for the proposed project are not excessively similar or dissimilar to any other building, structure or sign which is either fully constructed, permitted but not fully constructed, or included on the same permit application, and facing upon the same or intersecting street within five hundred (500) feet of the proposed site, with respect to one or more of the following features of exterior design and appearance: a. Front or side elevations; b. Size and arrangement of elevation facing the street, including reverse arrangement; or c. Other significant features of design such as, but not limited to materials, roof line, hardscape improvements, and height or design elements. **Analysis:** The plans for this project are not excessively similar or dissimilar to other projects within 500 feet of the proposed project. The restaurant is designed with its longer façade (typically side façade) facing S.R. 434,

	creating a more emphasized building paralleling the roadway. All parking is to be located behind the building.
4.	The plans for the proposed project are in harmony with, or significantly enhance, the established character of other buildings, structures or signs in the surrounding area with respect to architectural specifications and design features deemed significant based upon commonly accepted architectural principles of the local community. **Analysis:** As previously mentioned, the project has been reviewed under the Town Center District Code standards, ensuring conformance with the high standard of development for Town Center. The to-be-approved streetscape design will be reviewed and approved to the Town Center standards, further enhancing the aesthetic impact of the project.
5.	The proposed project has incorporated significant architectural enhancements such as concrete masonry units with stucco, wrought iron, columns and piers, porches, arches, planting areas, display windows, and other distinctive design features detailing and promoting the character of the community. **Analysis:** The project significantly meets the standards, with the use of brick, arches above windows and entries, parapets and cantilevered canopies. Regarding the more typical metal pole and roofed structure of the prototypical Chick-Fil-A drive thru canopy, landscaping will be used to soften the appearance of the structure and drive-thru vehicular impact, as was done for the existing Chick-Fil-A located near the intersection of Tuskawilla and Red Bug Lake Road.

Reports:

The Final Engineering submittal is required to include the following reports or updates of previously prepared reports for the same property.

Reports	
November 1, 2024	Drainage Report Suttons Crossings (Ex. 3)
10/27/2024	Traffic Impact Analysis Michael Blake Boulevard Development (Ex. "7")
10/18/2022	Phase I Environmental Report, Sutton Crossings Property (Ex. "10")

Procedural History:	
March 27, 2023	Non-Binding Presentation to City Commission (Aesthetics)
October 24, 2024	Community Meeting

April 24, 2025	Planning & Zoning Board | Recommendation on Final Engineering, Aesthetic Review, Waivers, and Development Agreement
May 12, 2025	City Commission | Hearing on Final Engineering, and Development Plan, Aesthetic Review, Waivers, and Development Agreement

Waiver Review: Pursuant to Section 20-34, Any real property owner may file a waiver application requesting a waiver(s) for their real property from any term and condition of this chapter (except from the list of permitted, conditional and prohibited uses set forth in any zoning district category). The Planning and Zoning Board shall be required to review all waiver applications and make a written recommendation to the City Commission. Such recommendation shall include the reasons for the board's recommendation and show the board has considered the applicable waiver criteria set forth and analyzed below. Upon receipt of the Planning and Zoning board's recommendation, the city commission shall make a final decision on the application. If the city commission determines that the planning and zoning board has not made a recommendation on an application within a reasonable period, the city commission may, at its discretion, consider an application without the planning and zoning board's recommendation.

Waiver I: A waiver to Section 20-324(6), Town Center District Code, to allow a drive-thru window in the side yard of the property (northern side of building) where this section requires drive-thru windows to be located the rear yard or alley of a site.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Due to the popularity of Chick-Fil-A's drive through and the need for optimal traffic circulation and bicycle pedestrian safety within this property, having the drive-thru on the north side yard of the building/site makes for the best traffic flow. On this odd-shaped lot, this also allows for all site entrances and parking to be to the rear of the site.
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the proposed development plan is substantially compliant with the design standards for the Town Center Code. Staff review of the streetscape prior to the issuance of the Building Permit will ensure compliance with the S.R. 434 and Tuskawilla Road Landscaping and Streetscape Standards.
3.	The proposed development plan will significantly enhance real property.

	Analysis: Staff finds that the proposed development plan will significantly enhance the subject property and the Town Center. It will add to the pedestrian/bicycle nature of the Town Center by adding another dining option within walking or biking distance to the many residents already residing within the Town Center.
4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the design and aesthetics of this project will serve the public health, safety, and welfare of area residents. For security purposes, the elongated façade and its many windows will provide good visual access to law enforcement. Traffic congestion internal to the project due to delivery trucks will be reduced due to deliveries being limited to nighttime non-business hours.
	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish property values or the essential character of the surrounding neighborhood. Landscaping along S.R. 434 will help buffer the drive-thru canopy and its vehicular activity. The unique building design and layout will further enhance the area, adding to the diversity of architecture. The location of the building and site layout will also block views of the project parking lot from S.R. 434.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. **Analysis:** Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. This design best suits traffic flow on this unusually shaped lot, while keeping all restaurant vehicular parking to the rear and out of site.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the development plan is compatible with the surrounding Sutton Crossings subdivision, and the Town Center.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The Applicant is working on and has agreed to a binding Development Agreement to incorporate terms and conditions deemed necessary by the City Commission.

Waiver II: A waiver to the requirement for the provision of a six-foot wide sidewalk along S.R. 434 under Article VII. S.R. 434 and Tuskawilla Road Landscape and Streetscape Requirements to allow provision of the required 27-foot wide fully landscaped streetscape area.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Staff finds that the applicant has demonstrated that replacing the existing five-foot wide sidewalk with a six-foot one would make it impossible to provide the 27-foot wide streetscape area.
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the proposed streetscape buffer is substantially compliant with the aforementioned Code requirements. The existing sidewalk would remain, with landscaping in the remainder of the right-of-way and within a 10-foot landscape buffer on the edge of the propertyAll development is in substantial compliance with this chapter and the comprehensive plan.
3.	The proposed development plan will significantly enhance the real property. **Analysis:** Staff finds that the proposed streetscaping, along with the other planned development, will significantly enhance the real property. The streetscaping will serve to reduce the visual impacts of the drive-thru window on drivers along S.R. 434.
4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the plan services the public health, safety, and welfare. The addition of the streetscape will add to the aesthetic beauty of S.R. 434 roadway, while adding the natural benefits of grass, trees, and shrubs. Security will be enhanced through the design elements previously discussed.
5.	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. Rather, it will add to the high-quality development existing in the Town Center.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter.

	Analysis: Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical or patently unreasonable result caused by the applicable term or condition under this chapter. It will allow for the maximum provision of the streetscape requirements.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the proposed development plan is compatible and harmonious with the surrounding neighborhood. It further enhances the aesthetic qualities of the Town Center and the S.R. 434 and Tuskawilla Road Streetscape.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions deemed necessary by the City Commission.

Waiver III: A waiver to the requirement of the Town Center District Code, Sec. 20-327.1 to allow for two monument signs for the project. The signs will be identical, with one located at the intersection of S.R. 434 and Michael Blake, and the second being located at the project driveway on Michael Blake Boulevard.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development. **Analysis:** Staff finds that although not permitted by right in the Town Center District, monument signs are a reasonable standard for drivers to note the location of a business. Not allowing monument signage could result in increased risks of dangerous driving. It would also prove to create an illogical, impossible, impractical or patently unreasonable result for the applicant.
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff has reviewed the proposed signs for conformance with the regulations for monument signs for single-tenant businesses under Code Sec. 16-82 (2) and other applicable requirements of Chapter 16, Signs and Advertising. Staff also finds them to be in compliance with the Comprehensive Plan.
3.	The proposed development plan will significantly enhance the real property.

	Analysis: Staff finds that the proposed monument signs will enhance the value of the subject property, increasing its commercial marketability.
4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the plan services the public health, safety, and welfare. The addition of the sign will increase traffic safety, while not degrading the aesthetics of the Town Center.
5.	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. Rather, it will add to the high-quality development existing in the Town Center.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter. **Analysis:** Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical or patently unreasonable result caused by the applicable term or condition under this chapter. It will allow for the monument signage as permitted in all other non-residential districts.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the proposed monument plan is compatible and harmonious with the surrounding neighborhood. It is similar in size and aesthetic style to other monument signs in the Town Center District.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The applicant has agreed to execute a binding development agreement required by the City to incorporate the terms and conditions deemed necessary by the City Commission.

Waiver IV: A waiver to the requirement of the Town Center District Code, Sec. 20-234(11) to allow the proposed rear of the quick serve restaurant with drive-thru building face State Road 434.

Waiver Review	
1.	The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development.

	Analysis: Staff finds that although not permitted by right in the Town Center District, the queuing of the drive-thru is crucial to the business and requires a specific length to ensure that the queuing of customer vehicles will not negatively impact onsite circulation and traffic patterns of abutting development or roadways. To prevent circulation conflict and meet the queuing requirement, the building needs to be oriented in the configuration shown on the site plan and updated building elevation. This configuration does have the rear of the building facing SR434. In consideration of LDC T-5 Town Center, the rear building elevation will be designed to have a faux frontage element with features such as: windows, faux arch way/door, which are purely for aesthetics, but not functional. This allows for the rear of the building to have architectural design elements that look like a building frontage and is in keeping with SR434 corridor building aesthetic. The applicant clearly demonstrates that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development.
2.	The proposed development plan is in substantial compliance with this chapter and in compliance with the comprehensive plan. **Analysis:** Staff finds that the design of the Sutton Crossing Development incorporated the Town Center District code and existing architectural design elements.
3.	The proposed development plan will significantly enhance the real property. **Analysis:** Staff finds that the proposed monument signs will enhance the value of the subject property, increasing its commercial marketability.
4.	The proposed development plan serves the public health, safety, and welfare. **Analysis:** Staff finds that the plan services the public health, safety, and welfare. The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.
5.	The waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. **Analysis:** Staff finds that the waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. Rather, it will add to the high-quality development existing in the Town Center.
6.	The waiver granted is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under this chapter.

	Analysis: Staff finds that this is the minimum waiver that will eliminate or reduce the illogical, impossible, impractical or patently unreasonable result caused by the applicable term or condition under this chapter.
7.	The proposed development plan is compatible and harmonious with the surrounding neighborhood. **Analysis:** Staff finds that the proposed rear building elevation, with faux frontage design elements, is compatible and harmonious with the surrounding neighborhood.
8.	Whether the applicant has agreed to execute a binding development agreement required by the city to incorporate the terms and conditions of approval deemed necessary by the city commission including, but not limited to, any mitigative techniques and plans required by City Code. **Analysis:** The applicant has agreed to execute a binding development agreement required by the City to incorporate the terms and conditions deemed necessary by the City Commission.

Applicable Law, Public Policy, and Events:

Florida Statutes 163.2511-163.3246: Growth Policy; County and Municipal Planning; Land Development Regulation (Provides that land development regulations for municipal planning be consistent with the Comprehensive Plan).

Home Rule Powers

Code of Ordinances City of Winter Springs.

Section 20-1. Definitions.

Fiscal Impact:

The Fiscal Impact Report shall be reviewed and approved prior to the project being heard before the City Commission.

Development Agreement:

The Applicant is currently working with the City Attorney on the Development Agreement for the project. The Development Agreement shall be executed prior to any work on the project covered within this document. The latest draft Development Agreement is enclosed as Figure "13" hereto.

STAFF RECOMMENDATION

Staff recommends that the Planning & Zoning Board recommend APPROVAL to the City Commission, subject to the following conditions:

1. Execution of the First Modification to the Development Agreement.

2. Approval of the project is conditioned upon and contingent upon approval of the Sutton Crossings final engineering plans, which provide for access, utilities, and stormwater drainage to the subject site.

3. The project will have to either show compliance with the 330-foot eagle net protection zone (nest appears occupied by other birds) or a permitting in-lieu of such a protection zone through the U.S. Fish and Wildlife Service (FWS) prior to the approval of a Building Permit.

4. A small wetland exists on site. Prior to the issuance of a Building Permit, a Saint Johns River Water Management District Environmental Resource Permit regarding this wetland shall be provided.

5. An Economic Impact Analysis Report as required by the Town Center Design standards shall be reviewed and approved prior to the project being heard before the City Commission.

6. The FDOT-approved Access Connection Permit shall be provided prior to the issuance of a Building Permit.

7. Prior to the issuance of a Building Permit, please provide a hydrant flow test in accordance with NFPA 291. This test shall be within the last 12 months.

8. All grass areas on the Property shall use Bahia grass. No St. Augustine grass or grass types with low drought tolerance shall be permitted.

9. Any additional conditions from City reviewing departments or the Development Agreement shall be enforceable.

Attachments:

Figure "1 "- Community Workshop Flyer
Figure "2" - Community Workshop Attendance Sheet
Figure "3"- Drainage Report for Sutton Crossings
Figure "4"- Environmental Species and Wetlands Report.
Figure "5 "- Sheet C5.0 of the Overall Grading Plan, Suttons Crossings Master Plan
Figure "6", the Phase I Environmental Site Assessment for the Sutton Crossings property.
Figure "7"- Traffic Impact Analysis
Exhibit "8"- Chick-Fil-A Final Engineering and Development Plan.
Exhibit "9"- Replat for Sutton Crossings
Exhibit "10"- Phase I Environmental Report
Exhibit "11"- Application for Final Engineering and Development Plan
Exbibit "12"- Application for Aesthetic Review
Exhibit "13" Application for Development Agreement

THIS INSTRUMENT WAS PREPARED BY
AND SHOULD BE RETURNED TO:

Anthony A. Garganese
City Attorney of Winter Springs
Garganese, Weiss, D'Agresta & Salzman, P.A.
111 N. Orange Avenue, Suite 2000
Orlando, FL 32802

(407) 425-9566

FOR RECORDING DEPARTMENT USE ONLY

FIRST MODIFICATION TO DEVELOPMENT AGREEMENT

BLUE ORANGE HOLDINGS, LLC

(Chick-fil-a)

THIS FIRST MODIFICATION TO DEVELOPMENT AGREEMENT ("Agreement") is made and executed this _____ day of _____, 2025, by and between the **CITY OF WINTER SPRINGS**, a Florida Municipal Corporation ("City"), whose address is 1126 East S.R. 434, Winter Springs, Florida 32708, and **BLUE ORANGE HOLDINGS, LLC,** a Florida limited liability company, ("Developer") whose address is 3440 Edgewater Drive, Orlando, FL 32804.

WITNESSETH:

WHEREAS, Blue Orange Holdings, LLC is the owner of approximately 2.3 acres, more or less, of real property located in the W1 Winter Springs tax district, generally located on the Northwest corner of SR 434 and Michael Blake Boulevard, in Winter Springs, Seminole County, Florida, more particularly described herein ("Property"); and

WHEREAS, Developer has applied for a Final Engineering/Site Plan Approval, Aesthetic Plan Approval, and Waivers from the City Code in order to construct a Chick-fil-a fast food restaurant with a double drive-through on the Property; and

WHEREAS, the Developer, along with EPB Engineering and Construction, LLC, applied for final engineering plan approval and certain waivers to construct the Sutton Crossings shopping center, which provided for the common infrastructure for the Property, including stormwater drainage, utility stub-outs, and access; and

WHEREAS, the Developer desires to construct the Chick-fil-a fast food restaurant on the Property as one of the individual sites in the Sutton Crossings shopping center, which is

intended to be constructed simultaneous with the overall Sutton Crossings shopping center and infrastructure; and

WHEREAS, pursuant to Chapter 20 Zoning, Article II, Division 1, Section 20-29.1 of the Winter Springs City Code ("City Code"), public Hearing Notices were mailed to all owners of real property adjacent to and within approximately five-hundred (500) feet of the subject property and all Homeowner's Associations on file within the City of Winter Springs on April 15, 2025, and a Community Workshop for the Project was held on October 15, 2024; and

WHEREAS, Section 20-29(c) of the City Code requires that all conditional uses, site plans and waivers shall be binding on the use of the subject property and, further, that as a condition of approval by the City Commission, all development projects requiring a community workshop pursuant to Section 20-29.1 of the City Code shall be required to be memorialized in a binding Development Agreement; and

WHEREAS, this Development Agreement shall be recorded against the property so that the terms and conditions of approval related to the Project shall run with the land; and

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties mutually agree as follows:

1.0 **Recitals.** The foregoing recitals are true and correct and are hereby incorporated herein by this reference.

2.0 **Authority.** This Agreement is entered into pursuant to the Florida Municipal Home Rule Powers Act.

3.0 **The Property.** The real property subject to this Agreement consists of tax parcel identification numbers of 26-20-30-5AR-0A00-008D and 26-20-30-5AR-0A00-008H and is legally described in **EXHIBIT "A"**, attached hereto and fully incorporated herein by this reference (the "Property").

4.0 **Project Description and Requirements.** Developer shall, at its expense, design, permit and construct a 5,576-square foot quick service restaurant with a double drive-through and associated parking on the Property, located in the City of Winter Springs Town Center. The supporting infrastructure shall be constructed in accordance with the Sutton Crossings final engineering plans as approved in the original Development Agreement in a single phase and simultaneously with the quick-serve restaurant and associated parking.

(Hereinafter the project description and requirements are referred to as the **"Project"**).

The Developer shall construct the Project in a manner consistent with the approved Final Engineering/Site Plans, Aesthetic Plans, and Waivers that are on file with the City with the following file numbers and consistent with the requirements contained in this Agreement:

File No. FEDP-2024-0003

File No. WAIV-2024-0001

File No. ARV-2024-0003

File No. DVAG-2024-0003

For convenience, a copy of the Overall Site Plan is attached hereto and fully incorporated herein by this reference as **EXHIBIT "B."** Specific conditions of approval for the above-referenced Plans and Waivers include the following, which are also addressed in the staff report for the Final Engineering/Site Plans, Aesthetic Plans, and Waivers:

1. Approval of the project is conditioned upon and contingent upon approval of the Sutton Crossings final engineering plans, which provide for access, utilities, and stormwater drainage to the subject site.

2. The project will have to either show compliance with the 330-foot eagle net protection zone (nest appears occupied by other birds) or a permitting in-lieu of such a protection zone through the U.S. Fish and Wildlife Service (FWS) prior to the approval of a Building Permit.

3. A small wetland exists on site. Prior to the issuance of a Building Permit, a Saint Johns River Water Management District Environmental Resource Permit regarding this wetland shall be provided.

4. An Economic Impact Analysis Report as required by the Town Center Design standards shall be reviewed and approved prior to the project being heard before the City Commission.

5. The FDOT-approved Access Connection Permit shall be provided prior to the issuance of a Building Permit.

6. Prior to the issuance of a Building Permit, please provide a hydrant flow test in accordance with NFPA 291. This test shall be within the last 12 months.

7. All grass areas on the Property shall use Bahia grass. No St. Augustine grass or grass types with low drought tolerance shall be permitted.

5.0 Future Permitting. Developer shall be required to receive building permits and substantially commence vertical construction of buildings, which shall at minimum include building foundations, for the Project within two (2) years of the Effective Date of this Agreement.

6.0 Representations of the Parties. The City and Developer hereby each represent and warrant to the other that it has the power and authority to execute, deliver and perform the terms and provisions of this Agreement and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. This Agreement will, when duly

executed and delivered by the City and Developer, constitute a legal, valid and binding obligation enforceable against the parties hereto. Upon recording of this Agreement in the Public Records of Seminole County, Florida, the Agreement shall be a binding obligation upon the Property in accordance with the terms and conditions of this Agreement. Developer represents that it has voluntarily and willfully executed this Agreement for purposes of binding himself and the Property to the terms and conditions set forth in this Agreement.

7.0 Successors and Assigns. This Agreement shall automatically be binding upon and shall inure to the benefit of the City and Developer and their respective successors and assigns. The terms and conditions of this Agreement similarly shall be binding upon the Property, and shall run with title to the same upon being duly recorded against the Property by the City.

8.0 Applicable Law; Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. The venue of any litigation arising out of this Agreement shall be in Seminole County, Florida or, for federal court actions, in Orlando, Florida.

9.0 Amendments. This Agreement shall not be modified or amended except by written agreement duly executed by both parties hereto (or their successors or assigns) and approved by the City Commission.

10.0 Entire Agreement; Exhibits. This Agreement and all attached exhibits hereto supersede any other agreement, oral or written, regarding the Property and contain the entire agreement between the City and Developer as to the subject matter hereof. The Exhibits attached hereto and referenced herein are hereby fully incorporated herein by this reference.

11.0 Severability. If any provision of this Agreement shall be held to be invalid or unenforceable to any extent by a court of competent jurisdiction, the same shall not affect in any respect the validity or enforceability of the remainder of this Agreement.

12.0 Effective Date. This Agreement shall become effective upon approval by the City Commission and execution of this Agreement by both parties hereto.

13.0 Recordation. Upon full execution by the Parties, this Agreement shall be recorded in the Public Records of Seminole County, Florida by the City. The Developer shall be responsible for all recording fees associated with this Agreement.

14.0 Relationship of the Parties. The relationship of the parties to this Agreement is contractual and Developer is an independent contractor and not an agent of the City. Nothing herein shall be deemed to create a joint venture or principal-agent relationship between the parties, and neither party is authorized to, nor shall either party act toward third persons or the public in any manner, which would indicate any such relationship with the other.

15.0 Sovereign Immunity. The City intends to avail itself of sovereign immunity and other applicable limitations on City liability whenever deemed applicable by the City. Therefore,

notwithstanding any other provision set forth in this Agreement, nothing contained in this Agreement shall be construed as a waiver of the City's right to sovereign immunity under section 768.28, Florida Statutes, or other limitations imposed on the City's potential liability under state or federal law. As such, the City shall not be liable under this Agreement for punitive damages or interest for the period before judgment. Further, the City shall not be liable for any claim or judgment, or portion thereof, to any one person for more than two hundred thousand dollars ($200,000.00), or any claim or judgment, or portion thereof, which, when totaled with all other claims or judgments paid by the State or its agencies and subdivisions arising out of the same incident or occurrence, exceeds the sum of three hundred thousand dollars ($300,000.00).

16.0 City's Police Power. Developer agrees and acknowledges that the City hereby reserves all police powers granted to the City by law. In no way shall this Agreement be construed as the City bargaining away or surrendering its police powers.

17.0 Interpretation. The parties hereby agree and acknowledge that they have both participated equally in the drafting of this Agreement and no party shall be favored or disfavored regarding the interpretation to this Agreement in the event of a dispute between the parties.

18.0 Third-Party Rights. This Agreement is not a third-party beneficiary contract and shall not in any way whatsoever create any rights on behalf of any third party.

19.0 Specific Performance and Enforcement. Strict compliance shall be required with each and every provision of this Agreement. The parties agree that failure to perform the obligations provided by this Agreement shall result in irreparable damage and that specific performance of these obligations may be obtained by a suit in equity. The failure to timely comply with any mandatory condition of this Agreement shall further constitute a violation of the City's Code of Ordinances and shall be subject to enforcement action as described therein including, but not limited to, enforcement before the City's Code Enforcement Board under Chapter 2, Article III, Division 2. – Code Enforcement.

20.0 Attorney's Fees. In connection with any arbitration or litigation arising out of this Agreement, each party shall be responsible for their own attorney's fees and costs.

21.0 Development Permits. Nothing herein shall limit the City's authority to grant or deny any development permit applications or requests subsequent to the effective date of this Agreement in accordance with the criteria of the City Code and the requirements of this Agreement. The failure of this Agreement to address any particular City, County, State and/or Federal permit, condition, term or restriction shall not relieve Developer or the City of the necessity of complying with the law governing said permitting requirement, condition, term or restriction. Without imposing any limitation on the City's police powers, the City reserves the right to withhold, suspend or terminate any and all certificates of occupancy for any building, trailer, structure or unit if Developer is in breach of any term and condition of this Agreement.

22.0 Default. Failure by either party to perform each and every one of its obligations hereunder shall constitute a default, entitling the non-defaulting party to pursue whatever remedies are available to it under Florida law or equity including, without limitation,

termination of this Agreement, an action for specific performance, and/or injunctive relief. Prior to any party filing any action as a result of a default under this Agreement, the non-defaulting party shall first provide the defaulting party with written notice of said default. Upon receipt of said notice, the defaulting party shall be provided a thirty (30) day opportunity in which to cure the default to the reasonable satisfaction of the non-defaulting party prior to filing said action.

23.0 Termination. The City shall have the unconditional right, but not obligation, to terminate this Agreement, without notice or penalty, if Developer fails to receive building permits and substantially commence vertical construction of buildings, which shall at minimum include building foundations, for the Project within two (2) years of the effective date of this Agreement. The Developer may apply to the City Commission for an extension of this Agreement, which may be granted upon good cause shown. In addition, the City shall have the right, but not obligation, to terminate the Agreement if Developer permanently abandons construction of the Project, provided, however, the City shall first deliver written notice and an opportunity to cure to the defaulting party as set forth in Section 22 above. If the City terminates this Agreement, the City shall record a notice of termination against the Property in the public records of Seminole County, Florida.

24.0 Indemnification and Hold Harmless. Developer shall be solely responsible for designing, permitting, constructing, operating and maintaining this Project. As such, Developer hereby agrees to indemnify, release, and hold harmless the City and its commissioners, employees and attorneys from and against all claims, losses, damages, personal injuries (including, but not limited to, death), or liability (including reasonable attorney's fees and costs through all appellate proceedings), directly or indirectly arising from, out of, or caused by Developer and Developer's contractor's and subcontractor's performance of design, permit and construction, and maintenance activities in furtherance of constructing the Project and maintaining the improvements of this Project. This indemnification shall survive the termination of this Agreement.

25.0 Force Majeure. The parties agree that in the event that the failure by either party to accomplish any action required hereunder within a specified time period ("Time Period") constitutes a default under the terms of this Agreement and, if any such failure is due to acts of God, acts of government authority (other than the City's own acts), acts of public enemy or war, riots, civil disturbances, power failure, shortages of labor or materials, injunction or other court proceedings beyond the control of such party, or severe adverse weather conditions ("Force Majeure Event"), then, notwithstanding any provision of this Agreement to the contrary, that failure shall not constitute a default under this Agreement and any Time Period proscribed hereunder shall be extended by the amount of time that such party was unable to perform solely due to the Force Majeure Event. The extended Time Period shall be agreed to in writing by the parties and said agreement shall not be unreasonably withheld by either party. The City Manager shall have the authority to grant an extended Time Period. An extension of any Time Period for reasons of a Force Majeure Event shall be requested solely as provided in this Section. Developer hereby waives and relinquishes the right to notify the City of the intent to exercise the tolling and extension of any permit related to the Project, including Time Periods under this Agreement, development orders, and building permits, available under Section 252.363, Florida

Statutes, as the result of a declaration of a state of emergency issued by the Governor for a natural emergency.

26. Notice. Whenever either party desires to give notice to the other, notice shall be sent by hand delivery or certified mail, return receipt requested, and shall be sent to:

For the City:

City Manager
City of Winter Springs
1126 East S.R. 434
Winter Springs, Florida 32708

With additional notice to:

Anthony A. Garganese, City Attorney
Garganese, Weiss, D'Agresta & Salzman, P.A.
111 N. Orange Avenue, Suite 2000
Orlando, FL 32802

For Developer:

Blue Orange Holdings, LLC

Attn: _____

3440 Edgewater Drive

Orlando, Florida 32804

Either party may freely modify their respective contact person and address contained in this Paragraph by providing written notice of the modification to the other party. Any Notice given as provided herein shall be deemed received as follows: if delivered by personal service, on the date so delivered; and if mailed, on the third business day after mailing.

27.0 Assignment. Prior to completing the construction of the Project and reaching final build-out of the Project, Developer shall not assign this Agreement without the prior written consent of the City. Such assignment shall require the written approval of the City by amendment to this Agreement, which shall not require a public hearing and shall not be unreasonably withheld. However, Developer shall be entitled to assign its rights and obligations under this Agreement to a parent, subsidiary, or affiliated entity in which Developer or its members are members or interest holders without City consent, provided that the City is given notice of such assignment in accordance with Section 26.0 herein. Any assignment authorized by this subparagraph shall require the assignee to be a formal signatory to this Agreement and fully assume all of Developer's obligations, commitments, representations, and warranties under this Agreement. In any assignment, the rights and obligations contained herein shall be binding

on successors in interest to the Property, and the terms and conditions of this Agreement shall bind and inure to the benefit of the parties hereto and any respective successors and assigns.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seal on the date first above written.

CITY OF WINTER SPRINGS

By: _____
Kevin McCann, Mayor

ATTEST:

By: _____
Christian Gowan, City Clerk

APPROVED AS TO FORM AND LEGALITY
For the use and reliance of the City of Winter Springs, Florida only.

CITY SEAL

Date: _____
By: _____
Anthony A. Garganese, City Attorney for the City of Winter Springs, Florida

DRAFT

Signed, sealed and delivered in the presence of the following witnesses:

BLUE ORANGE HOLDINGS, LLC, a Florida limited liability company

_____
Signature of Witness

_____
Printed Name of Witness

_____
Address of Witness

_____

_____
Signature of Witness

_____
Printed Name of Witness

_____
Address of Witness

_____

_____
Print name: _____

Title:_____

Date: _____, 2025

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of (___) physical presence or (___) online notarization, this _____ day of _____, 2025, by_____, the _____of BLUE ORANGE HOLDINGS, LLC, a limited liability company, on behalf of the company, who is personally known to me or produced _____ as identification.

(NOTARY SEAL)

_____
(Notary Public Signature)

_____
(Print Name)
Notary Public, State of _____
Commission No.: _____
My Commission Expires: _____

DEVELOPER IS HEREBY ADVISED THAT SHOULD DEVELOPER FAIL TO FULLY EXECUTE, AND DELIVER TO THE CITY, THIS AGREEMENT WITHIN THIRTY (30) DAYS FROM THE DATE THAT THE CITY COMMISSION APPROVES THIS

AGREEMENT, THIS AGREEMENT, AND THE DEVELOPMENT PERMIT APPROVALS REFERENCED HEREUNDER, SHALL AUTOMATICALLY BE DEEMED NULL AND VOID.

DRAFT

JOINDER AND CONSENT

For and in consideration of the mutual covenants, terms, and conditions and restrictions contained herein, together with other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, FAIRWINDS CREDIT UNION, as holder of that certain Mortgage, Security Agreement, Financing Statement and Assignment of Rents which is recorded in Official Records Book 10555, Page 952, of the Public Records of Seminole County, Florida, as affected by that certain Assignment of Rents, Leases, Profits and Contracts recorded in Official Records Book 10555, Page 972; and that certain Financing Statement recorded in Official Records Book 10555, Page 981, all of the Public Records of Seminole County, Florida. (collectively, the "Mortgage") hereby joins in and consents to the foregoing Development Agreement by and between the City of Winter Springs, a Florida municipal corporation, and Blue Orange Holdings, LLC, a Florida limited liability company, and further acknowledges and agrees that its Mortgage shall be subordinated to such Development Agreement and the obligations contained therein.

Dated this _____ day of _____, 2025.

Signed and sealed in the presence of: FAIRWINDS CREDIT UNION

By: _____

_____
Print Name: _____

Name: _____
Title :_____

_____
Print Name: _____

STATE OF _____
COUNTY OF _____

DRAFT

The foregoing instrument was acknowledged before me by means of (___) physical presence or (___) online notarization, this _____ day of _____, 2025, by _____, the _____ of FAIRWINDS CREDIT UNION**,** on behalf of the company, who is personally known to me or produced _____ as identification.

(NOTARY SEAL)

_____
(Notary Public Signature)

_____
(Print Name)
Notary Public, State of _____
Commission No.: _____
My Commission Expires: _____

DRAFT

EXHIBIT A

PROPERTY LEGAL DESCRIPTION

Parcel Identification Numbers: 26-20-30-5AR-0A00-008D and 26-20-30-5AR-0A00-008H (Blue Orange Property)

THAT PART OF LOT 8 BLOCK "A", OF TUSKAWILLA, ACCORDING TO THE PLAT OF MITCHELL'S SURVEY OF THE LEVY GRANT AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWESTERN MOST CORNER OF LOT 31 ST. JOHNS LANDING AS RECORDED IN PLAT BOOK 53, PAGES 45 THRU 49 OF SAID PUBLIC RECORDS, SAID POINT BEING A RECOVERED CONCRETE MONUMENT ON THE EASTERLY RIGHT OF WAY LINE OF TUSKAWILLA ROAD (FORMERLY BRANTLEY AS RECORDED IN OFFICIAL RECORDS BOOK 3225, PAGE 1829 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 59°31'38" WEST ALONG THE WESTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 31 FOR A DISTANCE OF 15.00 FEET; THENCE RUN SOUTH 30°04'55" WEST ALONG SAID EASTERLY RIGHT OF WAY LINE FOR A DISTANCE OF 5.00 FEET; THENCE CONTINUE SOUTH 30°04'55" WEST A DISTANCE OF 35.00 FEET; THENCE SOUTH 59°31'38" EAST, A DISTANCE OF 1132.34 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT HAVING A RADIUS OF 150.00 FEET; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE AT 60°36'00" FOR AN ARC DISTANCE OF 158.65 FEET TO THE POINT OF TANGENCY; THENCE SOUTH 01°04'22" WEST A DISTANCE OF 146.91 FEET; THENCE SOUTH 24°59'41"WEST, A DISTANCE OF 318.72 FEET; THENCE SOUTH 00°00'00" EAST A DISTANCE OF 115.48 FEET; THENCE SOUTH 36°55'21" EAST A DISTANCE OF 217.54 FEET; THENCE SOUTH 15°19'53" EAST A DISTANCE OF 140.49 FEET; THENCE SOUTH 02°23'00 WEST A DISTANCE OF 556.34 FEET; THENCE SOUTH 07°25'15" WEST A DISTANCE OF 272.61 FEET; THENCE SOUTH 29'30'05" WEST A DISTANCE OF 231.32 FEET; THENCE SOUTH 50°31'58" WEST A DISTANCE OF 1475.69 FEET TO THE NORTHEASTERLY RIGHT OF WAY LINE OF STATE ROAD 434 ACCORDING TO FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 77070-2516; THENCE CONTINUE SOUTH 50°31'58" WEST FOR A DISTANCE OF 143.34 FEET TO A FOUND 1/2" IRON ROD & CAP (LB6723) ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF SAID STATE ROAD 434; THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY NORTH 39°47'08"WEST, 741.99 FEET TO THE POINT OF BEGINNING; THENCE DEPARTING SAID SOUTHWESTERLY RIGHT OF WAY SOUTH 50°22'25"WEST, 153.21 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071); THENCE SOUTH 49°13'20"WEST, 22.84 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 21°33'57", AND A CHORD BEARING AND DISTANCE OF SOUTH 68°52'35"WEST, 63.61 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 63.99 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON THE WESTERLY RIGHT OF WAY OF C.S.X TRANSPORTATION., INC "LAKE CHARM BRANCH" RAIL CORRIDOR; SAID POINT BEING ON A NON-TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°28'47", AND A CHORD BEARING AND DISTANCE OF SOUTH 01°55'26"EAST, 31.04 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AND SAID WESTERLY RIGHT OF WAY, A DISTANCE OF 31.04 FEET TO A FOUND 4"X4" CONCRETE MONUMENT (LB 220) ON THE EASTERLY EXTENSION OF THE

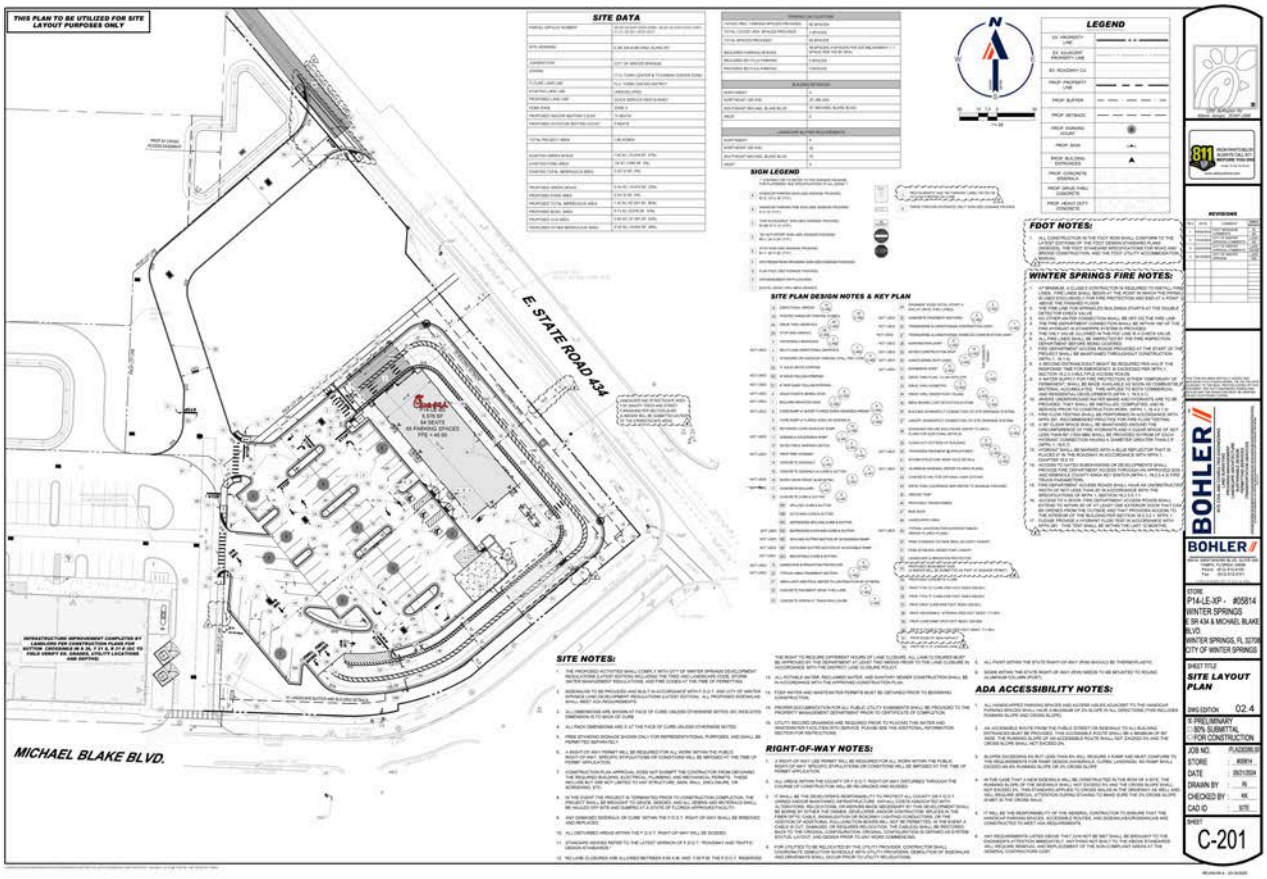
NORTH LINE OF LOT 17 OF SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID WESTERLY RIGHT OF WAY, ALONG SAID EASTERLY EXTENSION OF NORTH LINE, NORTH 87°52'13" WEST, 143.10 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID EASTERLY EXTENSION OF THE NORTH LINE, ALONG SAID EASTERLY RIGHT OF WAY, NORTH 02°44'06"EAST, 510.43 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID EASTERLY RIGHT OF WAY, ALONG SAID NORTHERLY RIGHT OF WAY, NORTH 87°56'41"WEST, 21.83 FEET TO THE EASTERLY BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2152, PAGE 533 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE DEPARTING SAID NORTHERLY RIGHT OF WAY, ALONG SAID EASTERLY BOUNDARY, NORTH 02°03'02"EAST, 65.81 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT OF WAY OF AFORESAID STATE ROAD 434; THENCE DEPARTING SAID EASTERLY BOUNDARY, ALONG THE SAID SOUTHWESTERLY RIGHT OF WAY THE FOLLOWS THREE (3) COURSES: 1) THENCE SOUTH 40°37'45"EAST, 224.63 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°18'00", AND A CHORD BEARING AND DISTANCE OF SOUTH 06°37'29"WEST, 19.42 FEET; 2) THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 19.42 FEET TO THE END OF SAID CURVE; 3) THENCE S.39°47'08"E., 293.27 FEET TO THE POINT OF BEGINNING.

LESS (OFFICIAL RECORDS BOOK 8943, PAGE 877):

A PORTION LOT 8, BLOCK A, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, LYING IN SECTION 6, TOWNSHIP 21 SOUTH, RANGE 31 EAST BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE RESERVE AT TUSCAWILLA PHASE II, AS RECORDED IN PLAT BOOK 50, PAGES 3 THROUGH 9 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE RUN SOUTH 00°45'33" EAST ALONG THE WESTERLY LINE OF SAID RESERVE AT TUSCAWILLLA, PHASE II, ALSO BEING THE EAST LINE OF BLOCK A, GARDENA FARMS TOWN SITES, AS RECORDED IN PLAT BOOK 6, PAGE 39, OF THE SAID PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, FOR A DISTANCE OF 810.29 FEET TO A POINT ON THE NORTHEASTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS AS RECORDED IN OFFICIAL RECORDS BOOK 3177, PAGE 632 OF SAID PUBLIC RECORDS; THENCE DEPARTING SAID WEST LINE AND SAID EAST LINE, RUN NORTH 55°28'13" WEST ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 593.50 FEET TO THE SOUTHEAST CORNER OF BLOCK C, OF SAID GARDENA FARMS TOWN SITES; THENCE CONTINUE NORTH 55°28'13" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 800.00 FEET TO A POINT ON A NON-TANGENT CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1815.35 FEET, A CHORD BEARING OF NORTH 39°53'20" WEST AND A CHORD DISTANCE OF 974.43 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL

EXHIBIT B
OVERALL SITE PLAN



CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Site Plan Review

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per Florida Statue 419.001. Applications shall be reviewed for sufficiency (completeness) within thirty (30) calendar days per FL Statue 166.033. By submitting this application, you hereby grant temporary right of entry for City officials to enter upon the subject property for purposes of evaluating this application.

Site Plan Type

Type of Development: ____ Residential X Non-Residential

____Preliminary Review ___Final Review X Combined Preliminary/Final ___Resubmittal ___ Recorded Plat

Project Name: QSR - Winter Springs Date:_____

Applicant/Agent Information

Applicant(s): Ferber Construction Management LLC; Paul Ferber

Mailing Address: 151 SAWGRASS CORNERS DR STE 202 PONTE VEDRA BEACH, FL 32082

Email: Wanderson@ferbercompany.com

Phone Number: 407-457-2246

Person Who Will Upload Plans: Bohler Engineering FL, LLC; Kyle Morel

Email: fl-permits@bohlereng.com Phone#: 813-812-4100

Property Owner(s) Name (If Applicant is not the Property Owner)

Name: _____

Email: _____ Phone #: _____

Mailing Address: _____

Phone Number: _____

Site Information

Project Address: E FL 434 & Michael Blake Blvd Winter Springs, FL 32708

Parcel ID(s): 26-20-30-5AR-0A00-008D; 26-20-30-5AR-0A00-008H

Parcel Size: +/- 1.73 acres

Existing Use: Vacant - general commercial

Proposed Use: Quick serve restaurant with drive thru

Zoning District: T-C

Future Land Use: Town center district

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Site Plan Review

Is the property located in the Town Center District? X Yes ____ No

Is the property within the S.R. 434 Corridor Overlay District? X Yes ____ No

Is the property located in the Greeneway Interchange Zoning District? ____ Yes x No

The Planning and Zoning Board/Local Planning Agency shall review Site Plan Applications and make a written recommendation to the City Commission. The City Commission shall render all final decisions regarding Preliminary and Final Engineering Plans and may impose reasonable conditions on any approved plans to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the City Code and Comprehensive Plan. All formal decisions shall be based upon the applicable criteria as set forth in the City's Code of Ordinances Chapter 9, Land Development and Chapter 20, Zoning.

Applicants are advised, that if they decide to appeal any decisions made at the meetings or hearings, with respect to any matter considered at the meetings or hearings, they will need a record of the proceedings and, for such purposes, they will need to ensure that a verbatim record of the proceedings is made, at their cost, which includes the testimony and evidence upon which the appeal is to be based, per 286.0105, Florida Statutes.

Application Fees

Fees are as reflected on the Fee Schedule plus actual costs incurred for advertising or notification, and reimbursement for technical, and/or professional services which may be required in connection with the review, inspection, or approval of any development (based on accounting submitted by the City Consultant), payable prior to approval of the pertinent stage of development.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Site Plan Review

THIS APPLICATION MUST BE SIGNED IN THE PRESENCE OF A NOTARY

This is to certify that I am the owner in simple fee of the subject property as described in this application for Site Plan Review.

Property Owner(s) Name (Print): Ferber Construction Management LLC

Property Owner Signature: _____ Date: 6/20/2024

Property Owner(s) Name (Print): _____

Property Owner Signature: _____ Date: _____

STATE OF Florida COUNTY OF St. Johns

The foregoing instrument was acknowledged before me this 20th day of June, 2024, by Paul S. Ferber who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

ShiAnne O'Connor Date: 6/20/2024 (seal):

Notary Public Signature: _____

My Commission Expires: 8/1/26

SHIANNE O'CONNOR
NOTARY PUBLIC
STATE OF FLORIDA
NO. HH 296305
MY COMMISSION EXPIRES AUG. 01, 2026

Note: If the applicant is not the property owner the Property Owner shall sign and have their signature notarized below, authorizing the applicant and/or agent permission to submit the Site Plan Review application.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF_____COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____Date: _____ (seal):

Notary Public Signature: _____

My Commission Expires: _____

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Aesthetic Review

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per Chapter 9–Aesthetic Review Sec.9-605. All applications shall be reviewed for sufficiency (completeness) within thirty (30) calendar days per FL Statue 166.033. Once the application is deemed sufficient, the applicant shall move forward with the Community Workshop, required per Chapter 20–Zoning Sec.20-29.1.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Conditional Use is quasi-judicial in nature. Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Aesthetic Review recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Aesthetic Review and may impose reasonable conditions on any approved Aesthetic Review to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan. All formal decisions shall be based on competent substantial evidence and the applicable criteria as set forth in Chapter 9, Aesthetic Review Standards. Applicants are advised that if, they decide to appeal any decisions made at the meetings or hearings with respect to any matter considered at the meetings or hearings, they will need a record of the proceedings and, for such purposes, they will need to insure that a verbatim record of the proceedings is made, at their cost, which includes the testimony and evidence upon which the appeal is to be based, per Florida Statute 286.0105.

An Aesthetic Review Approval by the City Commission under this article shall be valid for a maximum of eighteen (18) months from the date the city commission renders its approval at a public meeting. If the applicant fails to obtain a building permit within the eighteen (18) month period, the city commission's approval shall expire at the end of the period. However, once a building permit is issued, the approval shall be valid for a time period equal to the permit and shall expire only if the building permit expires. Reasonable extensions may be granted by the city commission upon good cause shown by the applicant, provided substantial changes have not occurred in the surrounding area that would make the prior approval inconsistent with the criteria set forth in Chapter 9-Aesthetic Review Sec.9-9603

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Aesthetic Review

REQUIRED INFORMATION

Applicant(s): Ferber Construction Management, LLC Date:
Mailing address: 151 Sawgrass Corners Dr, Suite 202 Ponte Vedra Beach, FL 32082
Email: wanderson@ferbercompany.com
Phone Number: 407-457-2246

Property Owner(s): Ferber Construction Management, LLC
Mailing Address: 151 Sawgrass Corners Dr, Suite 202 Ponte Vedra Beach, FL 32082
Email: wanderson@ferbercompany.com
Phone Number: 407-457-2246

Project Name: QSR - Winter Springs
Property Address: E. SR. 434 & MICHAEL BLAKE BLVD. WINTER SPRINGS, FL 32708
Parcel ID(s): 26-20-30-5AR-0A00-008D, 26-20-30-5AR-0A00-008H, 01-21-30-501-0000-0010
Parcel Size: +/- 1.73 acres
Existing Use: Vacant

List all witnesses that the applicant intends to present to the City Commission to provide testimony:
None other than applicant and applicant's authorized agents.

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:
Applicant intends to present oral factual testimony, citations to the City's LDC and Comprehensive Plan, and project submittal documents.

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Aesthetic Review

Criteria for Review

1. The plans and specifications of the proposed project indicate that the setting, landscaping, proportions, materials, colors, texture, scale, unity, balance, rhythm, contrast, and simplicity are coordinated in a harmonious manner relevant to the particular proposal, surrounding area and cultural character of the community.
2. The plans for the proposed project are in harmony with any future development which has been formally approved by the City within the surrounding area.
3. The plans for the proposed project are not excessively similar or dissimilar to any other building, structure or sign which is either fully constructed, permitted but not fully constructed, or included on the same permit application, and facing upon the same or intersecting street within five hundred (500) feet of the proposed site, with respect to one or more of the following features of exterior design and appearance:
    a. Front or side elevations;
    b. Size and arrangement of elevation facing the street, including reverse arrangement; or
    c. Other significant features of design such as, but not limited to: materials, roof line, hardscape improvements, and height or design elements.
4. The plans for the proposed project are in harmony with, or significantly enhance, the established character of other buildings, structures or signs in the surrounding area with respect to architectural specifications and design features deemed significant based upon commonly accepted architectural principles of the local community.
5. The proposed project is consistent and compatible with the intent and purpose of this article, the Comprehensive Plan for Winter Springs, design criteria adopted by the City (e.g. Town Center guidelines, SR 434 design specifications) and other applicable federal, state or local laws.
6. The proposed project has incorporated significant architectural enhancements such as concrete masonry units with stucco, marble, termite-resistant wood, wrought iron, brick, columns and piers, porches, arches, fountains, planting areas, display windows, and other distinctive design detailing and promoting the character of the community.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
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Application – Aesthetic Review

REQUIRED DOCUMENTATION

X A complete Application and applicable fee

- X Minor (Site less than 2 acres)
- ___ Major (Site greater than 2 acres)
- ___ Modification of previously approved Aesthetic Review

X A Legal Description accompanied by a certified survey or the portion of the map maintained by the Seminole County Property Appraiser reflecting the boundaries of the subject property (To scale).

X Site Plan

X Building Elevations (color) illustrating all sides of structures

X Color rendering illustrating street view with landscaping at time of planting;

X Illustrations of all walls, fences, and other accessory structures and indication of their height and the materials proposed for their construction;

X Signage elevations of proposed exterior permanent signs, outdoor advertising or other constructed elements other than habitable space, if any;

X Identification of materials, textures, and colors to be used on all buildings, accessory structures, exterior signs, and other constructed elements;

X Other architectural and engineering data as may be requested to clarify the application.

___ For all new commercial development and new residential subdivisions of ten (10) or more lots or existing commercial buildings being altered by 50 percent or greater of the original floor plan or seating capacity and requiring a modified site plan, or development agreements process under section 20-28.1 of the City Code, or as otherwise deemed applicable by the city to relevantly and competently examine an application for compliance with the city code and the affect and impact the proposed use will have on neighborhood and surrounding properties, applicants shall be required to submit with the following additional information referenced in Chapter 20 – Zoning Sec.20.29 Applications (7) – (11).

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Aesthetic Review

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for an Aesthetic Review for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): Ferber Construction Management, LLC

Applicant Signature: _____ Date: 8/19/24

Business Name: Ferber Construction Management, LLC

Address: 151 Sawgrass Corners Dr, Suite 202 Ponte Vedra Beach, FL 32082 Parcel ID: 26-20-30-5AR-0A00-008D, 26-20-30-5AR-0A00-008H, 01-21-30-501-0000-0010

STATE OF Florida COUNTY OF St. Johns

The foregoing instrument was acknowledged before me this 19th day of August, 2024, by Paul S. Ferber who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

ShiAnne O'Connor Date: 8/19/24 (seal):

Notary Public Signature: _____

My Commission Expires: 8/1/26

SHIANNE O'CONNOR
NOTARY PUBLIC
STATE OF FLORIDA
NO. HH 296305
MY COMMISSION EXPIRES AUG. 01, 2026

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF_____ COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____ Date: _____ (seal):

Notary Public Signature: _____

My Commission Expires: _____

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per all applicable City Codes and the City Comprehensive Plan. Applications shall be reviewed for sufficiency (completeness) within thirty (30) calendar days per FL Statue 166.033. Once the application is deemed sufficient, the applicant shall move forward with the Community Workshop, required per Chapter 20–Zoning Sec.20-29.1.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Development Agreement is quasi-judicial in nature. Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Development Agreement recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Development Agreements and may impose reasonable conditions on any approved Development Agreement to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan.

REQUIRED INFORMATION

Applicant(s): Ferber Construction Management, LLC

Applicant Signature: _____ Date: 8/19/24

Mailing address: 151 Sawgrass Corners Dr, Suite 202 Ponte Vedra Beach, FL 32082

Email: wanderson@ferbercompany.com

Phone Number: 407-457-2246

Property Owner(s): Ferber Construction Management, LLC

Mailing Address: 151 Sawgrass Corners Dr, Suite 202 Ponte Vedra Beach, FL 32082

Email: wanderson@ferbercompany.com

Phone Number: 407-457-2246

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

Property Address: E SR 434 & MICHAEL BLAKE BLVD. WINTER SPRINGS, FL 32708

Parcel ID(s): 26-20-30-5AR-0A00-008D, 26-20-30-5AR-0A00-008H, 01-21-30-501-0000-0010

Parcel Size: +/- 1.73 acres

Project Name: QSR - Winter Springs

A general description of the relief sought under this division.

N/A

A brief explanation, with applicable supporting competent substantial evidence and documents, as to why the application satisfies the relevant criteria set forth in the City Zoning Code and City Comprehensive Plan.

N/A

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

None other than applicant and applicant's authorized agents.

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Applicant intends to present oral factual testimony, citations to the City's LDC and Comprehensive Plan, and project submittal documents.

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

REQUIRED DOCUMENTATION

X A complete Application and Fee

X An Electronic copy of the most recent survey of the subject property.

X An Electronic copy of the Legal Description of the subject property.

X Documentation and Data supporting the request.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Development Agreement

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Development Agreement for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): Ferber Construction Management, LLC

Applicant Signature: _____ Date: 8/19/24

Business Name: Ferber Construction Management, LLC

Address: E SR 434 & MICHAEL BLAKE BLVD. WINTER SPRINGS, FL 32708 Parcel ID: 26-20-30-5AR-0A00-008D, 26-20-30-5AR-0A00-008H, 01-21-30-501-0000-0010

STATE OF Florida COUNTY OF St. Johns

The foregoing instrument was acknowledged before me this 19th day of August, 2024, by Paul S. Ferber who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

ShiAnne O'Connor Date: 8/19/24 (seal):

Notary Public Signature: _____

My Commission expires: 8/1/26

SHIANNE O'CONNOR
NOTARY PUBLIC
STATE OF FLORIDA
NO. HH 296305
MY COMMISSION EXPIRES AUG. 01, 2026

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF_____ COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____ Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per Chapter 20 – Zoning Sec. 20-34. Applications shall be reviewed for sufficiency (completeness) within thirty (30) calendar days per FL Statue 166.033.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Waiver is quasi-judicial in nature.

Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Waiver recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Waivers and may impose reasonable conditions on any approved Waiver to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan. All formal decisions shall be based on competent substantial evidence and the applicable criteria as set forth in Chapter 20, Zoning. Applicants are advised that if, they decide to appeal any decisions made at the meetings or hearings with respect to any matter considered at the meetings or hearings, they will need a record of the proceedings and, for such purposes, they will need to insure that a verbatim record of the proceedings is made, at their cost, which includes the testimony and evidence upon which the appeal is to be based, per Florida Statute 286.0105.

A Waiver which may be granted by the City Commission shall expire two (2) years after the effective date of such approval by the City Commission, unless a building permit based upon and incorporating the Waiver, is issued by the City within said time period. Upon written request of the property owner, the City Commission may extend the expiration date, without public hearing, an additional six (6) months, provided the property owner demonstrates good cause for the extension In addition, if the aforementioned building permit is timely issued, and the building permit subsequently expires and the subject development project is abandoned or discontinued for a period of six months, the Waiver shall be deemed expired and null and void, per Chapter 20 – Sec.20-36.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

REQUIRED INFORMATION

Applicant(s):	Ferber Construction Management, LLC; Paul Ferber Date: 07-09-2024
Mailing address:	151 Sawgrass Corners Drive, Suite 202 Ponte Vedra Beach, FL 32082
Email:	Wanderson@ferbercompany.com
Phone Number:	407-457-2246
Property Owner(s):	
Mailing Address:	
Email:	
Phone Number:	
Project Name:	QSR - Winter Springs
Property Address:	E FL 434 & Tiskawilla Rd Winter Springs, FL 32708
Parcel ID(s):	26-20-30-5AR-0A00-008D; 26-20-30-5AR-0A00-008H; 01-21-30-501-0000-0010
Parcel Size:	+/- 5.88 acres
Existing Use:	Vacant - general commercial

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): The proposed Waiver would allow construction of a 5,576 square foot restaurant with two drive-through lanes (the "Restaurant")1. The Property is located within the Town Center District – Urban Center Zone (T5). Under LDC Section 20-324(6), which provides the General Provisions for the Town Center Code, "[d]rive-through service windows are only permitted in the rear in and alley accessed locations provided they do not substantially disrupt pedestrian activity or surrounding uses." (the "Drive-Thru Code"). LDC Section 20-34 details the specific criteria that must be met for all waiver requests. In this case, all criteria have been met, as is discussed in more detail below.

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

Considering the Property's location at a major intersection, applying the Drive-Thru Code to the proposed Restaurant would create an illogical, impractical, and unreasonable result. The Property is located along the southern boundary of the Town Center District at the intersection of SR 434 and Tuskawilla Road. The Property, together with the 0.98 property to the north that is developed as a fueling station, form a wedge-shaped tract that is bounded at the south by Michael Blake Blvd. Locating the Restaurant's drive-through service window on the side of the Restaurant (shown below) is integral to the internal traffic circulation design of the Project as a whole. Conversely, locating the drive-through window at the rear of the building—as required by the Drive-Thru Code—would significantly disrupt the Project's internal traffic circulation. As a result, applying the Drive-Thru Code to the Project would create an illogical, impractical, and unreasonable result.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
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Application – Waiver

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The proposed Project and associated Waiver are in substantial compliance with the City's LDC and Comprehensive Plan. The overall Project design is consistent with the standards set forth within the Town Center Code and, in particular, those applicable within the T5 transect. The proposed Waiver will allow only one drive-through service window within the Project—at the Restaurant. The proposed drive-through window has been designed to accommodate the uses surrounding the Restaurant—both within and outside of the Project—and to avoid disrupting pedestrian activity in and around the Project.

Will the proposed development plan significantly enhance the real property?

The proposed Project will significantly enhance the Property, which is currently undeveloped. The properties to the east, south, and west are developed as residential, with a significant number of multifamily units immediately adjacent to the Property. The surrounding properties would be enhanced by the Project, which proposes complimentary commercial uses within walking distance for nearby City residents. In addition, the Project would enhance the Property as infill development. Policy 1.4.2 of the City's Comprehensive Plan encourages "the efficient use of land with compatible infill and higher density and intensity development within the Town Center and the U.S. 17-92 CRA Corridor." Moreover, the Project is consistent with the Urban Corridor (T5) Transect – the highest intensity transect within the Town Center District. For the foregoing reasons, the Project will significantly enhance the Property and advance the City's policy of encouraging infill development.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The Project will serve the public health, safety, and welfare of the City by providing infill development within the Town Center District that is designed consistent with the District's standards.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

The Waiver will not diminish property values in or alter the essential character of the surrounding neighborhood. As infill development, the Project will enhance property values of the surrounding neighborhood. As outlined above, the proposed drive-through window has been designed to accommodate the uses surrounding the Restaurant and to avoid disrupting pedestrian activity in and around the Project. In addition, the Project will include a ten (10) foot landscape buffer between the Restaurant site and SR 434 that will provide visual screening of the drive-through window. The Project's location at the intersection of SR 434 and Tuskawilla Road, coupled with the Restaurant's location at the southwest corner of the Project, ensure that the Waiver will not diminish property values in or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

As outlined above, locating the Restaurant's drive-through service window on the side of the Restaurant is integral to the internal traffic circulation design of the Project as a whole. Conversely, locating the drive-through window at the rear of the building—as required by the Drive-Thru Code— would significantly disrupt the Project's internal traffic circulation. As a result, the requested Waiver is the minimum waiver that will prevent an illogical, impractical, and unreasonable result.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

The design of the proposed Project is consistent with the standards set forth within the Town Center Code and, in particular, those applicable within the T5 transect. Moreover, the proposed drive-through window has been designed to accommodate the uses surrounding the Restaurant and to avoid disrupting pedestrian activity in and around the Project. For the foregoing reasons, the proposed Project is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

None other than applicant and applicant's authorized agents.

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Applicant intends to present oral factual testimony, citations to the City's LDC and Comprehensive Plan, and project submittal documents.

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing.

REQUIRED DOCUMENTATION

X A complete Application and Fee

X A general description of the relief sought under this division

X A brief explanation, with applicable supporting competent substantial evidence and documents, as to why the application satisfies the relevant criteria set forth in this division

X A Legal Description accompanied by a certified survey or the portion of the map maintained by the Seminole County Property Appraiser reflecting the boundaries of the subject property (To scale).

X An Excel mailing list with the names and addresses of each property owner within 500 ft. of each property line, along with the HOA Associations within 1/2 mile of each property line.

X For all new commercial development and new residential subdivisions of ten (10) or more lots or existing commercial buildings being altered by 50 percent or greater of the original floor plan or seating capacity and requiring a modified site plan, or development agreements process under section 20-28.1 of the City Code, or as otherwise deemed applicable by the city to relevantly and competently examine an application for compliance with the city code and the affect and impact the proposed use will have on neighborhood and surrounding properties, applicants shall be required to submit with the following additional information referenced in Chapter 20 – Zoning Sec.20.29 Applications (7) – (11).

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Waiver for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): Kyle Morel (Authorized Agent)

Applicant Signature: _____ Date: 7/9/24

Business Name: Feiber Construction Management, LLC

Address: 151 Sawgrass Corners Drive Suite 202 Parcel ID: 26-20-30-5AR-0A00-008D;
Ponte Vedra Beach, FL 32082 26-20-30-5AR-0A00-008H;
01-21-30-501-0000-0010

STATE OF FL COUNTY OF Hillsborough Date 7/9/24

The foregoing instrument was acknowledged before me this 9th day of July, 2024, by Kyle Morel who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____ Date: 7/9/24 (seal):

Notary Public Signature: _____

My Commission Expires: 9/7/25

SAMANTHA L. HARLAN
Notary Public - State of Florida
Commission # HH 173060
My Comm. Expires Sep 7, 2025
Bonded through National Notary Assn.

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF _____ COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by _____ who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

_____ Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per Chapter 20 – Zoning Sec. 20-34. Applications shall be reviewed for sufficiency (completeness) within thirty (30) calendar days per FL Statue 166.033.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Waiver is quasi-judicial in nature.

Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Waiver recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Waivers and may impose reasonable conditions on any approved Waiver to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan. All formal decisions shall be based on competent substantial evidence and the applicable criteria as set forth in Chapter 20, Zoning. Applicants are advised that if, they decide to appeal any decisions made at the meetings or hearings with respect to any matter considered at the meetings or hearings, they will need a record of the proceedings and, for such purposes, they will need to insure that a verbatim record of the proceedings is made, at their cost, which includes the testimony and evidence upon which the appeal is to be based, per Florida Statute 286.0105.

A Waiver which may be granted by the City Commission shall expire two (2) years after the effective date of such approval by the City Commission, unless a building permit based upon and incorporating the Waiver, is issued by the City within said time period. Upon written request of the property owner, the City Commission may extend the expiration date, without public hearing, an additional six (6) months, provided the property owner demonstrates good cause for the extension In addition, if the aforementioned building permit is timely issued, and the building permit subsequently expires and the subject development project is abandoned or discontinued for a period of six months, the Waiver shall be deemed expired and null and void, per Chapter 20 – Sec.20-36.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

Waiver - Streetscape

REQUIRED INFORMATION

Applicant(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 3/21/2025
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Project Name:	Sutton Crossings Development
Property Address:	Raw Land Near West of intersection of Michael Blake Blvd and SR434 and East of intersection of Michael Blake Blvd and Tuskawilla Rd
Parcel ID(s):	01213050100000010 , 2620305AROA00008D, 2620305AROA00008H
Parcel Size:	6.2 Acres
Existing Use:	Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): Waiver - Monument signs

We are requesting a waiver from the City of Winter Springs to allow two monument signs along the SR 434 frontage for Chick-fil-A. Although monument signs are not typically permitted in the Town Center overlay, Sec. 20-327.1 allows them by waiver along SR 434.

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

Per Sec. 20-327.1. Free standing monument signs are permitted by waiver along State Road 434 frontage.

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossings Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features an early learning academy, an Ace Hardware, Tropical Café, a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

Wess McMillan - Developer, Owner, and Operator for Ace Hardware

Marlon Champion - Developer for Chick-fil-a

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Conceptual site plan, proposed re-plat

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

REQUIRED DOCUMENTATION

_x_ A complete Application and Fee

_x_ A general description of the relief sought under this division

_x_ A brief explanation, with applicable supporting competent substantial evidence and documents, as to why the application satisfies the relevant criteria set forth in this division

_x_ A Legal Description accompanied by a certified survey or the portion of the map maintained by the Seminole County Property Appraiser reflecting the boundaries of the subject property (To scale).

_x_ An Excel mailing list with the names and addresses of each property owner within 500 ft. of each property line, along with the HOA Associations within 1/2 mile of each property line.

_x_ For all new commercial development and new residential subdivisions of ten (10) or more lots or existing commercial buildings being altered by 50 percent or greater of the original floor plan or seating capacity and requiring a modified site plan, or development agreements process under section 20-28.1 of the City Code, or as otherwise deemed applicable by the city to relevantly and competently examine an application for compliance with the city code and the affect and impact the proposed use will have on neighborhood and surrounding properties, applicants shall be required to submit with the following additional information referenced in Chapter 20 – Zoning Sec.20.29 Applications (7) – (11).

SPECIFICATIONS

SIGN CABINET IS SIGN COMP #2005 EXTRUDED CABINET WITH A SIGN COMP # 2085/2095 BLEED FLEX FACE FRAME
CABINET IS INTERNALLY ILLUMINATED WHITE LED 6500K LIGHTS, SPACED EVENLY. PAINT INTERIOR OF CABINETS MATTE WHITE.
CLOSED SUNDAY PANEL (IF SHOWN)
IS .125" ALUM. ROUTED FACE BACKED ACRYLIC.

READER BOARD CABINET (IF SHOWN)
.125" ALUM. FACE PANEL WITH ROUTED OPENING FOR READER BOARD AND COPY READING "CLOSED SUNDAY"
APERCU SENTENCE CASE BOLD.
HINGED VANDAL COVER FRAME WITH 187" THICK CLEAR POLYCARBONATE FACE WITH INSET .125" #7328 WHITE.
READER FACE WITH ZIP TRACK TO ACCOMMODATE WAGNER ZIP LETTER SET THAT INCLUDES FRANKLIN GOTHIC EXTRA CONDENSED UPPERCASE LETTER SET OF 334 CHARACTERS WITH PUNCTUATION MARKS.

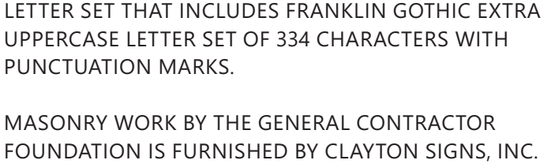
MASONRY WORK BY THE GENERAL CONTRACTOR
FOUNDATION IS FURNISHED BY CLAYTON SIGNS, INC.

3M #3630-53 TRANSLUCENT CARDINAL RED
TENSION FRAME COVER TO BE PAINTED
GENESIS M SINGLE STAGE (G2-SERIES) RED #48247

WHITE BLEED 3M
PANOGRAPHIC III FLEX FACE
W/ .125" #7328 WHITE PLEX

PAINTED MATTHEWS
#74155 DARK BRONZE, SEMI-GLOSS

MASONRY TO MATCH BUILDING





ELEVATION
SCALE - 3/8" = 1'- 0"

END VIEW
SCALE - 3/8" = 1'- 0"

SEE ENGINEER STAMPED DRAWING FOR FOUNDATION DETAILS

CLAYTON Signs 50 YEARS SINCE 1965
5198 North Lake Drive
Lake City, GA 30260
404.361.3800
www.claytonsigns.com

MONUMENT SIGN

DRAWING FILE - CFA - WINTER SPRINGS, FL (05814) SIGNAGE.CDR

ALL ELECTRICAL SIGNS ARE 120 VOLTS UNLESS OTHERWISE INDICATED

DRAWN BY	Ben Holliday
ACCOUNT REP.	Ben Holliday
DRAWING DATE	March 8, 2024
REVISION DATE	April 22, 2024

STORE NUMBER	STORE ADDRESS
L05814	Chick-fil-A at Winter Springs, FL (05814) E SR 434 & Michael Blake Blvd. Winter Springs, FL 32708

THIS DRAWING IS AN ORIGINAL, UNPUBLISHED DESIGN CREATED BY CLAYTON SIGNS, INC. IT IS NOT TO BE REPRODUCED, CHANGED, OR EXHIBITED TO ANYONE OUTSIDE OF YOUR COMPANY IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION FROM THE OWNER OF CLAYTON SIGNS, INC.. ANY SUCH ACTIONS MAY BE SUBJECT TO LEGAL ACTION IN A COURT OF LAW.
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LOCATION
A1/A2

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Waiver for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): John W. McMillan Jr.

Applicant Signature: _____ Date: 8/12/2024

Business Name: EPB ENGINEERING & CONSTRUCTION, PLLC

Address: P.O. BOX 1013 OAKLAND FL 34760 Parcel ID: G 01-21-30-501-0000-0010 26-20-30-5AR-0A00-00D & H

STATE OF Mississippi COUNTY OF Jackson Date 8-12-2024

The foregoing instrument was acknowledged before me this 12 day of August, 2024, by John McMillan who is personally known to me or who has produced FL DL as identification and who did/did not take an oath.

Date: 8-12-2024 (seal):

Notary Public Signature: _____

My Commission Expires: 3-6-2028

STATE OF MISSISSIPPI
ERIC W. COLLUM
ID No. 88054
Comm. Exp. 03-06-2028
NOTARY PUBLIC
HARRISON COUNTY

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF_____COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____as identification and who did/did not take an oath.

_____Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

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Application – Waiver

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per Chapter 20 – Zoning Sec. 20-34. Applications shall be reviewed for sufficiency (completeness) within thirty (30) calendar days per FL Statue 166.033.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Waiver is quasi-judicial in nature.

Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Waiver recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Waivers and may impose reasonable conditions on any approved Waiver to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan. All formal decisions shall be based on competent substantial evidence and the applicable criteria as set forth in Chapter 20, Zoning. Applicants are advised that if, they decide to appeal any decisions made at the meetings or hearings with respect to any matter considered at the meetings or hearings, they will need a record of the proceedings and, for such purposes, they will need to insure that a verbatim record of the proceedings is made, at their cost, which includes the testimony and evidence upon which the appeal is to be based, per Florida Statute 286.0105.

A Waiver which may be granted by the City Commission shall expire two (2) years after the effective date of such approval by the City Commission, unless a building permit based upon and incorporating the Waiver, is issued by the City within said time period. Upon written request of the property owner, the City Commission may extend the expiration date, without public hearing, an additional six (6) months, provided the property owner demonstrates good cause for the extension In addition, if the aforementioned building permit is timely issued, and the building permit subsequently expires and the subject development project is abandoned or discontinued for a period of six months, the Waiver shall be deemed expired and null and void, per Chapter 20 – Sec.20-36.

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Application – Waiver

REQUIRED INFORMATION

Applicant(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 3/21/2025
Mailing address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Property Owner(s):	EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address:	PO Box 1013 Oakland Fl. 34760
Email:	wessmcmillan@centralfloridaace.com
Phone Number:	407-509-7098
Project Name:	Sutton Crossings Development
Property Address:	Raw Land Near West of intersection of Michael Blake Blvd and SR434 and East of intersection of Michael Blake Blvd and Tuskawilla Rd
Parcel ID(s):	01213050100000010 , 2620305AROA00008D, 2620305AROA00008H
Parcel Size:	6.2 Acres
Existing Use:	Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): Waiver - Streetscape

We are requesting a waiver from the City of Winter Springs streetscape requirements in Sec. 20-601 to preserve the existing 5-foot sidewalk along SR 434 within FDOT's right-of-way. Instead of removing the sidewalk, we propose providing the required landscaping in the existing green space, maintaining the full 27-foot streetscape depth while minimizing unnecessary disturbance

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

The current conditions include a 3-foot landscape area, a 5-foot sidewalk, and a 19-foot landscape and treescape area, which together meet the required 27-foot streetscape depth. Rather than removing and reconstructing the existing 5-foot sidewalk to meet the city's required 5-foot landscape area, 6-foot sidewalk, and 16-foot landscape area. we propose to provide the required landscaping within the existing green space. This maintains the functional sidewalk, minimizes unnecessary disturbance, and achieves the intended streetscape aesthetic and buffering objectives.

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossings Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features an early learning academy, an Ace Hardware, Tropical Café, a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

Wess McMillan - Developer, Owner, and Operator for Ace Hardware

Marlon Champion - Developer for Chick-fil-a

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Conceptual site plan, proposed re-plat

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing_

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customerservice@winterspringsfl.org

Application – Waiver

REQUIRED DOCUMENTATION

_x_ A complete Application and Fee

_x_ A general description of the relief sought under this division

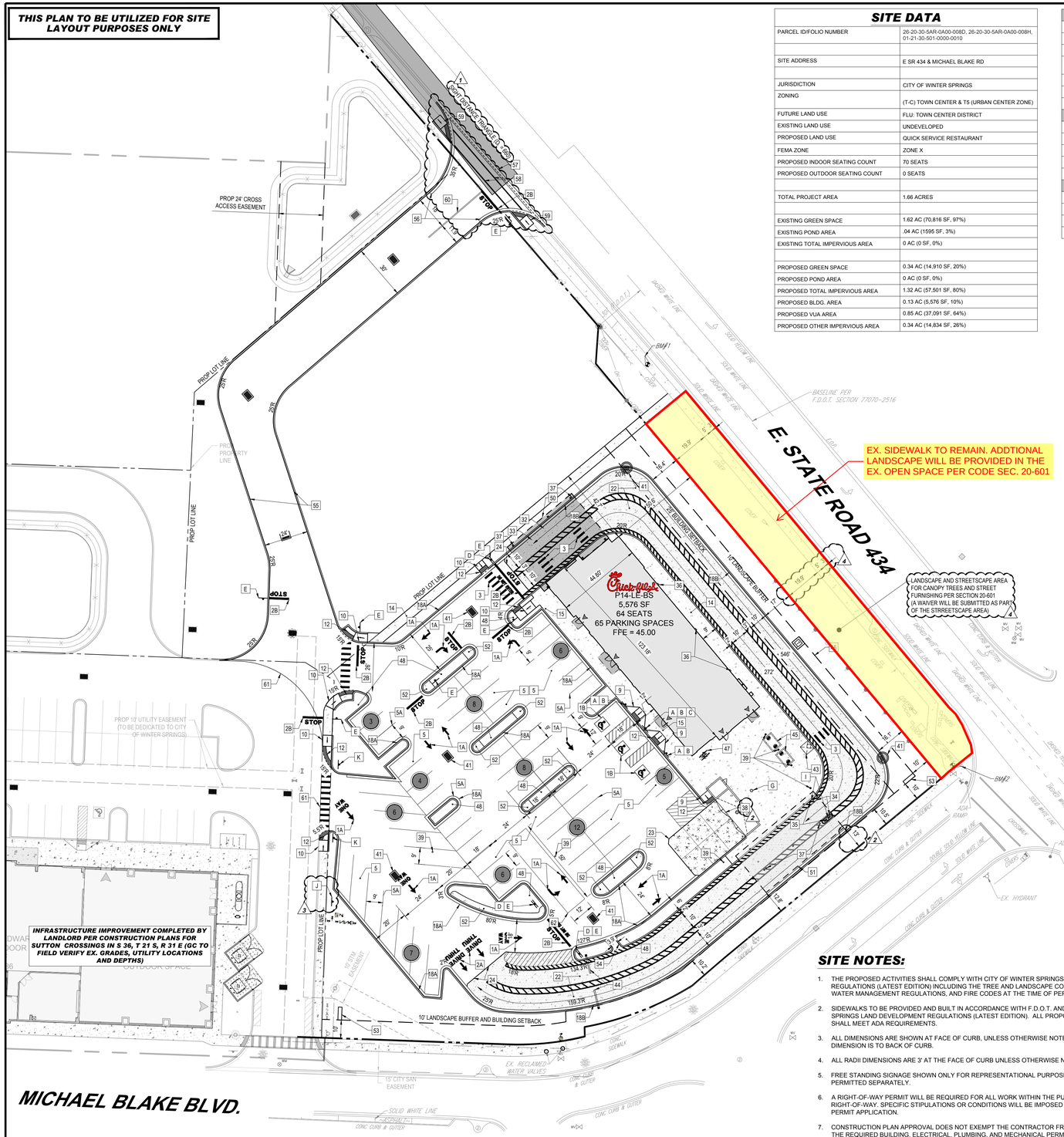
_x_ A brief explanation, with applicable supporting competent substantial evidence and documents, as to why the application satisfies the relevant criteria set forth in this division

_x_ A Legal Description accompanied by a certified survey or the portion of the map maintained by the Seminole County Property Appraiser reflecting the boundaries of the subject property (To scale).

_x_ An Excel mailing list with the names and addresses of each property owner within 500 ft. of each property line, along with the HOA Associations within 1/2 mile of each property line.

_x_ For all new commercial development and new residential subdivisions of ten (10) or more lots or existing commercial buildings being altered by 50 percent or greater of the original floor plan or seating capacity and requiring a modified site plan, or development agreements process under section 20-28.1 of the City Code, or as otherwise deemed applicable by the city to relevantly and competently examine an application for compliance with the city code and the affect and impact the proposed use will have on neighborhood and surrounding properties, applicants shall be required to submit with the following additional information referenced in Chapter 20 – Zoning Sec.20.29 Applications (7) – (11).

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY



SITE DATA

PARCEL ID/FOLIO NUMBER	26-20-30-5AR-0A00-008D, 26-20-30-5AR-0A00-008H, 01-21-30-501-0000-0010
SITE ADDRESS	E SR 434 & MICHAEL BLAKE RD
JURISDICTION	CITY OF WINTER SPRINGS
ZONING	(T-C) TOWN CENTER & T5 (URBAN CENTER ZONE)
FUTURE LAND USE	FLU: TOWN CENTER DISTRICT
EXISTING LAND USE	UNDEVELOPED
PROPOSED LAND USE	QUICK SERVICE RESTAURANT
FEMA ZONE	ZONE X
PROPOSED INDOOR SEATING COUNT	70 SEATS
PROPOSED OUTDOOR SEATING COUNT	0 SEATS
TOTAL PROJECT AREA	1.66 ACRES
EXISTING GREEN SPACE	1.62 AC (70,816 SF, 97%)
EXISTING POND AREA	.04 AC (1595 SF, 3%)
EXISTING TOTAL IMPERVIOUS AREA	0 AC (0 SF, 0%)
PROPOSED GREEN SPACE	0.34 AC (14,910 SF, 20%)
PROPOSED POND AREA	0 AC (0 SF, 0%)
PROPOSED TOTAL IMPERVIOUS AREA	1.32 AC (57,501 SF, 80%)
PROPOSED BLDG. AREA	0.13 AC (5,576 SF, 10%)
PROPOSED VUA AREA	0.85 AC (37,091 SF, 64%)
PROPOSED OTHER IMPERVIOUS AREA	0.34 AC (14,834 SF, 26%)

PARKING CALCULATIONS	
(10'X20') REG. PARKING SPACES PROVIDED	62 SPACES
TOTAL (12'X20') ADA SPACES PROVIDED	3 SPACES
TOTAL SPACES PROVIDED	65 SPACES
REQUIRED PARKING SPACES	58 SPACES (4 SPACES PER ESTABLISHMENT + 1 SPACE PER 100 SF GFA)
REQUIRED BICYCLE PARKING	0 SPACES
PROVIDED BICYCLE PARKING	2 SPACES
BUILDING SETBACKS	
NORTHWEST	0'
NORTHEAST (SR 434)	25' (SR 434)
SOUTHEAST MICHAEL BLAKE BLVD	10' (MICHAEL BLAKE BLVD)
WEST	0'
LANDSCAPE BUFFER REQUIREMENTS	
NORTHWEST	0'
NORTHEAST (SR 434)	10'
SOUTHEAST MICHAEL BLAKE BLVD	10'
WEST	0'

SIGN LEGEND

** CONTRACTOR TO REFER TO THE SIGNAGE PACKAGE FOR PLACEMENT AND SPECIFICATIONS OF ALL SIGNS **

- A — HANDICAP PARKING SIGN (SEE SIGNAGE PACKAGE) R7-8; 12" X 18" (TYP.)
- B — HANDICAP PARKING FINE SIGN (SEE SIGNAGE PACKAGE) 6" X 12" (TYP.)
- C — "VAN ACCESSIBLE" SIGN (SEE SIGNAGE PACKAGE) R7-8P; 6" X 12" (TYP.)
- D — "DO NOT ENTER" SIGN (SEE SIGNAGE PACKAGE) R5-1; 24" X 24" (TYP.)
- E — STOP SIGN (SEE SIGNAGE PACKAGE) R1-1; 30" X 30" (TYP.)
- F — ~~CFA PEDESTRIAN CROSSING SIGN (SEE SIGNAGE PACKAGE)~~
- G — FLAG POLE (SEE SIGNAGE PACKAGE)
- H — ~~CFA MONUMENT OR PYLON SIGN~~
- I — DIGITAL DRIVE-THRU MENU BOARDS
- J — "RESTAURANTS" AND "NO PARKING" LABEL ON FDC W/ YELLOW STRIPING ON CURB
- K — "DRIVE-THROUGH ENTRANCE ONLY" SIGN (SEE SIGNAGE PACKAGE

SITE PLAN DESIGN NOTES & KEY PLAN

1A DIRECTIONAL ARROW (1A C-405)
1B PAINTED HANDICAP PARKING SYMBOL (1B C-405)
2A DRIVE-THRU GRAPHICS (2A C-405)
2B STOP BAR GRAPHIC (2B C-405, 3 C-405)
3 CROSSWALK MARKINGS
NOT USED — ~~4 MULTI-LANE DIRECTIONAL GRAPHICS~~ (4 C-405)
5 STANDARD OR HANDICAP PARKING STALL PER CODE (5 C-405)
5A 4" SOLID WHITE STRIPING
NOT USED — ~~5B 4" SOLID YELLOW STRIPING~~
NOT USED — ~~5C 4" SKIP DASH YELLOW STRIPING~~
NOT USED — ~~6 SOLID PLASTIC WHEEL STOP~~ (6 C-405)
NOT USED — ~~7 BOLLARD MOUNTED SIGN~~ (7 C-405)
NOT USED — ~~8 CURB RAMP w/ SHORT FLARED SIDES (GRASSED AREAS)~~ (1 C-406)
9 CURB RAMP w/ FLARED SIDES (IN SIDEWALK) (9 C-405)
10 RETURNED CURB HANDICAP RAMP (10 C-405)
NOT USED — ~~11 SIDEWALK ACCESSIBLE RAMP~~ (1 C-401, 2 C-401, 3 C-401)
12 DETECTABLE WARNING DEVICE
NOT USED — ~~13 PROP FIRE HYDRANT~~
14 CONCRETE SIDEWALK (4 C-401)
15 CONCRETE SIDEWALK w/ CURB & GUTTER (5 C-401)
NOT USED — ~~16 ENTRY DOOR FROST SLAB DETAIL~~ (6 C-401)
NOT USED — ~~17 CONCRETE BOLLARD~~ (7 C-401)
18 CONCRETE CURB & GUTTER (8 C-401)
18A SPILLING CURB & GUTTER
18B CATCHING CURB & GUTTER
18C ~~DEPRESSED SPILLING CURB & GUTTER~~
NOT USED — ~~18D DEPRESSED CATCHING CURB & GUTTER~~
NOT USED — ~~18E SPILLING GUTTER SECTION AT ACCESSIBLE RAMP~~
NOT USED — ~~18F CATCHING GUTTER SECTION AT ACCESSIBLE RAMP~~
NOT USED — ~~18G MOUNTABLE CURB & GUTTER~~
NOT USED — ~~19 LANDSCAPE & IRRIGATION PROTECTOR~~ (9 C-401, 4 C-402)
NOT USED — ~~20 TYPICAL HMAC PAVEMENT SECTION~~
21 AREA LIGHT AND POLE (REFER TO LIGHTING PLAN BY OTHERS)
22 CONCRETE PAVEMENT DRIVE-THRU LANE (3 C-402)
23 CONCRETE APRON AT TRASH ENCLOSURE (4 C-402)
24 PAVEMENT EDGE DETAIL (START & END OF DRIVE-THRU LANES) (5 C-402)
NOT USED — ~~25 CONCRETE PAVEMENT SECTIONS~~ (6 C-402)
NOT USED — ~~26 TRANSVERSE & LONGITUDINAL CONTRACTION JOINT~~ (7 C-402)
NOT USED — ~~27 TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT~~
NOT USED — ~~28 CONTRACTION JOINT~~ (9 C-402)
NOT USED — ~~29 KEYED CONSTRUCTION JOINT~~ (10 C-402)
NOT USED — ~~30 LONGITUDINAL BUTT JOINT~~ (11 C-402) FOR CONCRETE PAVING
NOT USED — ~~31 EXPANSION JOINT~~ (12 C-402)
32 DRIVE-THRU PLAN - FLUSH WITH FFE (1 C-403)
NOT USED — 33 DRIVE-THRU ISOMETRIC (2 C-403)
34 DRIVE-THRU ORDER POINT ISLAND (3 C-403)
35 MENU BOARD LOOP DETECTION SYSTEM (4 C-403)
36 BUILDING DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)
37 CANOPY DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)
38 SCREENED REFUSE ENCLOSURE (REFER TO ARCH PLANS FOR ADDITIONAL DETAILS) (7 C-403)
39 CLEAN-OUT (OUTSIDE OF BUILDING) (8 C-403)
NOT USED — 40 THICKENED PAVEMENT @ STRUCTURES (9 C-403, 10 C-403)
41 STORM STRUCTURE WEEP HOLE DETAILS
NOT USED — ~~42 ALUMINUM HANDRAIL (REFER TO ARCH PLANS)~~
43 CONCRETE PAD FOR OPTIONAL CASH STATION
44 DRIVE-THRU CLEARANCE BAR (REFER TO SIGNAGE PACKAGE)
45 GREASE TRAP
46 PROPOSED TRANSFORMER
47 BIKE RACK
48 LANDSCAPED AREA
NOT USED — ~~49 TYPICAL LOCATION FOR OUTDOOR TABLES~~ (REFER TO ARCH PLANS)
50 FREE-STANDING OUTSIDE MEAL DELIVERY CANOPY
51 FREE-STANDING ORDER POINT CANOPY
52 LANDSCAPE & IRRIGATION PROTECTOR
53 PROPOSED MONUMENT SIGN (A WAIVER WILL BE SUBMITTED AS PART OF SIGNAGE PERMIT) (4)
54 PROPOSED CONCRETE FLUME
55 PROP TYPE "D" CURB (PER FDOT INDEX 520-001)
56 PROP TYPE "F" CURB (PER FDOT INDEX 520-001)
57 PROP DROP CURB (PER FDOT INDEX 520-001)
58 PROP CROSSWALK STRIPING (PER FDOT INDEX: 711-001)
59 PROP CURB RAMP (PER FDOT INDEX: 522-002)
60 PROP 6" DOUBLE YELLOW (PER FDOT INDEX: 711-001)
61 PROP EDGE OF NEW ASPHALT
62 PROP 50' X 12' LOADING ZONE (3)

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE; SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
13. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN.
14. FDEP WATER AND WASTEWATER PERMITS MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

RIGHT-OF-WAY NOTES:

1. A RIGHT-OF-WAY USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
2. ALL AREAS WITHIN THE COUNTY OR F.D.O.T. RIGHT-OF-WAY DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.
3. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO PROTECT ALL COUNTY OR F.D.O.T. OWNED AND/OR MAINTAINED INFRASTRUCTURE. ANY/ALL COSTS ASSOCIATED WITH ALTERATIONS, RELOCATIONS, OR REPAIRS MADE NECESSARY BY THIS DEVELOPMENT SHALL BE BORNE BY EITHER THE OWNER, DEVELOPER, AND/OR CONTRACTOR. SPLICES IN THE FIBER OPTIC CABLE, SIGNALIZATION OR ROADWAY LIGHTING CONDUCTORS, OR THE ADDITION OF ADDITIONAL PULL/JUNCTION BOXES WILL NOT BE PERMITTED. IN THE EVENT A CABLE IS CUT, DAMAGED, OR REQUIRES RELOCATION, THE CABLE(S) SHALL BE RESTORED BACK TO THE ORIGINAL CONFIGURATION. ORIGINAL CONFIGURATION IS DEFINED AS SYSTEM STATUS, LAYOUT, AND DESIGN PRIOR TO ANY WORK COMMENCING.
4. FOR UTILITIES TO BE RELOCATED BY THE UTILITY PROVIDER, CONTRACTOR SHALL COORDINATE DEMOLITION SCHEDULE WITH UTILITY PROVIDERS. DEMOLITION OF SIDEWALKS AND DRIVEWAYS SHALL OCCUR PRIOR TO UTILITY RELOCATIONS.
5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (R/W) SHOULD BE THERMOPLASTIC.
6. SIGNS WITHIN THE STATE RIGHT-OF-WAY (R/W) NEEDS TO BE MOUNTED TO ROUND ALUMINUM COLUMN (POST).

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE ROW OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

FDOT NOTES:

1. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL

WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS (NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROJECT MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES
5200 Buffington Rd
Atlanta, Georgia, 30349-2998

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MCNEIL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH No. 30780

STORE
P14-LE-XP - #05814
WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
SITE LAYOUT PLAN

DWG EDITION 02.4

☒ PRELIMINARY
☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

JOB NO.	:FLA230280.00
STORE	: #05814
DATE	: 05/21/2024
DRAWN BY	: RI
CHECKED BY	: KK
CAD ID	: SITE

SHEET
C-201

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Waiver for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): John W. McMillan Jr.

Applicant Signature: _____ Date: 8/12/2024

Business Name: EPB ENGINEERING & CONSTRUCTION, PLLC

Address: P.O. BOX 1013 OAKLAND FL 34760 Parcel ID: 26-20-30-5AR-0A00-00D & H
G 01-21-30-501-0000-0010

STATE OF Mississippi COUNTY OF Jackson Date 8-12-2024

The foregoing instrument was acknowledged before me this 12 day of August, 2024, by John McMillan who is personally known to me or who has produced FL DC as identification and who did/did not take an oath.

Date: 8-12-2024 (seal):

Notary Public Signature: _____

My Commission Expires: 3-6-2028

STATE OF MISSISSIPPI
ERIC W. COLLUM
ID No. 88054
Comm. Exp. 03-06-2028
NOTARY PUBLIC
HARRISON COUNTY

Note: The Property Owner shall sign and have their signature notarized below if the Applicant is not the owner of the subject property.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF_____COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____as identification and who did/did not take an oath.

_____Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

FERBER

REAL ESTATE DEVELOPMENT
& INVESTMENT SINCE 1907

April 21, 2025

City of Winter Springs
Community Development Department
1126 E State Rd 434
Winter Springs, Florida 32708

RE: Lot 4A – Developer Cover Letter

Dear Community Development Department,

To assist with the review of the waiver applications for the proposed Lot 4A, Chick-fil-A, the intent of this cover letter is to help clarify all the entities involved with the subject development.

2025 Michael Blake Winter Springs LLC is the contract purchaser for Lot 4A (Chick-fil-A parcel) and is represented by Ferber Construction Management, LLC (Marlon Champion and Nim Robinson).

The current property owner and land seller is John W. McMillan, President of EPB Engineering and Construction, PLLC and Blue Orange Holding, LLC.

If you have any questions regarding the applicant and property owner information, please feel free to contact me at nrobinson@ferbercompany.com

Sincerely,

Nim Robinson
VP Project & Construction Services
Ferber Construction Management, LLC

Signature: 

Date: **4/21/25**

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

The Community Development Director reserves the right to determine whether this application is complete and accurate. An incomplete application will not be processed and will be returned to the applicant. The application shall be reviewed per Chapter 20 – Zoning Sec. 20-34. Applications shall be reviewed for sufficiency (completeness) within thirty (30) calendar days per FL Statue 166.033.

All applicants shall be afforded minimal due process as required by law, including the right to receive notice, be heard, present evidence, cross-examine witnesses, and be represented by a duly authorized representative. Applicants are further advised that a Waiver is quasi-judicial in nature.

Therefore, APPLICANT ACKNOWLEDGES and AGREES, by signing below, that he or she:

- May be sworn-in as a witness in order to provide testimony to the City Commission;
- Shall be subject to cross-examination by party intervenors (if requested); and
- Shall be required to qualify expert witnesses, as appropriate.

Applicants are encouraged to familiarize themselves with Chapter 2 – Administration Sec. 2-30 of the Winter Springs City Code relating to Quasi-Judicial Rules and Procedures of the City Commission. All Waiver recommendations shall be based from the required information/documentation provided, the Winter Springs Code of Ordinances, and the Winter Springs Comprehensive Plan (to the extent applicable).

The City Commission (CC) shall render all final decisions regarding Waivers and may impose reasonable conditions on any approved Waiver to the extent deemed necessary and relevant to ensure compliance with applicable criteria and other applicable provisions of the Winter Springs Code of Ordinances and the Winter Springs Comprehensive Plan. All formal decisions shall be based on competent substantial evidence and the applicable criteria as set forth in Chapter 20, Zoning. Applicants are advised that if, they decide to appeal any decisions made at the meetings or hearings with respect to any matter considered at the meetings or hearings, they will need a record of the proceedings and, for such purposes, they will need to insure that a verbatim record of the proceedings is made, at their cost, which includes the testimony and evidence upon which the appeal is to be based, per Florida Statute 286.0105.

A Waiver which may be granted by the City Commission shall expire two (2) years after the effective date of such approval by the City Commission, unless a building permit based upon and incorporating the Waiver, is issued by the City within said time period. Upon written request of the property owner, the City Commission may extend the expiration date, without public hearing, an additional six (6) months, provided the property owner demonstrates good cause for the extension In addition, if the aforementioned building permit is timely issued, and the building permit subsequently expires and the subject development project is abandoned or discontinued for a period of six months, the Waiver shall be deemed expired and null and void, per Chapter 20 – Sec.20-36.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

REQUIRED INFORMATION

Applicant(s): EPB Engineering & Construction, PLLC and Blue Orange Holdings Date: 4/21/2025
Mailing address: PO Box 1013 Oakland FL 34760
Email: wessmcmillan@centralfloridaace.com
Phone Number: 407-509-7098

Property Owner(s): EPB Engineering & Construction, PLLC and Blue Orange Holdings, LLC
Mailing Address: PO Box 1013 Oakland FL 34760
Email: wessmcmillan@centralfloridaace.com
Phone Number: 407-509-7098

Project Name: QSR - Winter Springs
Property Address: Raw land near west of intersection of Michael Blake Blvd. and SR434 and East of intersection of Michael Blake Blvd. and Tuskawilla Rd.
Parcel ID(s): 26-20-30-5AR-0A00-008D:26-20-30-5AR-0A00-008H;01-21-30-501-0000-0010
Parcel Size: +/-5.88 acres
Existing Use: Raw Land - TC-5 Zoning - Commercial/Retail

All waiver requests shall be written in the following format: A waiver is requested from Winter Springs City Code 'X' to allow 'Y' in lieu of 'Z'. After the request, the applicant shall provide a justification for each waiver request.

List Waiver(s)(provide additional sheets if necessary): Waiver - Rear of building facing SR434

We are requesting a waiver from the City of Winter Springs outlined in Sec. 20-234(11) to have the proposed rear of the restaurant building face SR434.

Demonstrate that the applicable term or condition clearly creates an illogical, impossible, impractical, or patently unreasonable result related to the proposed property and development?

The proposed use is a quick service restaurant with drive-thru (Chick-fil-A). The queuing of the drive-thru is crucial to the business and requires a specific length to ensure that the queuing of customer cars will not negatively impact onsite circulation and traffic patterns of abutting development or roadways. To prevent circulation conflict and to meet the queuing requirement, the building needs to be oriented in the configuration shown on the site plan and building elevation. This configuration does have the rear of the building facing SR434. In consideration of LDC T-5 Town Center, the rear building elevation will be designed to have a faux frontage element with features such as: windows, faux arch way/door, which are purely for aesthetics, but not functional. This allows for the rear of the building to have architectural design elements that look like a building frontage and is in keeping with SR434 corridor building aesthetic.

Demonstrate that the proposed development plan is in substantial compliance with Chapter 20 of the City's Code of Ordinances and in compliance with the Comprehensive Plan?

The design of the Sutton Crossing Development incorporated the Town Center District code and existing architectural design elements.

Will the proposed development plan significantly enhance the real property?

The proposed development will significantly enhance the real property. The current design features early learning academy, an Ace Hardware, Tropical Cafe', a nail salon, a regional bank, and a Chick-fil-A.

Will the proposed development plan serve the public health, safety, and welfare of the City of Winter Springs?

The proposed development will contribute tax revenue, create jobs, and enhance the retail landscape of Winter Springs.

Will the waiver diminish property values in or alter the essential character of the surrounding neighborhood?

No, the waiver will not diminish property values or alter the essential character of the surrounding neighborhood.

Is the waiver request the minimum waiver that will eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20 – Zoning?

Yes, the waiver request is the minimum necessary to eliminate or reduce the illogical, impossible, impractical, or patently unreasonable result caused by the applicable term or condition under Chapter 20-Zoning.

Is the proposed development plan compatible and harmonious with the surrounding neighborhood?

Yes, the proposed development plan is compatible and harmonious with the surrounding neighborhood.

List all witnesses that the applicant intends to present to the City Commission to provide testimony:

Wess McMillan - Developer, Owner, and Operator for Ace Hardware

Marlon Champion, with Ferber is the Developer for Chick-fil-A.

Describe with specificity any evidence which the applicant intends to present to the City Commission, including oral factual testimony, maps, photographs, records or reports and/or expert testimony:

Site Plan and building elevation for the Chick-fil-A development.

Attach all documentary evidence which the applicant intends to present to the city commission to the back of this application. The Applicant has a continuing duty to update the list of witnesses, description of evidence, and documentary evidence throughout the application process. Additional witnesses or evidence will not be admitted at the city commission hearing if not submitted at least seven (7) days prior to such hearing.

CITY OF WINTER SPRINGS
COMMUNITY DEVELOPMENT DEPARTMENT
1126 East State Road 434
Winter Springs, Florida 32708
customerservice@winterspringsfl.org

Application – Waiver

CITY LIMITED RIGHT OF ENTRY: By submitting this Application you hereby grant temporary right of entry for City Officials to enter upon the subject property for purposes of evaluating this Application and posting on the subject property.

APPLICANT'S AUTHORIZATION: I desire to make Application for a Waiver for the aforementioned project and have read and agree to the terms contained herein. In addition, if the Applicant is a corporate entity, the undersigned hereby represents and warrants that he/she is authorized to act on behalf of, and bind, the corporate entity.

Applicant Name (Print): John W. McMillan Jr.

Applicant Signature: _____ Date: 8/12/2024

Business Name: EPB ENGINEERING & CONSTRUCTION, PLLC

Address: P.O. BOX 1013 OAKLAND FL 34760 Parcel ID: 26-20-30-5AR-0A00-00D & H
01-21-30-501-0000-010

STATE OF Mississippi COUNTY OF Jackson Date 8-12-2024

The foregoing instrument was acknowledged before me this 12 day of August, 2024, by John McMillan who is personally known to me or who has produced FL DL as identification and who did/did not take an oath.

Date: 8-12-2024 (seal):

Notary Public Signature: _____

My Commission Expires: 3-6-2028

STATE OF MISSISSIPPI
ERIC W. COLLUM
ID No. 88054
Comm. Exp. 03-06-2028
NOTARY PUBLIC
HARRISON COUNTY

Note: The Property Owner shall sign and have their signature notarized below if Applicant is not the owner of the subject property.

Property Owner's Name (Print): _____

Property Owner Signature: _____ Date _____

STATE OF_____COUNTY OF _____

The foregoing instrument was acknowledged before me this_____day of_____, 20____, by _____ who is personally known to me or who has produced _____as identification and who did/did not take an oath.

_____Date: _____ (seal):

Notary Public Signature: _____

My Commission expires: _____

DISCLAIMER:
THE PANORAMA IS FOR THE PROTOTYPICAL TEMPLATE AND MAY NOT REPRESENT SITE SPECIFIC CHANGES.

EXTERIOR FINISHES

BR-A
BRICK VENEER
COLOR: RED
SIZE: MODULAR

EC-1
PREFINISHED METAL COPING
COLOR: MIDNIGHT BRONZE

PT-113
EXTERIOR PAINT
COLOR: DARK BRONZE
FINISH: SEMI-GLOSS

ST-1
STOREFRONT
COLOR: DARK BRONZE

ATTACHED CANOPY SCHEDULE

Mark	Description	Count	Overall Width	Overall Depth	Tie Back Mounting (Offset From Top)	Integral Lighting
C4-B	Exterior Canopy	2	5'-4"	4'-0"	2'-4"	Yes
C4-G	Exterior Canopy	1	7'-4"	4'-0"	2'-4"	Yes
C5-A	Exterior Canopy	1	12'-0"	5'-0"	2'-4"	Yes
Grand total		4				



PERSPECTIVE VIEW



PERSPECTIVE VIEW



PERSPECTIVE VIEW



PERSPECTIVE VIEW

PROJECT DATA

Prototype Edition: *Acceptable Values: LS, LSR, LE, SE, DR, DE	LE
Exterior Finish Type: *Acceptable Values: TOWER BRICK, TOWER STUCCO, TOWER BOARD, WRAP BRICK, WRAP STUCCO	TOWER BRICK
Wall Framing Type: *Acceptable Values: WOOD STUD, WOOD SUPERSHELL, PAB, METAL STUD, METAL STUD - PREFAB, STEEL FRAME, CMU, VOLUMETRIC MODULAR	WOOD STUD
Kitchen Type: *Acceptable Values: CENTERLINE 2.0, CENTERLINE 3.0	CENTERLINE 3.0
Water Filtration Type: *Acceptable Values: TYPE A, TYPE A+E, TYPE A+C, TYPE A+B+C, ETC	TYPE A
Industrialized Construction: *Acceptable Values: YES, NO	NO
Number of Parking Spaces: *Acceptable Values: (Digits)	70
Number of Accessible Parking Spaces: *Acceptable Values: (Digits)	3
Cross Parking: *Acceptable Values:	NO
Menu Board - Interior: *Acceptable Values: YES, NO	YES
Menu Board - Interior - Count: *Acceptable Values: (Digits)	4
Menu Board - Interior - Type: *Acceptable Values: DIGITAL, STATIC, OTHER	DIGTAL
Menu Board - Walk-up: *Acceptable Values: YES, NO	NO
Menu Board - Walk-up - Count: *Acceptable Values: (Digits)	0
Menu Board - Walk-up - Type: *Acceptable Values: DIGITAL, STATIC, OTHER	N/A
Menu Board - Order Point: *Acceptable Values: YES, NO	YES
Menu Board - Order Point - Count: *Acceptable Values: (Digits)	4
Menu Board - Order Point - Type: *Acceptable Values: DIGITAL, STATIC, OTHER	DIGITAL
Planned Classification: *Acceptable Values: BASE, MODIFIED-LOW, MODIFIED-MEDIUM, MODIFIED-HIGH, CUSTOM-LOW, CUSTOM-HIGH	BASE
Playground *Acceptable Values: YES, NO	SMALL
Landscaping Type *Acceptable Values: STANDARD	STANDARD
LEED Rating *Acceptable Values: NOT CERTIFIED, CERTIFIED, SILVER, GOLD, PLATINUM	NOT CERTIFIED
Drive Thru Stack Count: *Acceptable Values: (Digits)	#
Drive Thru Number of Approach Lanes: *Acceptable Values: (Digits)	2
Drive Thru Number of Ordering Lanes: *Acceptable Values: (Digits)	2
Drive Thru Number of Fulfillment Lanes: *Acceptable Values: (Digits)	2
Drive Thru Dedicated Bypass Lane: *Acceptable Values:	NO
Drive Thru Opening: *Acceptable Values: DOOR, WINDOW, NONE	DOOR
Canopy Structure: *Acceptable Values: STEEL, CONCRETE	STEEL
Canopy Type - Order Point: *Acceptable Values:	DOUBLE
Canopy Type - Meal Delivery: *Acceptable Values: SINGLE, DOUBLE	DOUBLE
Seat Count - Interior: *Acceptable Values: (Digits)	66
Seat Count - Exterior: *Acceptable Values: (Digits)	12
Number of Walk-up Windows: *Acceptable Values: (Digits)	0
Number of Registers: *Acceptable Values: (Digits)	3
Building Area Square Footage: *Acceptable Values: (Digits)	5157

DESIGN APPROVAL

SUP SD DD CD

NOT APPROVED - REVISE AND RESUBMIT

APPROVED AS NOTED - REVISE AND RESUBMIT

APPROVED FOR DESIGN INTENT

INITIAL: DATE:

PROJECT NOTES

*Record any personal notes with text, views, or schedules



EXTERIOR ELEVATION



EXTERIOR ELEVATION



EXTERIOR ELEVATION



EXTERIOR ELEVATION

BUILDING FOOTPRINT INSIDE FACE OF FINISH	CANOPY AREA
5157 SF	1437 SF

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

NOT FOR REGULATORY APPROVAL, BIDDING, OR CONSTRUCTION

CHICK-FIL-A WINTER SPRINGS

E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708

FSR#05814

BUILDING TYPE / SIZE: P14 LE BS
RELEASE: 24.05
PRINTED FOR

SCHEMATIC DESIGN

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

CONSULTANT PROJECT # 2024223.17
DATE 05/27/24
DRAWN BY SC

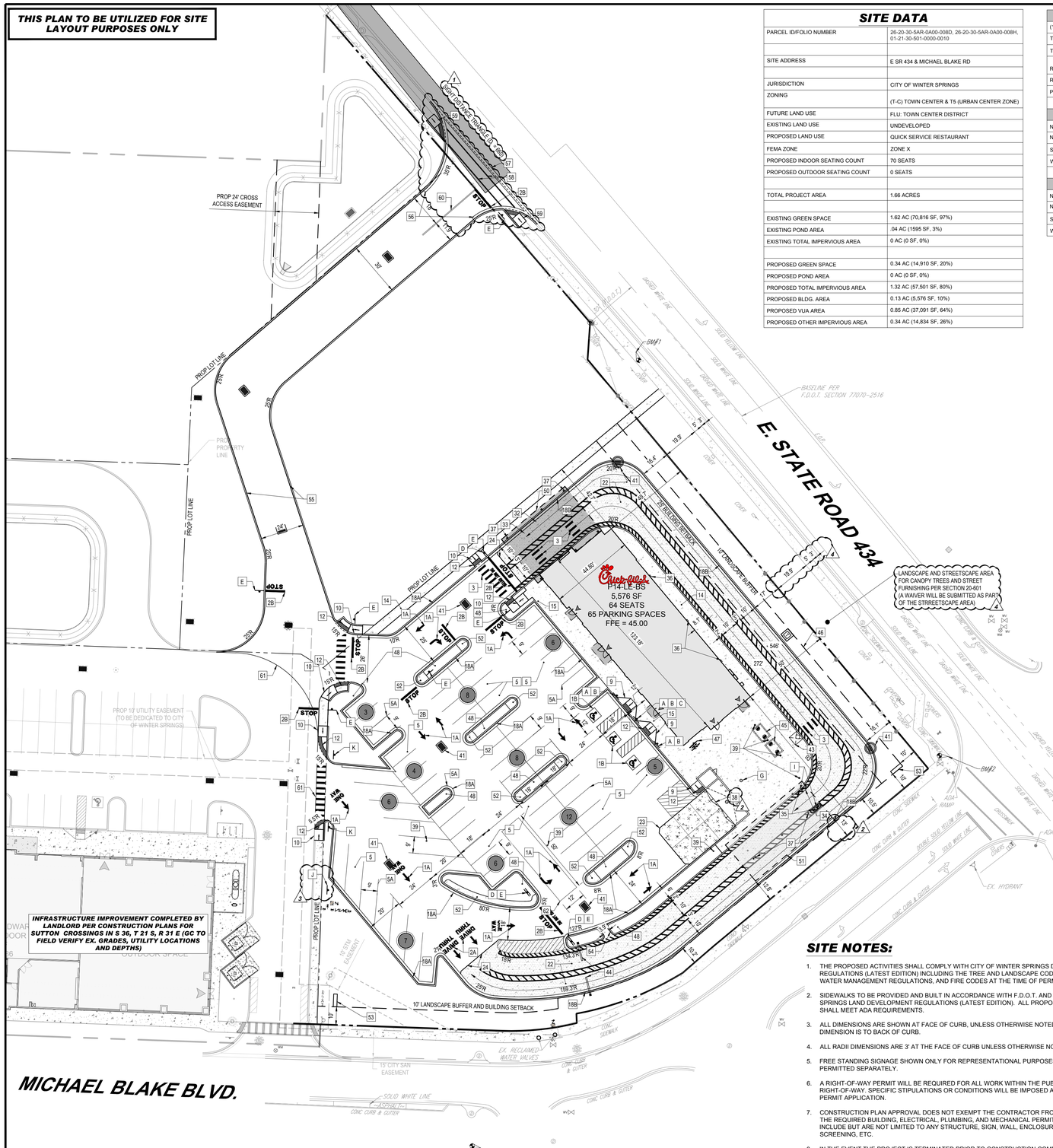
Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET
DESIGN OVERVIEW - BRICK

SHEET NUMBER
X-900

6/14/2024 2:04:31 PM Autodesk Docs://FL_05814_Winter Springs_2024.5_FSR/05814_Winter Springs_ARC.rvt
XX-LE-05814-X-900-DESIGN OVERVIEW - BRICK

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY



SITE DATA

PARCEL ID/FOLIO NUMBER	26-20-30-5AR-0A00-008D, 26-20-30-5AR-0A00-008H, 01-21-30-501-0000-0010
SITE ADDRESS	E SR 434 & MICHAEL BLAKE RD
JURISDICTION	CITY OF WINTER SPRINGS
ZONING	(T-C) TOWN CENTER & T5 (URBAN CENTER ZONE)
FUTURE LAND USE	FLU: TOWN CENTER DISTRICT
EXISTING LAND USE	UNDEVELOPED
PROPOSED LAND USE	QUICK SERVICE RESTAURANT
FEMA ZONE	ZONE X
PROPOSED INDOOR SEATING COUNT	70 SEATS
PROPOSED OUTDOOR SEATING COUNT	0 SEATS
TOTAL PROJECT AREA	1.66 ACRES
EXISTING GREEN SPACE	1.62 AC (70,816 SF, 97%)
EXISTING POND AREA	.04 AC (1595 SF, 3%)
EXISTING TOTAL IMPERVIOUS AREA	0 AC (0 SF, 0%)
PROPOSED GREEN SPACE	0.34 AC (14,910 SF, 20%)
PROPOSED POND AREA	0 AC (0 SF, 0%)
PROPOSED TOTAL IMPERVIOUS AREA	1.32 AC (57,501 SF, 80%)
PROPOSED BLDG. AREA	0.13 AC (5,576 SF, 10%)
PROPOSED VUA AREA	0.85 AC (37,091 SF, 64%)
PROPOSED OTHER IMPERVIOUS AREA	0.34 AC (14,834 SF, 26%)

PARKING CALCULATIONS	
(10'X20') REG. PARKING SPACES PROVIDED	62 SPACES
TOTAL (12'X20') ADA SPACES PROVIDED	3 SPACES
TOTAL SPACES PROVIDED	65 SPACES
REQUIRED PARKING SPACES	58 SPACES (4 SPACES PER ESTABLISHMENT + 1 SPACE PER 100 SF GFA)
REQUIRED BICYCLE PARKING	0 SPACES
PROVIDED BICYCLE PARKING	2 SPACES
BUILDING SETBACKS	
NORTHWEST	0'
NORTHEAST (SR 434)	25' (SR 434)
SOUTHEAST MICHAEL BLAKE BLVD	10' (MICHAEL BLAKE BLVD)
WEST	0'
LANDSCAPE BUFFER REQUIREMENTS	
NORTHWEST	0'
NORTHEAST (SR 434)	10'
SOUTHEAST MICHAEL BLAKE BLVD	10'
WEST	0'

SIGN LEGEND

** CONTRACTOR TO REFER TO THE SIGNAGE PACKAGE FOR PLACEMENT AND SPECIFICATIONS OF ALL SIGNS **

- A — HANDICAP PARKING SIGN (SEE SIGNAGE PACKAGE) R7-8; 12" X 18" (TYP.)
- B — HANDICAP PARKING FINE SIGN (SEE SIGNAGE PACKAGE) 6" X 12" (TYP.)
- C — "VAN ACCESSIBLE" SIGN (SEE SIGNAGE PACKAGE) R7-8P; 9" X 12" (TYP.)
- D — "DO NOT ENTER" SIGN (SEE SIGNAGE PACKAGE) RS-1; 24" X 24" (TYP.)
- E — STOP SIGN (SEE SIGNAGE PACKAGE) R1-1; 30" X 30" (TYP.)
- F — ~~CFA PEDESTRIAN CROSSING SIGN (SEE SIGNAGE PACKAGE)~~
- G — FLAG POLE (SEE SIGNAGE PACKAGE)
- H — ~~CFA MONUMENT OR PYLON SIGN~~
- I — DIGITAL DRIVE-THRU MENU BOARDS
- J — "RESTAURANTS" AND "NO PARKING" LABEL ON FDC W/ YELLOW STRIPING ON CURB
- K — "DRIVE-THROUGH ENTRANCE ONLY" SIGN (SEE SIGNAGE PACKAGE

SITE PLAN DESIGN NOTES & KEY PLAN

1A	DIRECTIONAL ARROW	C-405	24	PAVEMENT EDGE DETAIL (START & END OF DRIVE-THRU LANES)	C-402
1B	PAINTED HANDICAP PARKING SYMBOL	C-405	NOT USED	~~25~~ ~~CONCRETE PAVEMENT SECTIONS~~	C-402
2A	DRIVE-THRU GRAPHICS	C-405	NOT USED	~~26~~ ~~TRANSVERSE & LONGITUDINAL CONTRACTION JOINT~~	C-402
2B	STOP BAR GRAPHIC	C-405	NOT USED	~~27~~ ~~TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT~~	C-402
3	CROSSWALK MARKINGS	C-405	NOT USED	~~28~~ ~~CONTRACTION JOINT~~	C-402
NOT USED	~~4 MULTI-LANE DIRECTIONAL GRAPHICS~~	C-405	NOT USED	~~29~~ ~~KEYED CONSTRUCTION JOINT~~	C-402
5	STANDARD OR HANDICAP PARKING STALL PER CODE	C-405	NOT USED	~~30~~ ~~LONGITUDINAL BUTT JOINT~~	C-402
5A	4" SOLID WHITE STRIPING		NOT USED	~~31~~ ~~EXPANSION JOINT~~	C-402
NOT USED	~~5B 4" SOLID YELLOW STRIPING~~		32	DRIVE-THRU PLAN - FLUSH WITH FFE	C-403
NOT USED	~~5C 4" SKIP DASH YELLOW STRIPING~~		33	DRIVE-THRU ISOMETRIC	C-403
NOT USED	~~6 SOLID PLASTIC WHEEL STOP~~	C-405	34	DRIVE-THRU ORDER POINT ISLAND	C-403
NOT USED	~~7 BOLLARD MOUNTED SIGN~~	C-405	35	MENU BOARD LOOP DETECTION SYSTEM	C-403
NOT USED	~~8 CURB RAMP w/ SHORT FLARED SIDES (GRASSED AREAS)~~	C-405	36	BUILDING DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)	
9	CURB RAMP w/ FLARED SIDES (IN SIDEWALK)	C-405	37	CANOPY DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)	
10	RETURNED CURB HANDICAP RAMP	C-401	38	SCREENED REFUSE ENCLOSURE (REFER TO ARCH PLANS FOR ADDITIONAL DETAILS)	C-403
NOT USED	~~11 SIDEWALK ACCESSIBLE RAMP~~	C-401	39	CLEAN-OUT (OUTSIDE OF BUILDING)	C-403
12	DETECTABLE WARNING DEVICE	C-401	NOT USED	~~40 THICKENED PAVEMENT @ STRUCTURES~~	C-403
NOT USED	~~13 PROP FIRE HYDRANT~~	C-401	41	STORM STRUCTURE WEEP HOLE DETAILS	C-403
14	CONCRETE SIDEWALK	C-401	NOT USED	~~42 ALUMINUM HANDRAIL (REFER TO ARCH PLANS)~~	C-403
15	CONCRETE SIDEWALK w/ CURB & GUTTER	C-401	43	CONCRETE PAD FOR OPTIONAL CASH STATION	C-403
NOT USED	~~16 ENTRY DOOR FROST SLAB DETAIL~~	C-401	44	DRIVE-THRU CLEARANCE BAR (REFER TO SIGNAGE PACKAGE)	
NOT USED	~~17 CONCRETE BOLLARD~~	C-401	45	GREASE TRAP	
18	CONCRETE CURB & GUTTER	C-401	46	PROPOSED TRANSFORMER	
18A	SPILLING CURB & GUTTER		47	BIKE RACK	
18B	CATCHING CURB & GUTTER		48	LANDSCAPED AREA	
18C	~~DEPRESSED SPILLING CURB & GUTTER~~		NOT USED	~~49 TYPICAL LOCATION FOR OUTDOOR TABLES~~ (REFER TO ARCH PLANS)	
NOT USED	~~18D DEPRESSED CATCHING CURB & GUTTER~~		50	FREE-STANDING OUTSIDE MEAL DELIVERY CANOPY	
NOT USED	~~18E SPILLING GUTTER SECTION AT ACCESSIBLE RAMP~~		51	FREE-STANDING ORDER POINT CANOPY	
NOT USED	~~18F CATCHING GUTTER SECTION AT ACCESSIBLE RAMP~~		52	LANDSCAPE & IRRIGATION PROTECTOR	
NOT USED	~~18G MOUNTABLE CURB & GUTTER~~		53	PROPOSED MONUMENT SIGN (A WAIVER WILL BE SUBMITTED AS PART OF SIGNAGE PERMIT)	
NOT USED	~~19 LANDSCAPE & IRRIGATION PROTECTOR~~	C-401	54	PROPOSED CONCRETE FLUME	
NOT USED	~~20 TYPICAL HVAC PAVEMENT SECTION~~	C-402	55	PROP TYPE "D" CURB (PER FDOT INDEX 520-001)	
21	AREA LIGHT AND POLE (REFER TO LIGHTING PLAN BY OTHERS)		56	PROP TYPE "F" CURB (PER FDOT INDEX 520-001)	
22	CONCRETE PAVEMENT DRIVE-THRU LANE	C-402	57	PROP DROP CURB (PER FDOT INDEX 520-001)	
23	CONCRETE APRON AT TRASH ENCLOSURE	C-402	58	PROP CROSSWALK STRIPING (PER FDOT INDEX: 711-001)	
			59	PROP CURB RAMP (PER FDOT INDEX: 522-002)	
			60	PROP 6" DOUBLE YELLOW (PER FDOT INDEX: 711-001)	
			61	PROP EDGE OF NEW ASPHALT	
			62	PROP 50' X 12' LOADING ZONE	

SITE NOTES:

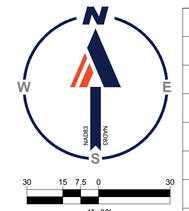
1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE, SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
13. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN.
14. FDEP WATER AND WASTEWATER PERMITS MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

RIGHT-OF-WAY NOTES:

1. A RIGHT-OF-WAY USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
2. ALL AREAS WITHIN THE COUNTY OR F.D.O.T. RIGHT-OF-WAY DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.
3. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO PROTECT ALL COUNTY OR F.D.O.T. OWNED AND/OR MAINTAINED INFRASTRUCTURE. ANY/ALL COSTS ASSOCIATED WITH ALTERATIONS, RELOCATIONS, OR REPAIRS MADE NECESSARY BY THIS DEVELOPMENT SHALL BE BORNE BY EITHER THE OWNER, DEVELOPER, AND/OR CONTRACTOR. SPLICES IN THE FIBER OPTIC CABLE, SIGNALIZATION OR ROADWAY LIGHTING CONDUCTORS, OR THE ADDITION OF ADDITIONAL PULL/JUNCTION BOXES WILL NOT BE PERMITTED. IN THE EVENT A CABLE IS CUT, DAMAGED, OR REQUIRES RELOCATION, THE CABLE(S) SHALL BE RESTORED BACK TO THE ORIGINAL CONFIGURATION. ORIGINAL CONFIGURATION IS DEFINED AS SYSTEM STATUS, LAYOUT, AND DESIGN PRIOR TO ANY WORK COMMENCING.
4. FOR UTILITIES TO BE RELOCATED BY THE UTILITY PROVIDER, CONTRACTOR SHALL COORDINATE DEMOLITION SCHEDULE WITH UTILITY PROVIDERS. DEMOLITION OF SIDEWALKS AND DRIVEWAYS SHALL OCCUR PRIOR TO UTILITY RELOCATIONS.
5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (R/W) SHOULD BE THERMOPLASTIC.
6. SIGNS WITHIN THE STATE RIGHT-OF-WAY (R/W) NEEDS TO BE MOUNTED TO ROUND ALUMINUM COLUMN (POST).

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE ROW OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.



LEGEND

- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- EX. ROADWAY C/L
- PROP. PROPERTY LINE
- PROP. BUFFER
- PROP. SETBACK
- PROP. PARKING COUNT
- PROP. SIGN
- PROP. BUILDING ENTRANCES
- PROP. CONCRETE SIDEWALK
- PROP. DRIVE-THRU CONCRETE
- PROP. HEAVY DUTY CONCRETE

FDOT NOTES:

1. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL

WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 12" ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS (NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 8" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROJECT MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PLANNING SERVICES
TRANSPORTATION SERVICES
5200 Buffington Rd
Atlanta, Georgia, 30349-2998
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MOREL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

STORE
P14-LE-XP - #05814
WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
SITE LAYOUT PLAN

DWG EDITION 02.4

☒ PRELIMINARY
☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

JOB NO.	:FLA230280.00
STORE	: #05814
DATE	: 05/21/2024
DRAWN BY	: RI
CHECKED BY	: KK
CAD ID	: SITE

SHEET
C-201

DISCLAIMER:
THE PANORAMA IS FOR THE PROTOTYPICAL TEMPLATE AND MAY NOT REPRESENT SITE SPECIFIC CHANGES.

EXTERIOR FINISHES

BR-A
BRICK VENEER
COLOR: RED
SIZE: MODULAR

EC-1
PREFINISHED METAL COPING
COLOR: MIDNIGHT BRONZE

PT-113
EXTERIOR PAINT
COLOR: DARK BRONZE
FINISH: SEMI-GLOSS

ST-1
STOREFRONT
COLOR: DARK BRONZE

ATTACHED CANOPY SCHEDULE

Mark	Description	Count	Overall Width	Overall Depth	Tie Back Mounting (Offset From Top)	Integral Lighting
C4-B	Exterior Canopy	2	5'-4"	4'-0"	2'-4"	Yes
C4-G	Exterior Canopy	1	7'-4"	4'-0"	2'-4"	Yes
C5-A	Exterior Canopy	1	12'-0"	5'-0"	2'-4"	Yes
Grand total		4				



PERSPECTIVE VIEW



PERSPECTIVE VIEW



PERSPECTIVE VIEW



PERSPECTIVE VIEW

PROJECT DATA

Prototype Edition: *Acceptable Values: LS, LSR, LE, SE, DR, DE	LE
Exterior Finish Type: *Acceptable Values: TOWER BRICK, TOWER STUCCO, TOWER BOARD, WRAP BRICK, WRAP STUCCO	TOWER BRICK
Wall Framing Type: *Acceptable Values: WOOD STUD, WOOD STUD-PREFAB, METAL STUD, METAL STUD - PREFAB, STEEL FRAME, CMU, VOLUMETRIC MODULAR	WOOD STUD
Kitchen Type: *Acceptable Values: CENTERLINE 2.0, CENTERLINE 3.0	CENTERLINE 3.0
Water Filtration Type: *Acceptable Values: TYPE A, TYPE A+E, TYPE A+C, TYPE A+B+C, ETC	TYPE A
Industrialized Construction: *Acceptable Values: YES, NO	NO
Number of Parking Spaces: *Acceptable Values: (Digits)	70
Number of Accessible Parking Spaces: *Acceptable Values: (Digits)	3
Cross Parking: *Acceptable Values:	NO
Menu Board - Interior: *Acceptable Values: YES, NO	YES
Menu Board - Interior - Count: *Acceptable Values: (Digits)	4
Menu Board - Interior - Type: *Acceptable Values: DIGITAL, STATIC, OTHER	DIGTAL
Menu Board - Walk-up: *Acceptable Values: YES, NO	NO
Menu Board - Walk-up - Count: *Acceptable Values: (Digits)	0
Menu Board - Walk-up - Type: *Acceptable Values: DIGITAL, STATIC, OTHER	N/A
Menu Board - Order Point: *Acceptable Values: YES, NO	YES
Menu Board - Order Point - Count: *Acceptable Values: (Digits)	4
Menu Board - Order Point - Type: *Acceptable Values: DIGITAL, STATIC, OTHER	DIGITAL
Planned Classification: *Acceptable Values: BASE, MODIFIED-LOW, MODIFIED-MEDIUM, MODIFIED-HIGH, CUSTOM-LOW, CUSTOM-HIGH	BASE
Playground *Acceptable Values: YES, NO	SMALL
Landscaping Type *Acceptable Values: STANDARD	STANDARD
LEED Rating *Acceptable Values: NOT CERTIFIED, CERTIFIED, SILVER, GOLD, PLATINUM	NOT CERTIFIED
Drive Thru Stack Count: *Acceptable Values: (Digits)	#
Drive Thru Number of Approach Lanes: *Acceptable Values: (Digits)	2
Drive Thru Number of Ordering Lanes: *Acceptable Values: (Digits)	2
Drive Thru Number of Fulfillment Lanes: *Acceptable Values: (Digits)	2
Drive Thru Dedicated Bypass Lane: *Acceptable Values:	NO
Drive Thru Opening: *Acceptable Values: DOOR, WINDOW, NONE	DOOR
Canopy Structure: *Acceptable Values: STEEL, CONCRETE	STEEL
Canopy Type - Order Point: *Acceptable Values:	DOUBLE
Canopy Type - Meal Delivery: *Acceptable Values: SINGLE, DOUBLE	DOUBLE
Seat Count - Interior: *Acceptable Values: (Digits)	66
Seat Count - Exterior: *Acceptable Values: (Digits)	12
Number of Walk-up Windows: *Acceptable Values: (Digits)	0
Number of Registers: *Acceptable Values: (Digits)	3
Building Area Square Footage: *Acceptable Values: (Digits)	5157

DESIGN APPROVAL

SUP SD DD CD

NOT APPROVED - REVISE AND RESUBMIT

APPROVED AS NOTED - REVISE AND RESUBMIT

APPROVED FOR DESIGN INTENT

INITIAL: DATE:

PROJECT NOTES

*Record any personal notes with text, views, or schedules



EXTERIOR ELEVATION



EXTERIOR ELEVATION



EXTERIOR ELEVATION



EXTERIOR ELEVATION

BUILDING FOOTPRINT INSIDE FACE OF FINISH	CANOPY AREA
5157 SF	1437 SF

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

NOT FOR REGULATORY APPROVAL, BIDDING, OR CONSTRUCTION

CHICK-FIL-A WINTER SPRINGS

E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708

FSR#05814

BUILDING TYPE / SIZE: P14 LE BS
RELEASE: 24.05
PRINTED FOR

SCHEMATIC DESIGN

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

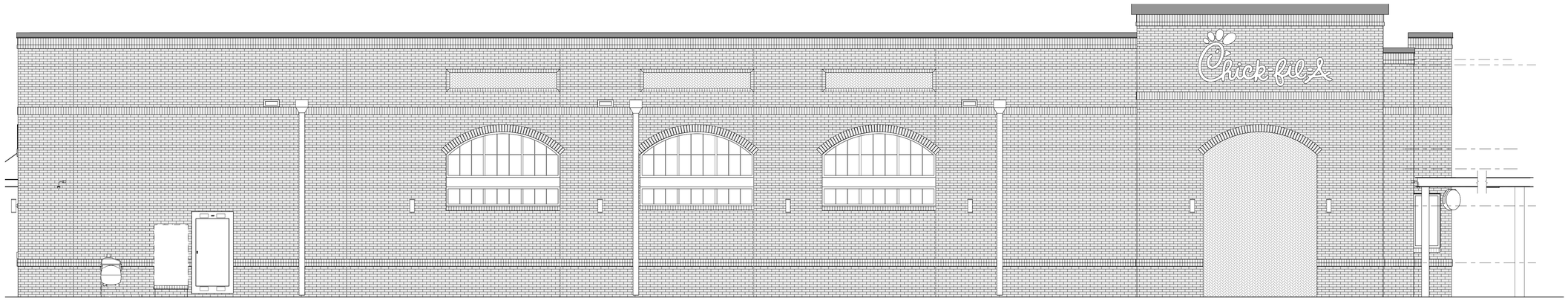
CONSULTANT PROJECT # 2024223.17
DATE 05/27/24
DRAWN BY SC

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SHEET
DESIGN OVERVIEW - BRICK

SHEET NUMBER
X-900

6/14/2024 2:04:31 PM Autodesk Docs://FL_05814_Winter Springs_2024.5_FSR/05814_Winter Springs_ARC.rvt
XX-LE-05814-X-900-DESIGN OVERVIEW - BRICK



D4 EXTERIOR ELEVATION
1/4" = 1'-0"



C4 EXTERIOR ELEVATION
1/4" = 1'-0"





B4 EXTERIOR ELEVATION
1/4" = 1'-0"

B2 EXTERIOR ELEVATION
1/4" = 1'-0"

APPROVED BRICK ALTERNATES
(SEE NATIONAL ACCOUNTS LIST FOR CONTACT INFORMATION)

FINISH	MANUFACTURER	MODEL	MORTAR	PLANT LOCATION	PREFERRED REGION(S)
BR-A (PRIMARY BRICK)					
BR-02	ACME BRICK	PALOMA GRAY	ARGOS, SAN TAN	ELGIN, TX	SOUTHWEST
BR-18	MUTUAL MATERIALS	IMPERIAL GRAY	ARGOS, SAN TAN	MICA, WA	WEST
BR-20	GLEN-GERY	KHAKI MATT	ARGOS, SAN TAN	CHESWICK, PA	ATLANTIC, NORTHEAST, MIDWEST
BR-30	CHEROKEE BRICK	LIGHT GRAY SMOOTH	ARGOS, SAN TAN	MACON, GA	SOUTHEAST
BR-B (ACCENT BRICK)					
BR-03	ACME BRICK	RUSTIC WHITE	ARGOS, SAN TAN	MALVERN, AR	SOUTHWEST
BR-19	MUTUAL MATERIALS	DESERT WHITE	ARGOS, SAN TAN	MICA, WA	WEST
BR-26	GLEN-GERY	WHITEHALL	ARGOS, SAN TAN	CHESWICK, PA	ATLANTIC, NORTHEAST, MIDWEST
BR-31	CHEROKEE BRICK	OATMEAL SMOOTH	ARGOS, SAN TAN	MACON, GA	SOUTHEAST

FINISH SCHEDULE - EXTERIOR

MARK	DESCRIPTION	MANUFACTURER	MODEL NAME	MODEL NUMBER	COLOR	NOTE
BR-A	BRICK VENEER (PRIMARY)	*	MODULAR	*	*	*SEE APPROVED BRICK ALTERNATES
BR-B	BRICK VENEER (ACCENT)	*	MODULAR	*	*	*SEE APPROVED BRICK ALTERNATES
CP-1	CANOPY METAL FASCIA		DURA COAT	DC19ST-2703	DARK BRONZE	OIL RUBBED BRONZE METALLIC TEXTURE PVD
CP-2	CANOPY METAL DECK				WHITE	SMOOTH WHITE, HIGH GLOSS
EC-1	PARAPET WALL COPING	DUROLAST / EXCEPTIONAL METALS			MIDNIGHT BRONZE	
PT-100	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350	SW 2807	ROOKWOOD	REFUSE ENCLOSURE, FINISH: SEMI-GLOSS ON DOOR FRAMES, SATIN ON WALLS
PT-113	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350	SW Bronzetone	DARK BRONZE	FINISH: SEMI-GLOSS
SC-1	STUCCO	STO	POWERWALL		STO WHITE	FINISH: SAND MEDIUM
SC-2	STUCCO	STO	POWERWALL		ADOBE BROWN	FINISH: SAND MEDIUM
ST-1	STOREFRONT	YKK	YES 45		DARK BRONZE (MATTE)	

ATTACHED CANOPY SCHEDULE

Mark	Description	Count	Overall Width	Overall Depth	Tie Back Mounting (Offset From Top)	Integral Lighting
C4-B	Exterior Canopy	2	5'-4"	4'-0"	2'-4"	Yes
C4-G	Exterior Canopy	1	7'-4"	4'-0"	2'-4"	Yes
C5-A	Exterior Canopy	1	12'-0"	5'-0"	2'-4"	Yes
Grand total		4				

CANOPY NOTES:

BUILDING MOUNTED CANOPIES
- 8" THICK CANOPY
- KYNAR FINISH OF STRUCTURE, FASCIA, & DECKING TO MATCH (CP-1)

COLUMN MOUNTED CANOPIES
- 10" THICK CANOPY
- FINISH OF STRUCTURE TO BE (CP-1)
- FINISH OF DECKING TO BE (CP-2)

GENERAL NOTES
1. ALL SIGNAGE PROVIDED BY OTHERS
2. REF FLOOR PLAN AND WINDOW LEGEND FOR STOREFRONT INFORMATION

LEGEND

(BR-B) (BR-A) (SC-1) (SC-2) (EC-1)

- EXPANSION JOINT, SEALANT COLOR TO MATCH MORTAR COLOR, RE: SPECIFICATIONS
- CARD READER BY SECURITY VENDOR - RE: ELEC
- SCUPPER - (PT-113) SEE A2 / A-503
- DOWNSPOUT - (PT-113) SEE A4 / A-503
- MDP - (PT-113) RE: ELECTRICAL
- OIL EXTRACTION PORT ACCESS BOX
- CO2 FILL BOX - RE: KITCHEN
- LIGHT FIXTURE - RE: ELECTRICAL
- CT CABINET - (PT-113) RE: ELECTRICAL

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

NOT FOR REGULATORY APPROVAL, BIDDING, OR CONSTRUCTION

CHICK-FIL-A WINTER SPRINGS

E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708

FSR#05814

BUILDING TYPE / SIZE: P14 LE BS
RELEASE: 24.05
PRINTED FOR
SCHEMATIC DESIGN

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

CONSULTANT PROJECT # 2024223.17
DATE 05/27/24
DRAWN BY Author

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SHEET
EXTERIOR ELEVATIONS - BRICK

SHEET NUMBER
A-301BNB

6/14/2024 1:41:04 PM Autodesk Docs://FL_05814_Winter Springs_2024.5_FSR05814_Winter Springs_ARC.rvt
10-LE-05814-A-301BNB-EXTERIOR ELEVATIONS - BRICK

PROPOSED SITE PLAN DOCUMENTS

FOR

PROPOSED

RESTAURANT W/ DRIVE THRU

LOCATION OF SITE

E. SR. 434 & MICHAEL BLAKE BLVD.

WINTER SPRINGS, FL 32708

MAP 38, BLOCK 21, LOT 31



LOCATION MAP

SCALE: N.T.S.

REFERENCES AND CONTACTS

REFERENCES

♦BOUNDARY & TOPOGRAPHIC SURVEY:
BOHLER ENGINEERING, LLC
1900 CORPERATE BLVD. SUITE 101E, NW,
BOCA RATON, FL 33431
DATED: 03/28/2024
JOB # /SURVEY JOB #FLA230280
ELEVATIONS: NAVD88

♦GEOTECHNICAL INVESTIGATION REPORT:
UNITED CONSULTING
625 HOLCOMB BRIDGE RD.
NORCROSS, GA 30071
DATED: 04/19/2024

♦ARCHITECTURAL PLAN:
GDP GROUP
1117 PERIMETER CENTER WEST, SUITE W306
ATLANTA, GA 30338

GOVERNING AGENCIES

♦PLANNING, ZONING COMMITTEE
CITY OF WINTER SPRINGS
1126 E STATE RD. 434
WINTER SPRINGS, FL 32708
PHONE: (407) 327-5963

♦BUILDING DEPARTMENT
CITY OF WINTER SPRINGS BUILDING DEPT.
1126 E STATE RD. 434
WINTER SPRINGS, FL 32708
PHONE: (407) 327-5963

♦FIRE DEPARTMENT
SEMINOLE COUNTY FIRE DEPT.
150 ESLINGER WAY
SANFORD, FL 32773
PHONE: (407) 665-5042

♦FDOT DISTRICT 5
719 SOUTH WOODLAND BLVD.
DELAND, FL 32720
PHONE: (800) 780-7120

♦SJRWMD
19661 SE HWY. 42
UMATILLA, FL 32784
PHONE: (832) 821-1043

ROW JURISDICTION

♦TRAFFIC, STORMWATER, WATER & SEWER
CITY OF WINTER SPRINGS PUBLIC WORKS
1126 E. SR. 434
WINTER SPRINGS, FL 32708
PHONE: (407) 327-5989

UTILITIES

♦WATER
CITY OF WINTER SPRINGS PUBLIC WORKS
1126 E. SR. 434
WINTER SPRINGS, FL 32708
PHONE: (407) 327-5989

♦WASTE WATER
CITY OF WINTER SPRINGS PUBLIC WORKS
1126 E. SR. 434
WINTER SPRINGS, FL 32708
PHONE: (407) 327-5989

♦ELECTRIC
DUKE ENERGY
2801 W. SR. 426
OVIEDO, FL 32765
PHONE: (877) 372-8477

♦GAS
FLORIDA PUBLIC UTILITIES
5011 N. DUPONT HWY.
DOVER, DE 19901
PHONE: (833) 486-0773

♦FIBER
UNITI FIBER
805 EXECUTIVE CENTER DR. W.
ST. PETERSBURG, FL 33702
PHONE: (727) 471-5600

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.

SHEET INDEX

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COVER SHEET	C-000
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OVERALL PLAN	C-200
SITE LAYOUT PLAN	C-201
TRUCK TURN PLAN	C-202
PAVING, GRADING, AND DRAINAGE PLAN	C-301
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EROSION CONTROL PLAN	C-303
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CFA STANDARD DETAILS SHEET	C-402
CFA STANDARD DETAILS SHEET	C-403
CITY UTILITY DETAIL SHEET	C-500
FDOT DETAILS SHEET	C-501
UTILITY SHEET	PS-100

DEVELOPER

THE FERBER COMPANY
100 SECOND AVE S, SUITE 201-N
ST. PETERSBURG, FL 33701
POC: WILL ANDERSON
C: (727) 490-1779
E: WANDERSON@FERBERCOMPANY.COM

PREPARED BY

BOHLER

CONTACT: FL-PERMITS@BOHLERENG.COM

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

5200 Buffington Rd
Atlanta, Georgia, 30349-2998

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: C=US, E=kmorel@bohlereng.com, CN=Kyle Morel, O=BOHLER ENGINEERING FLORIDA, PLLC, OU=Fl-Boca Raton, St-Florida
Reason: I am approving this document
Date: 2025.03.25 11:35:13-04'00'
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MOREL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROJECT MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
RESILIENCY SERVICES
TRANSPORTATION SERVICES

THE INFORMATION CONTAINED IN THIS DRAWING COMPRISES THE INTELLECTUAL PROPERTY OF BOHLER AND IS SUBJECT TO A LICENSE AGREEMENT. NEITHER THE WHOLE NOR ANY PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR MEDIUM WHATSOEVER WITHOUT THE EXPRESS WRITTEN PERMISSION OF BOHLER. ANY UNAUTHORIZED USE OF THIS DRAWING MAY VIOLATE COPYRIGHT LAWS, TRADEMARK LAWS AND THE LAWS OF UNFAIR COMPETITION AND OTHER STATUTES AND LAWS AND WILL SUBJECT THE PERPETRATOR TO APPROPRIATE LEGAL ACTION. ALL RIGHTS RESERVED.

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

STORE
P14-LE-XP - #05814
WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
COVER SHEET

DWG EDITION 02.4

☒ PRELIMINARY
☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

JOB NO.	FLA230280.00
STORE	#05814
DATE	05/21/2024
DRAWN BY	RI
CHECKED BY	KK
CAD ID	CNDS

SHEET
C-000

GENERAL NOTES

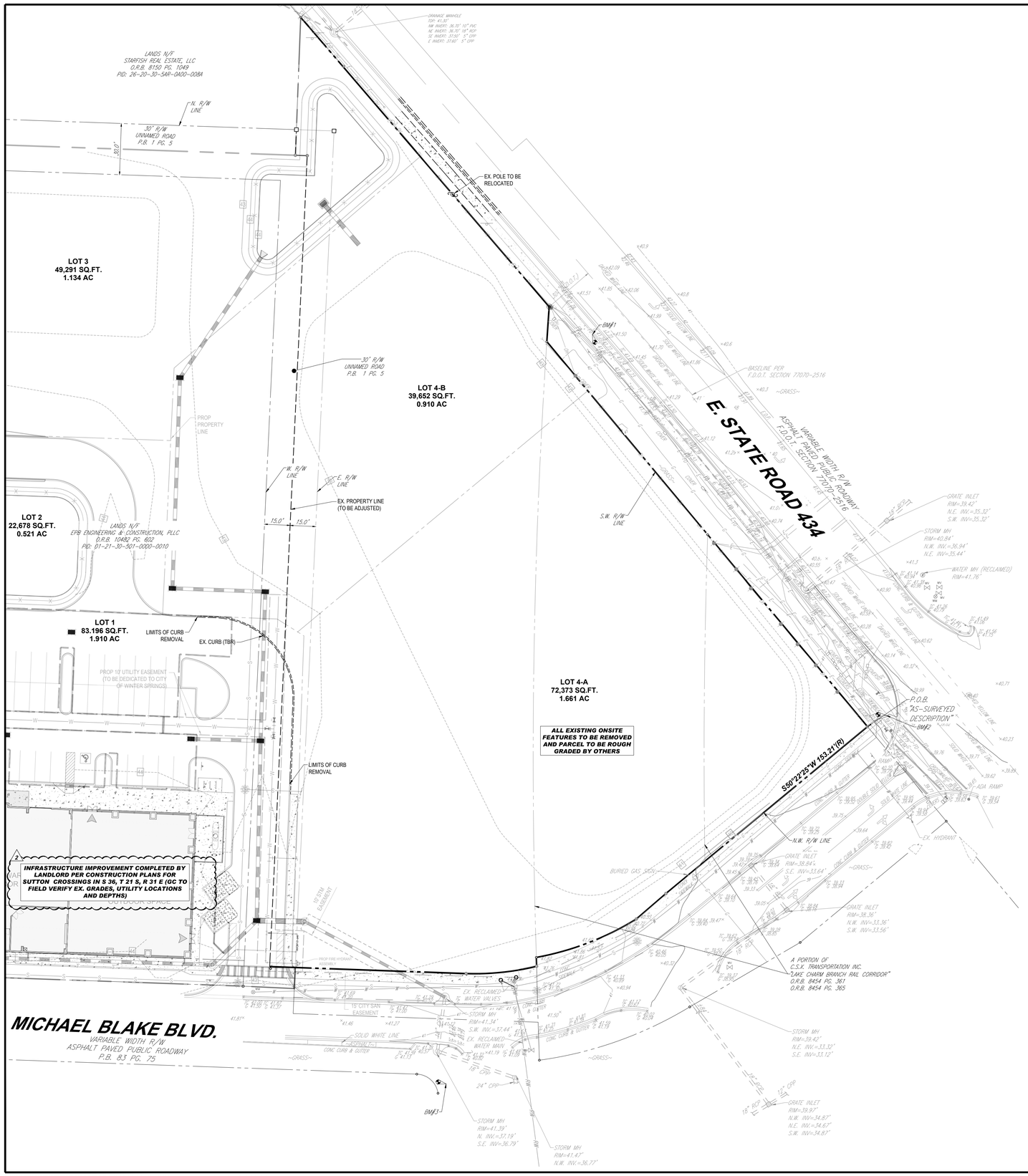
(Rev. 1/2023)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING, FL, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE PROFESSIONAL OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER , IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION MAY BE UNDERTAKEN UNTIL THE CONTRACTOR HAS RECEIVED AND REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT DRAWING AND DIMENSIONAL REQUIREMENTS OF BUILDING APPURTENANCES INCLUDING BUILDING OVERHANGS, EXACT BUILDING DIMENSIONS, AND BUILDING UTILITY ENTRANCES. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY PROFESSIONAL OF RECORD, BOHLER, MUNICIPAL ENGINEER, AND ARCHITECT OR INSPECTOR IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS WHEN THE CONTRACTOR FAILED TO FIELD VERIFY SUCH PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN FIELD MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
9. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
10. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE RECOMMENDATIONS CONTAINED IN THESE PLANS. IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY PRIOR TO PROCEEDING WITH THE WORK ADDRESSED IN THE REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH OSHA STANDARDS AND GUIDELINES). PRECAUTIONS MUST BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE EXPENSE.
14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOIL AND DEBRIS MUST BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THE PROJECT OR OVER THE CONTRACTOR).
16. CONTRACTOR DEBRIS DUMPSTER SERVICE SHALL BE CONTRACTED THROUGH WASTEPRO. CONTACT TOM DALY AT TDALY@WASTEPROUSA.COM OR 407-734-9809.
17. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
18. THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURBING, AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST REPAIR ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION, IN ACCORDANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
19. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY OR JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER'S ROLE IS NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY. SAME BEING WHOLLY OUTSIDE OF PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER NOT RESPONSIBLE FOR, AND DOES NOT ASSUME, ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
20. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER , ANY PROCEDURES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FROM AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
21. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR CONSTRUCTION MANAGER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT PROFESSIONAL OF RECORD AND BOHLER SUFFER AND ALL COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME.
22. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE, AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INSURANCE, INCLUDING ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER , AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, EMPLOYEES, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO IN THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK, ALL OF WHICH IS AT THE CONTRACTORS SOLE COST.
23. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
24. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN 'BOHLER PARTIES'), RELIEVES OR WILL RELIEVE THE CONTRACTOR FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES HAVING SITE JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SAFETY VIOLATIONS OR FAILURE TO PERFORM THE WORK IN ACCORDANCE WITH THE PLANS AND SET AN EXPRESS WRITING CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
25. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLERS REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, CALL TO BOHLER'S ATTENTION ANY DEVIATIONS THAT IT MAY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
26. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN PROFESSIONAL OF RECORD'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, AFFIRMATIVE CLAIMS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
27. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY.
28. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN; AND, FURTHER, THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS. OWNER AGREES TO INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
29. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
30. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES, PROFESSIONAL OF RECORD AND BOHLER HAVE NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
31. THE CONTRACTOR AND OWNER MUST INSTALL ALL EQUIPMENT AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD PROFESSIONAL OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND ALL COSTS THAT PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE.
32. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD), THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP. CONTRACTOR MUST NOT LIMIT TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
33. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTES AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE; EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

DEMOLITION NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND THE FEDERAL, STATE AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW WORK SHOWN ON THE PLANS.
   B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES, AND PROCEDURES OF DEMOLITION ACTIVITIES. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL AND LOCAL JURISDICTIONAL REQUIREMENTS, INCLUDING ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S MATERIALS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, COMPLYING WITH ALL OSHA REQUIREMENTS AND CODES. EARTHWORK ACTIVITIES MUST NOT ENDANGER ADJACENT SITE OR ADJACENT PROPERTY OR NEAR TO THE SAME.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SECURE THE SITE AS NECESSARY TO PREVENT THE DEMOLITION IN A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME, TO OR NEAR THE DEMOLITION AREA.
8. PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION ACTIVITY AND ANY SITE WORK, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS, AND ANY OTHER CONCERNS OF CONTRACTOR AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT. ANY SUCH CONCERNS MUST BE CONVEYED TO THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING AND MUST ADDRESS ALL ISSUES AND ITEMS RESPONDED TO, BY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION. IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, AND ORDINANCES.
9. THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION WITH UTILITY COMPANIES REGARDING UTILITY DEMOLITION AND/OR DISCONNECTION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED, REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS. PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, AND PARKING ARRANGEMENTS AND COUNTS.
10. PRIOR TO COMMENCING ANY DEMOLITION, THE CONTRACTOR MUST:
    A. OBTAIN ALL REQUIRED PERMITS AND APPROVALS AND MAKE ON SITE FOR REVIEW BY THE PROFESSIONAL OF RECORD AND ALL PUBLIC AG





LEGEND

ONSITE PROPERTY LINE / R.O.W. LINE	
NEIGHBORING PROPERTY LINE	
EX. EASEMENT	
EX. ROADWAY C/L	
EX. OVERHEAD ELECTRIC	OH OH OH
EX. STORM SEWER	
EX. SANITARY LINE	SS SS SS
EX. GAS LINE	G G G
EX. TELEPHONE LINE	T T T
EX. FENCE	X X X
EX. SPOT ELEVATION	×16.6'
EX. TREE	20" PINE
EX. CONCRETE	
TO BE REMOVED/ TO BE RELOCATED	(TBR)/(TBRL)

DEMOLITION ABBREVIATIONS

ABBREVIATION	DESCRIPTION
(TBA)	TO BE ABANDONED
(TBR)	TO BE REMOVED
(TBV)	TO BE VACATED
(RELO)	TO BE RELOCATED

DEMOLITION NOTES:

1. BOHLER FL, LLC IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
2. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE, AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO BOHLER FL, LLC IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.
3. PERMITS FOR DEVIATIONS SHALL BE APPLIED FOR AND APPROVED BY THE CITY OF WINTER SPRINGS PRIOR TO THE COMMENCEMENT OF DEVIATION. 2
4. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO: 2
   A. PRE -CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE CITY OF WINTER SPRINGS PRIOR TO CONSTRUCTION ACTIVITY.
   B. NO CONSTRUCTION SHALL COMMENCE WITHOUT AN INSPECTED AND APPROVED SITE WORK PERMIT FROM THE CITY OF WINTER SPRINGS.
   C. CONSTRUCTION FENCE WITH MESH SHALL BE FULLY INSTALLED, INSPECTED, AND APPROVED PRIOR TO CONSTRUCTION ACTIVITIES.
   D. NO CONSTRUCTION SHALL COMMENCE WITHOUT AN INSPECTED AND APPROVED SITE WORK PERMIT FROM THE CITY OF WINTER SPRINGS.
   E. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE FULLY INSTALLED, INSPECTED, AND APPROVED BY THE CITY OF WINTER SPRINGS PRIOR TO CONSTRUCTION ACTIVITY.
   F. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATE ONE CALL LOCATION CERTIFICATION PRIOR TO ANY EXCAVATION OR DEMOLITION. THE NUMBER IS 1-800-432-4770.
   G. ENSURING COPIES OF ALL PERMITS AND APPROVALS MUST BE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW.
   H. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
   I. LOCATE/CAP ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE.
   J. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
   K. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND BEING RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
   L. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.
   M. OPERATION OF ANY MECHANICALLY POWERED TOOLS OR EQUIPMENT USED IN CONSTRUCTION, DRILLING, OR DEMOLITION WORK BETWEEN THE HOURS OF 10:00 P.M. AND 7:00 A.M. THE FOLLOWING DAY IS PROHIBITED PER SECTION 13-31(D), CITY OF WINTER SPRINGS. 2
   N. A COMPLETE INSPECTION OF CONTAMINANTS BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED. SAME SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. ANY/ALL CONTAMINANTS SHALL BE REMOVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK, INCLUDING HAZARDOUS MATERIAL, SOILS, ASBESTOS, OR OTHER REFERENCED OR IMPLIED HEREIN IS THE SOLE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL CONSULTANT.
4. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.
5. IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
6. EXPLOSIVES SHALL NOT BE USED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES. 2
7. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH: THE "MANUAL ON UNIFORM TRAFFIC CONTROL " AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT - OF - WAY.
8. CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITIES. 2
9. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
10. USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
11. WRITTEN NOTICE INDICATING PROPERTIES DEEMED TO BE RETURNED TO "PRE-DEMOLITION" CONDITION SHALL BE SENT TO THE CITY OF WINTER SPRINGS. THE LETTER SHALL INCLUDE PROPERTY LOCATIONS, DATE OF DEMOLITION COMPLETION, DATE OF WORK TO COMMENCEMENT, AND NAME AND CONTACT INFORMATION OF CONTRACTOR. 2
12. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
13. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
14. DEBRIS SHALL NOT BE BURIED OR BURNED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS AND APPLICABLE CODES. BURNING OF ANY ORGANIC OR INORGANIC MATERIAL ON SITE SHALL BE PROHIBITED. 2
15. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
16. ALL EXISTING UTILITIES BEING REMOVED SHALL BE DONE SO BY THE CONTRACTOR IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
17. THERE ARE NO KNOWN WATER COURSES, WATER BODIES, FLOODPLAINS, XERIC UPLANDS, WETLANDS, CUTTHROAT GRASS SEEPS, HISTORICAL, AND ARCHAEOLOGICAL RESOURCES, OR CONES OF INFLUENCE FOR POTABLE WELLS, AQUIFER RECHARGE AREAS, SOIL TYPES, AND VEGETATIVE COVER LOCATED WITHIN PROJECT LIMITS.

DATUM NOTE:

ELEVATIONS ARE BASED ON NAVD88 DATUM DETERMINED BY GPS OBSERVATIONS AND TIED IN TO THE NGS BENCHMARK NO. AI0227 WITH A PUBLISHED ELEVATION OF 37.81 FEET.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

THIS PLAN TO BE UTILIZED FOR PRELIMINARY PURPOSES ONLY

5200 Buffington Rd
Atlanta, Georgia 30349-2998

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MORRIS
LICENSED PROFESSIONAL ENGINEER
No. 77085
STATE OF FLORIDA
Digitally signed by Kyle Steven Morris
DN: c=US, o=Bohler Engineering Florida, LLC, cn=Kyle Steven Morris, pc=77085, e=Kyle.Morris@BohlerUSA.com
Date: 2025.03.21 11:36:54-04'00'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MORRIS, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROJECT MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION CONTAINED IN THIS DRAWING COMPRISES THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF BOHLER AND IS NOT TO BE REPRODUCED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF BOHLER. ALL RIGHTS RESERVED. COPYRIGHT © 2024

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

STORE
P14-LE-XP - #05814
WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE

DEMOLITION PLAN

DWG EDITION 02.4

☒ PRELIMINARY
☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

JOB NO.	FLA230280.00
STORE	#05814
DATE	05/21/2024
DRAWN BY	RI
CHECKED BY	KK
CAD ID	EXDM

SHEET
C-100



N
W
E
S
NAD83
SPCFN

30 15 7.5 0 30
1"= 30'

LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. DRIVE-THRU CONCRETE	
PROP. HEAVY DUTY CONCRETE	

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MOREL — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Steven Morel
DN: c=US, o=Bohler Engineering, Florida, LLC, ou=Bohler Engineering, Florida, PLLC, cn=Kyle Steven Morel, 5279.0001, 1.2.840.113549.1.9.1=kmorel@bohlereng.com
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Phone: (813) 812-4100
Fax: (813) 812-4101
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WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
OVERALL PLAN

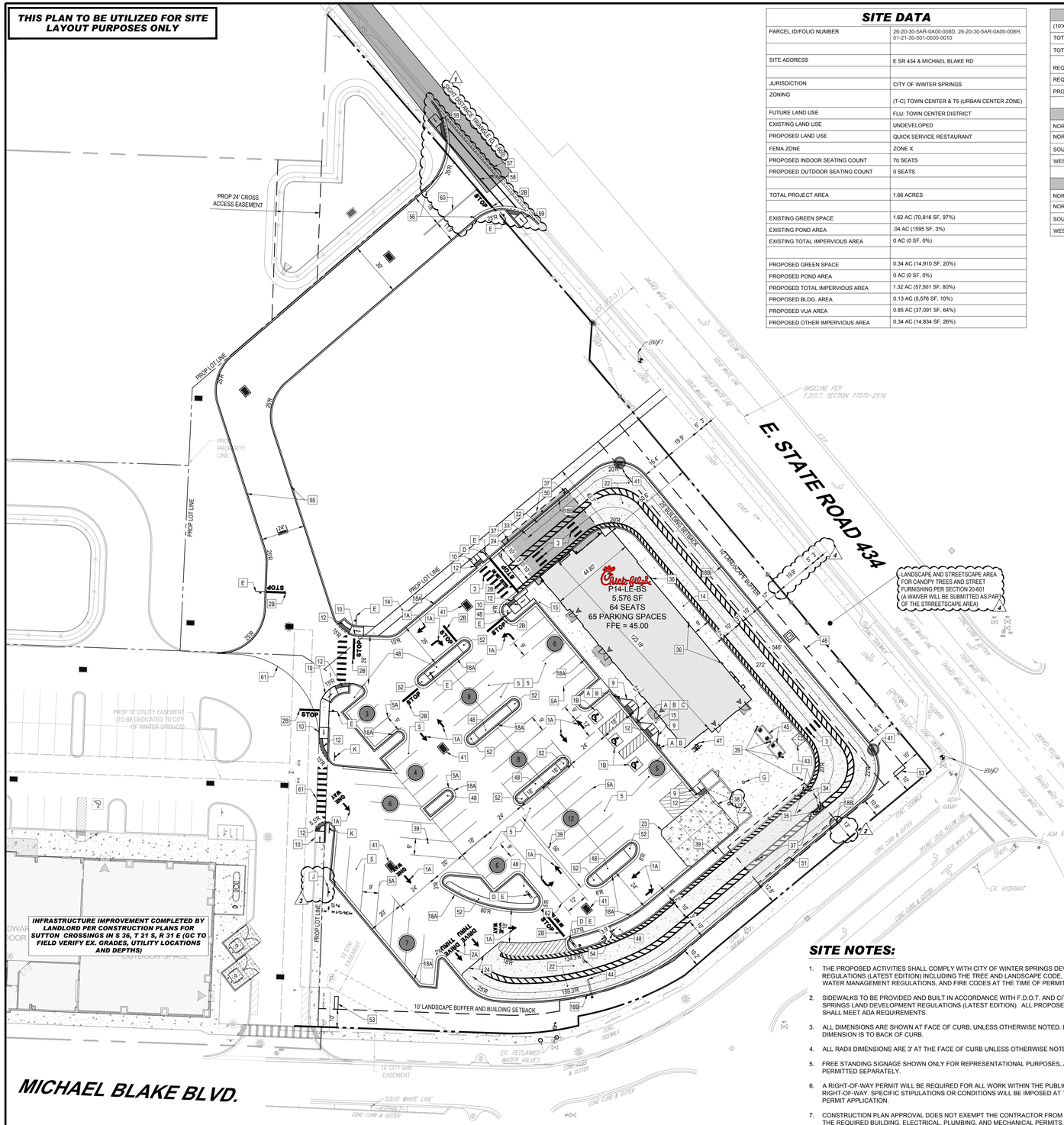
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SITE DATA

PARCEL ID/FOLIO NUMBER	26-20-30-5AR-0A00-008D, 26-20-30-5AR-0A00-008H, 01-21-30-501-0000-0010
SITE ADDRESS	E SR 434 & MICHAEL BLAKE RD
JURISDICTION	CITY OF WINTER SPRINGS
ZONING	(T-C) TOWN CENTER & T5 (URBAN CENTER ZONE)
FUTURE LAND USE	FLU: TOWN CENTER DISTRICT
EXISTING LAND USE	UNDEVELOPED
PROPOSED LAND USE	QUICK SERVICE RESTAURANT
FEMA ZONE	ZONE X
PROPOSED INDOOR SEATING COUNT	70 SEATS
PROPOSED OUTDOOR SEATING COUNT	0 SEATS
TOTAL PROJECT AREA	1.66 ACRES
EXISTING GREEN SPACE	1.62 AC (70,816 SF, 97%)
EXISTING POND AREA	.04 AC (1595 SF, 3%)
EXISTING TOTAL IMPERVIOUS AREA	0 AC (0 SF, 0%)
PROPOSED GREEN SPACE	0.34 AC (14,910 SF, 20%)
PROPOSED POND AREA	0 AC (0 SF, 0%)
PROPOSED TOTAL IMPERVIOUS AREA	1.32 AC (57,501 SF, 80%)
PROPOSED BLDG. AREA	0.13 AC (5,576 SF, 10%)
PROPOSED VUA AREA	0.85 AC (37,091 SF, 64%)
PROPOSED OTHER IMPERVIOUS AREA	0.34 AC (14,834 SF, 26%)

PARKING CALCULATIONS	
(10'X20') REG. PARKING SPACES PROVIDED	62 SPACES
TOTAL (12'X20') ADA SPACES PROVIDED	3 SPACES
TOTAL SPACES PROVIDED	65 SPACES
REQUIRED PARKING SPACES	58 SPACES (4 SPACES PER ESTABLISHMENT + 1 SPACE PER 100 SF GFA)
REQUIRED BICYCLE PARKING	0 SPACES
PROVIDED BICYCLE PARKING	2 SPACES
BUILDING SETBACKS	
NORTHWEST	0'
NORTHEAST (SR 434)	25' (SR 434)
SOUTHEAST MICHAEL BLAKE BLVD	10' (MICHAEL BLAKE BLVD)
WEST	0'
LANDSCAPE BUFFER REQUIREMENTS	
NORTHWEST	0'
NORTHEAST (SR 434)	10'
SOUTHEAST MICHAEL BLAKE BLVD	10'
WEST	0'

SIGN LEGEND

** CONTRACTOR TO REFER TO THE SIGNAGE PACKAGE FOR PLACEMENT AND SPECIFICATIONS OF ALL SIGNS **

- A — HANDICAP PARKING SIGN (SEE SIGNAGE PACKAGE) R7-8; 12" X 18" (TYP.)
- B — HANDICAP PARKING FINE SIGN (SEE SIGNAGE PACKAGE) 6" X 12" (TYP.)
- C — "VAN ACCESSIBLE" SIGN (SEE SIGNAGE PACKAGE) R7-8P; 6" X 12" (TYP.)
- D — "DO NOT ENTER" SIGN (SEE SIGNAGE PACKAGE) R5-1; 24" X 24" (TYP.)
- E — STOP SIGN (SEE SIGNAGE PACKAGE) R1-1; 30" X 30" (TYP.)
- F — ~~CFA PEDESTRIAN CROSSING SIGN (SEE SIGNAGE PACKAGE)~~
- G — FLAG POLE (SEE SIGNAGE PACKAGE)
- H — ~~CFA MONUMENT OR PYLON SIGN~~
- I — DIGITAL DRIVE-THRU MENU BOARDS
- J — "RESTAURANTS" AND "NO PARKING" LABEL ON FDC W/ YELLOW STRIPING ON CURB
- K — "DRIVE-THROUGH ENTRANCE ONLY" SIGN (SEE SIGNAGE PACKAGE

SITE PLAN DESIGN NOTES & KEY PLAN

1A DIRECTIONAL ARROW (1A C-405)
1B PAINTED HANDICAP PARKING SYMBOL (1B C-405)
2A DRIVE-THRU GRAPHICS (2A C-405)
2B STOP BAR GRAPHIC (2B C-405, 3 C-405)
3 CROSSWALK MARKINGS
NOT USED — ~~4 MULTI-LANE DIRECTIONAL GRAPHICS~~ (4 C-405)
5 STANDARD OR HANDICAP PARKING STALL PER CODE (5 C-405)
5A 4" SOLID WHITE STRIPING
NOT USED — ~~5B 4" SOLID YELLOW STRIPING~~
NOT USED — ~~5C 4" SKIP DASH YELLOW STRIPING~~
NOT USED — ~~6 SOLID PLASTIC WHEEL STOP~~ (6 C-405)
NOT USED — ~~7 BOLLARD MOUNTED SIGN~~ (7 C-405)
NOT USED — ~~8 CURB RAMP w/ SHORT FLARED SIDES (GRASSED AREAS)~~ (1 C-405)
9 CURB RAMP w/ FLARED SIDES (IN SIDEWALK) (9 C-405)
10 RETURNED CURB HANDICAP RAMP (10 C-405)
NOT USED — ~~11 SIDEWALK ACCESSIBLE RAMP~~ (1 C-401, 2 C-401, 3 C-401)
12 DETECTABLE WARNING DEVICE
NOT USED — ~~13 PROP FIRE HYDRANT~~ (4 C-401)
14 CONCRETE SIDEWALK
15 CONCRETE SIDEWALK w/ CURB & GUTTER (5 C-401)
NOT USED — ~~16 ENTRY DOOR FROST SLAB DETAIL~~ (6 C-401)
NOT USED — ~~17 CONCRETE BOLLARD~~ (7 C-401)
18 CONCRETE CURB & GUTTER (8 C-401)
18A SPILLING CURB & GUTTER
18B CATCHING CURB & GUTTER
18C ~~DEPRESSED SPILLING CURB & GUTTER~~
NOT USED — ~~18D DEPRESSED CATCHING CURB & GUTTER~~
NOT USED — ~~18E SPILLING GUTTER SECTION AT ACCESSIBLE RAMP~~
NOT USED — ~~18F CATCHING GUTTER SECTION AT ACCESSIBLE RAMP~~
NOT USED — ~~18G MOUNTABLE CURB & GUTTER~~
NOT USED — ~~19 LANDSCAPE & IRRIGATION PROTECTOR~~ (9 C-401, 2 C-402)
NOT USED — ~~20 TYPICAL HMAC PAVEMENT SECTION~~
21 AREA LIGHT AND POLE (REFER TO LIGHTING PLAN BY OTHERS)
22 CONCRETE PAVEMENT DRIVE-THRU LANE (3 C-402)
23 CONCRETE APRON AT TRASH ENCLOSURE (4 C-402)
24 PAVEMENT EDGE DETAIL (START & END OF DRIVE-THRU LANES) (5 C-402)
NOT USED — ~~25 CONCRETE PAVEMENT SECTIONS~~ (6 C-402)
NOT USED — ~~26 TRANSVERSE & LONGITUDINAL CONTRACTION JOINT~~ (7 C-402)
NOT USED — ~~27 TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT~~
NOT USED — ~~28 CONTRACTION JOINT~~ (9 C-402)
NOT USED — ~~29 KEYED CONSTRUCTION JOINT~~ (10 C-402)
NOT USED — ~~30 LONGITUDINAL BUTT JOINT~~ (11 C-402) FOR CONCRETE PAVING
NOT USED — ~~31 EXPANSION JOINT~~ (12 C-402)
32 DRIVE-THRU PLAN - FLUSH WITH FFE (1 C-403)
33 DRIVE-THRU ISOMETRIC (2 C-403)
34 DRIVE-THRU ORDER POINT ISLAND (3 C-403)
35 MENU BOARD LOOP DETECTION SYSTEM (4 C-403)
36 BUILDING DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)
37 CANOPY DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)
38 SCREENED REFUSE ENCLOSURE (REFER TO ARCH PLANS FOR ADDITIONAL DETAILS) (7 C-403)
39 CLEAN-OUT (OUTSIDE OF BUILDING) (8 C-403)
NOT USED — 40 ~~THICKENED PAVEMENT @ STRUCTURES~~ (9 C-403, 10 C-403)
41 STORM STRUCTURE WEEP HOLE DETAILS
NOT USED — 42 ~~ALUMINUM HANDRAIL (REFER TO ARCH PLANS)~~
43 CONCRETE PAD FOR OPTIONAL CASH STATION
44 DRIVE-THRU CLEARANCE BAR (REFER TO SIGNAGE PACKAGE)
45 GREASE TRAP
46 PROPOSED TRANSFORMER
47 BIKE RACK
48 LANDSCAPED AREA
NOT USED — 49 ~~TYPICAL LOCATION FOR OUTDOOR TABLES~~ (REFER TO ARCH PLANS)
50 FREE-STANDING OUTSIDE MEAL DELIVERY CANOPY
51 FREE-STANDING ORDER POINT CANOPY
52 LANDSCAPE & IRRIGATION PROTECTOR
53 PROPOSED MONUMENT SIGN (A WAIVER WILL BE SUBMITTED AS PART OF SIGNAGE PERMIT) (4)
54 PROPOSED CONCRETE FLUME
55 PROP TYPE "D" CURB (PER FDOT INDEX 520-001)
56 PROP TYPE "F" CURB (PER FDOT INDEX 520-001)
57 PROP DROP CURB (PER FDOT INDEX 520-001)
58 PROP CROSSWALK STRIPING (PER FDOT INDEX: 711-001)
59 PROP CURB RAMP (PER FDOT INDEX: 522-002)
60 PROP 6" DOUBLE YELLOW (PER FDOT INDEX: 711-001)
61 PROP EDGE OF NEW ASPHALT
62 PROP 50' X 12' LOADING ZONE (3)

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE; SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
13. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN.
14. FDEP WATER AND WASTEWATER PERMITS MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

RIGHT-OF-WAY NOTES:

1. A RIGHT-OF-WAY USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
2. ALL AREAS WITHIN THE COUNTY OR F.D.O.T. RIGHT-OF-WAY DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.
3. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO PROTECT ALL COUNTY OR F.D.O.T. OWNED AND/OR MAINTAINED INFRASTRUCTURE. ANY/ALL COSTS ASSOCIATED WITH ALTERATIONS, RELOCATIONS, OR REPAIRS MADE NECESSARY BY THIS DEVELOPMENT SHALL BE BORNE BY EITHER THE OWNER, DEVELOPER, AND/OR CONTRACTOR. SPLICES IN THE FIBER OPTIC CABLE, SIGNALIZATION OR ROADWAY LIGHTING CONDUCTORS, OR THE ADDITION OF ADDITIONAL PULL/JUNCTION BOXES WILL NOT BE PERMITTED. IN THE EVENT A CABLE IS CUT, DAMAGED, OR REQUIRES RELOCATION, THE CABLE(S) SHALL BE RESTORED BACK TO THE ORIGINAL CONFIGURATION. ORIGINAL CONFIGURATION IS DEFINED AS SYSTEM STATUS, LAYOUT, AND DESIGN PRIOR TO ANY WORK COMMENCING.
4. FOR UTILITIES TO BE RELOCATED BY THE UTILITY PROVIDER, CONTRACTOR SHALL COORDINATE DEMOLITION SCHEDULE WITH UTILITY PROVIDERS. DEMOLITION OF SIDEWALKS AND DRIVEWAYS SHALL OCCUR PRIOR TO UTILITY RELOCATIONS.
5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (R/W) SHOULD BE THERMOPLASTIC.
6. SIGNS WITHIN THE STATE RIGHT-OF-WAY (R/W) NEEDS TO BE MOUNTED TO ROUND ALUMINUM COLUMN (POST).

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE ROW OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

FDOT NOTES:

1. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL

WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS (NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

N / W / E / S (NAD83 SPCS N)

30 15 7.5 0 30
1"= 30'

LEGEND

- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- EX. ROADWAY C/L
- PROP. PROPERTY LINE
- PROP. BUFFER
- PROP. SETBACK
- PROP. PARKING COUNT
- PROP. SIGN
- PROP. BUILDING ENTRANCES
- PROP. CONCRETE SIDEWALK
- PROP. DRIVE-THRU CONCRETE
- PROP. HEAVY DUTY CONCRETE

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TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH No. 30780

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E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

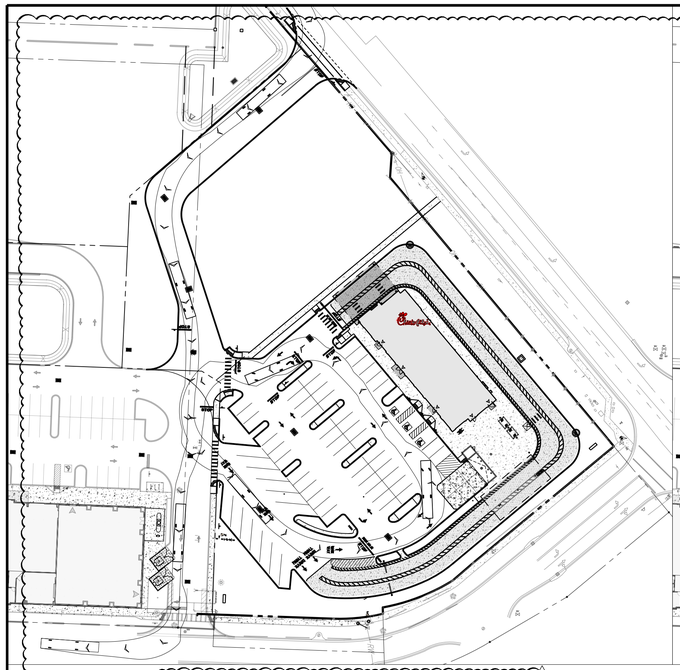
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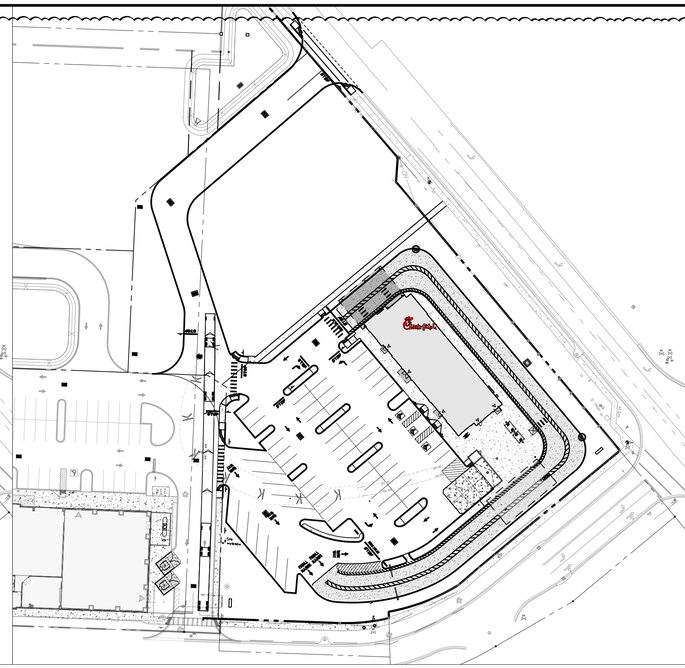
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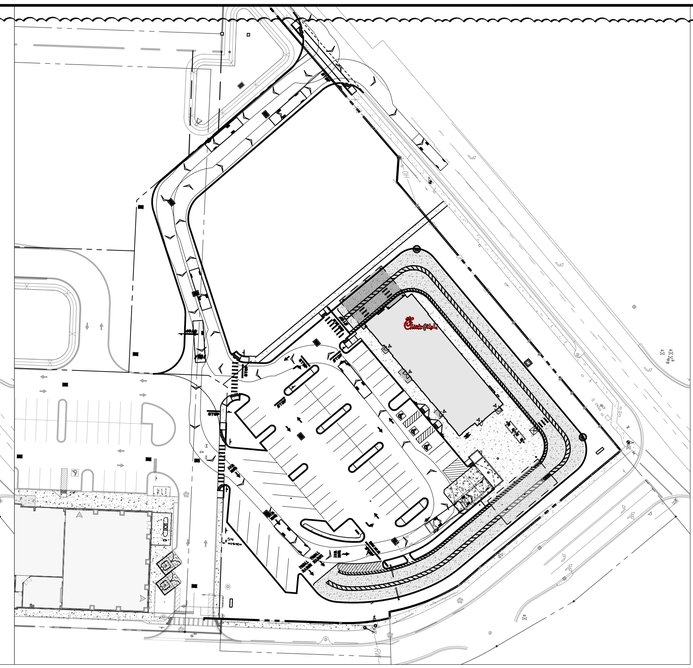
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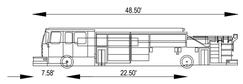
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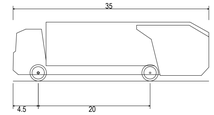








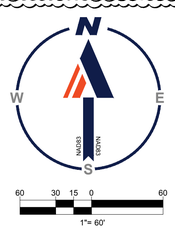
Pierce Arrow XT Chassis	
Aerial Platform	100.00ft
Inside Cramp Angle	40.00°
Axle Track	82.92in
Wheel Offset	5.30in
Tread Width	17.50in
Chassis Overhang	68.99in
Additional Bumper Depth	22.00in
Front Overhang	90.99in
Wheelbase	270.00in
Overall Length	581.75in
Calculated Turning Radius:	
Inside Turn	25.00ft 7.00in
Curb To Curb	41.00ft 8.00in
Wall To Wall	48.00ft 5.00in



Rear-Load Garbage Truck	
Overall Length	35.000ft
Overall Width	8.375ft
Overall Body Height	10.546ft
Min Body Ground Clearance	1.000ft
Track Width	8.375ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	29.300ft

LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. DRIVE-THRU CONCRETE	
PROP. HEAVY DUTY CONCRETE	



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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MOREL — LICENSED PROFESSIONAL ENGINEER — No. 77085 — STATE OF FLORIDA

Digitally signed by Kyle Morel
DN: c=US, o=Bohler Engineering - Florida LC, ou=A01410D0ACE0A0E0A0E0A0E70, cn=Kyle Morel, dn=Florida, 1.3.6.1.4.1.311.60.2.1.3=US, 1.3.6.1.4.1.311.60.2.1.2=Florida, 2.5.4.15=Private Organization, 2.5.4.5=F16000078829, 2.5.4.17=32708, 2.5.4.9=600 N Westshore Blvd Suite 950, 2.5.4.10=Bohler Engineering Florida LLC, 2.5.4.11=Civil Engineering
Date: 2025.03.31 11:37:19-04'00'

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WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

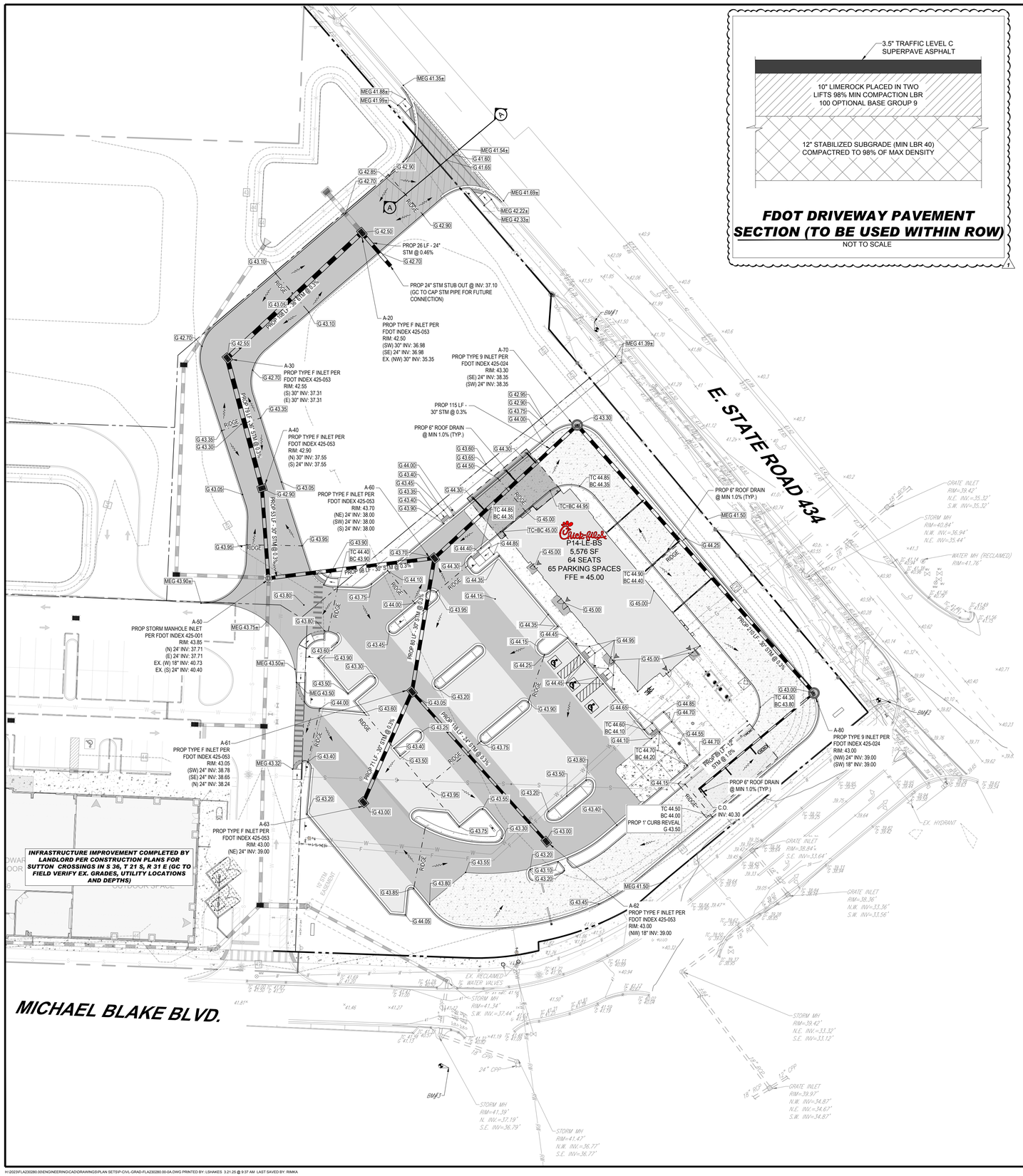
SHEET TITLE
TRUCK TURN PLAN

DWG EDITION 02.4

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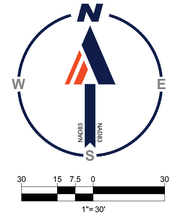
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CHECKED BY	KK
CAD ID	SITE

SHEET
C-202



FDOT DRIVEWAY PAVEMENT SECTION (TO BE USED WITHIN ROW)

NOT TO SCALE



LEGEND

PROPERTY LINE	
PROP. ASPHALT PAVING	
PROP. HEAVY DUTY ASPHALT PAVING	
PROP. FDOT PAVEMENT SECTION	
PROP. CONCRETE SIDEWALK	
PROP. DRIVE-THRU CONCRETE	
PROP. HEAVY DUTY CONCRETE	
PROP. SPOT ELEVATION	G 39.96
EX. STORM SEWER	
PROP. STORM SEWER	
PROP. GRATE INLET	
PROP. STORM CLEANOUT	C/O
PROP. STORM MANHOLE	
RIDGE LINE	
OVERLAND FLOW PATH	<<

GENERAL NOTES:

1. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CASTING STRUCTURES.
3. COORDINATE ALL UTILITY LEADS AND BUILDING CONNECTIONS WITH THE ARCHITECTURAL PLANS.
4. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
5. ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY WILL NEED TO BE SODDED.

PAVING AND GRADING NOTES:

A. GENERAL:

1. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE SURVEYOR'S BENCHMARKS AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUNDBREAK.
2. ALL GRADES SHOWN REFERENCE PROPOSED ELEVATIONS AT EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. "TC" = TOP OF CURB ELEVATION; "G" = FINISHED GRADE; "MEG" = PROPOSED GRADE TO MATCH EXISTING GRADE; T/W = TOP OF RETAINING WALL ELEVATION; B/W = BOTTOM OF RETAINING WALL ELEVATION.
3. THE ALTA/ACSM LAND TITLE SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
4. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
5. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF LIMEROCK BASE.
6. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
7. WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAWCUT TO ENSURE A PROPER JOINT.
8. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.

B. MATERIALS:

1. BASE COURSE SHALL BE ABC-3 PER F.D.O.T. SPECIFICATIONS OR EQUIVALENT LIMEROCK THICKNESS W/ MINIMUM LBR-100 (MAX. 6" LIFTS).
2. ASPHALT SURFACES SHALL BE TYPE S-III ASPHALTIC CONCRETE, UNLESS OTHERWISE SPECIFIED ON THE PLANS, SHALL BE A MINIMUM OF 1-1/2" THICK, AND SHALL BE CONSTRUCTED IN TWO 3/4" LIFTS, WITH TACKCOAT BETWEEN LIFTS.
3. REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" x 6" NO. 6 GAUGE WIRE MESH.

C. INSTALLATION:

1. SUBGRADE FOR ROADWAY SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY (AASHTO T-180), SHALL BE A MINIMUM 12", AND SHALL HAVE A MINIMUM LBR 40.
2. BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 6" PLACED IN ONE LIFT. ADDITIONALLY, BASE COURSE MATERIAL SHALL HAVE A MINIMUM MARSHALL STABILITY OF 1000, UNLESS OTHERWISE INDICATED (OR LBR-100).
3. BASE COURSE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
4. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM TO THE REQUIREMENTS OF THE D.O.T. STANDARD SPECIFICATIONS FOR TYPE S-III ASPHALTIC CONCRETE OR THE LATEST REVISION.

D. TESTING

1. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
2. DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.
3. ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE CONTRACTOR.
4. DENSITY TESTS ON THE STABILIZED SUBGRADE SHALL BE SUPPLIED TO AND APPROVED BY THE ENGINEER OF RECORD AND GEOTECHNICAL ENGINEER BEFORE ANY BASE IS CONSTRUCTED.
5. DENSITY TESTS AND "AS-BUILTS" ON THE FINISHED BASE SHALL BE SUPPLIED TO AND APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE ANY ASPHALT PAVEMENT IS CONSTRUCTED.

STORM DRAINAGE NOTES:

A. GENERAL:

1. DISTANCES AND LENGTHS OF PIPE SHOWN ON PLANS ARE REFERENCED TO THE CENTER OF STRUCTURES.

B. MATERIALS:

1. REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM C-76, CLASS III, WALL THICKNESS "B", LATEST REVISION. RUBBER GASKETS OR OTHER MANUFACTURER SUPPLIED JOINT SEALER SHALL BE USED.
2. ALL PVC DRAINAGE PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 35, WITH PUSH-ON RUBBER GASKET JOINTS.
3. ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.

C. INSTALLATION:

1. PIPE SHALL BE PLACED ON A MINIMUM OF 8" STABLE GRANULAR MATERIAL FREE OF ROCK FORMATION AND OTHER FOREIGN FORMATIONS, AND CONSTRUCTED TO A UNIFORM GRADE AND LINE.
2. BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6" TO A HEIGHT OF 12" ABOVE PIPE AS SHOWN ON THE PLANS.
3. PROVIDE A MINIMUM PROTECTIVE COVER OF 18" OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.

D. CONNECTIONS TO EXISTING STORM STRUCTURES:

1. THE HOLE INTO THE EXISTING STRUCTURE SHALL BE SAW CUT OR CORE DRILLED.
2. USE NON-SHRINKING GROUT TO FILL ALL GAPS AROUND THE JOINT.
3. AFTER PIPE IS CONNECTED WITH THE INLET, THE END OF THE PIPE MUST BE CUT FLUSH WITH THE INSIDE SURFACE OF THE INLET.
4. REFER TO F.D.O.T. STANDARD PLAN INDEX 425-001 FOR FILTER FABRIC WRAP ON GROUTED PIPE TO STRUCTURE JOINT DETAIL.

DATUM NOTE:

ELEVATIONS ARE BASED ON NAVD88 DATUM DETERMINED BY GPS OBSERVATIONS AND TIED IN TO THE NGS BENCHMARK NO. AI0227 WITH A PUBLISHED ELEVATION OF 37.81 FEET.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

DEWATERING NOTE:

CONTRACTOR SHALL SUBMIT DEWATERING PLAN TO THE DISTRICT, 14 DAYS PRIOR TO COMMENCEMENT, SUBJECT PLANS SHALL BE REVISED AS NECESSARY.

THIS PLAN TO BE UTILIZED FOR PRELIMINARY PURPOSES ONLY

Chick-fil-A, Inc.
5200 Buffington Rd
Atlanta, Georgia 30349-2998

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MONIEL — LICENSED PROFESSIONAL ENGINEER — No. 77085 — STATE OF FLORIDA

Digitally signed by Kyle Monel
DN: c=US, o=BOHLER ENGINEERING FL, cn=Kyle Monel
Reason: I have reviewed this document
Location: 600 N. Westshore Blvd., Suite 950, Tampa, FL 33609
Email: kmonel@bohlerengineering.com
Date: 2025.03.25 15:13:37 -05'00'

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E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

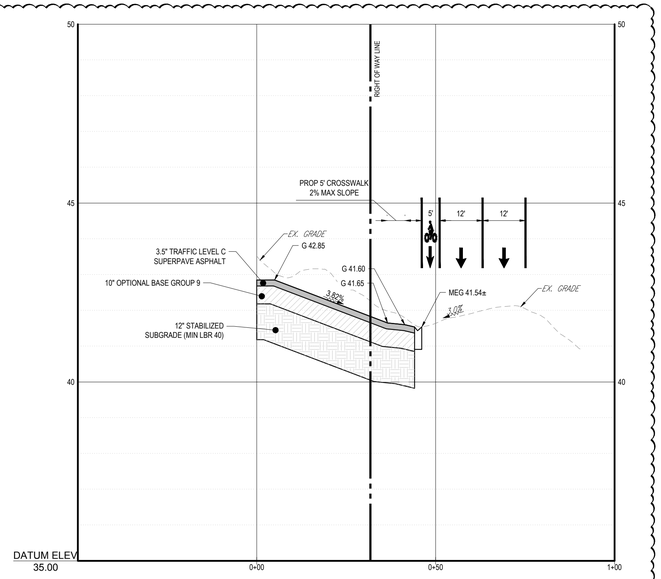
SHEET TITLE
PAVING, GRADING, AND DRAINAGE PLAN

DWG EDITION 02.4

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☐ FOR CONSTRUCTION

JOB NO.	:FLA230280.00
STORE	: #05814
DATE	: 05/21/2024
DRAWN BY	: RI
CHECKED BY	: KK
CAD ID	: GRAD

SHEET
C-301



SECTION A-A

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL

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4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: c=US, o=BOHLER ENGINEERING FL, ou=BOHLER ENGINEERING FL, cn=Kyle Morel, email=kmorel@bohlereng.com
Date: 2025.03.31 13:57:48-04'00'

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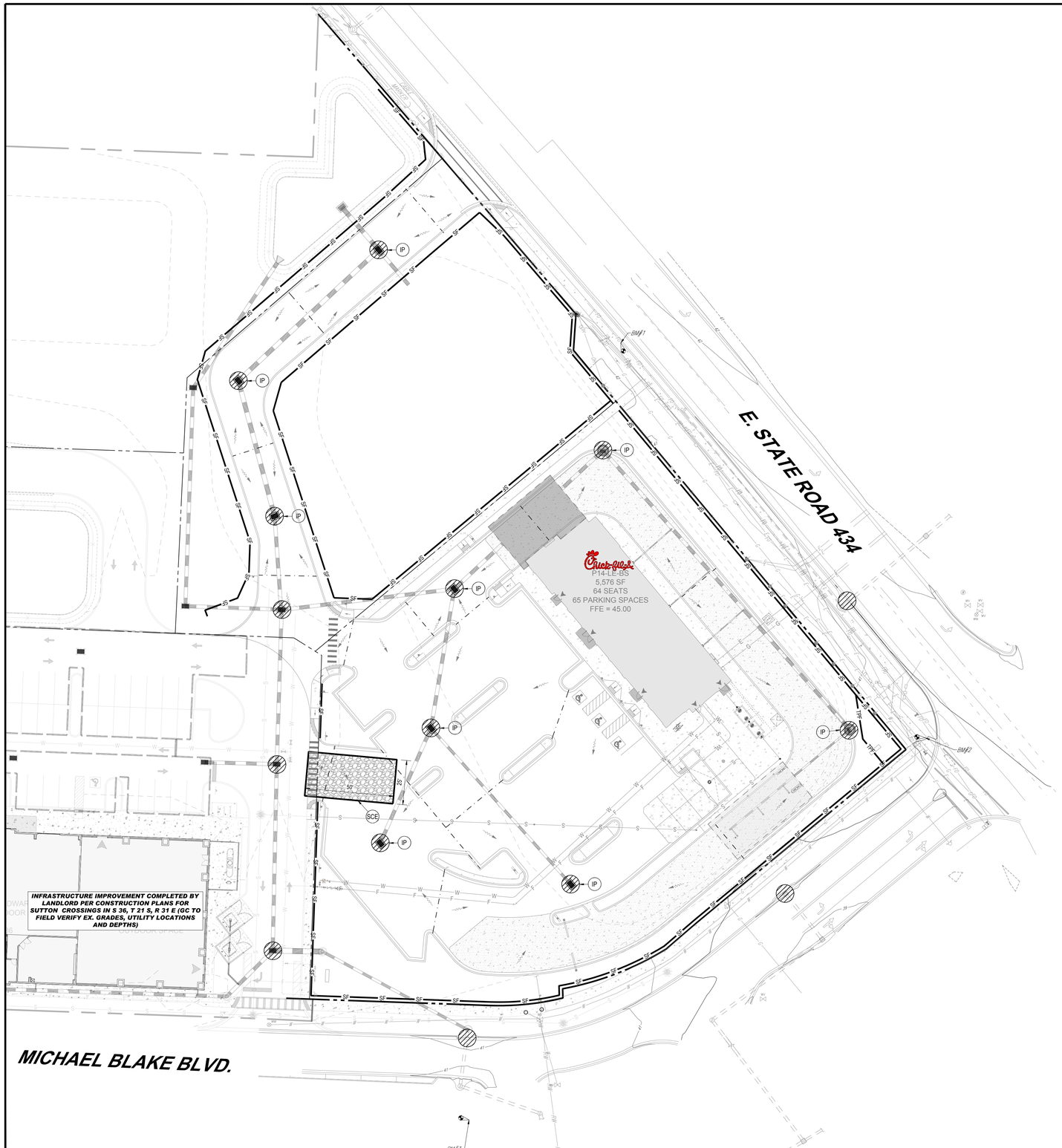
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SECTIONS

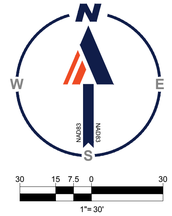
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CAD ID	SECT

SHEET
C-302





LEGEND

	EX. R.O.W. LINE
	EX. ADJACENT PROPERTY LINE
	PROP. PROPERTY LINE
OH OH	EX. OVERHEAD WIRE
123.45 ×	EX. SPOT ELEVATION
	PROP. STORM PIPE
	PROP. RIDGE LINE
SF SF	PROP. SILT FENCE
	PROP. INLET PROTECTION

KEYNOTES:

- (IP) INLET PROTECTION
- (SBB) STRAW BALE BARRIER
- (SCE) CONSTRUCTION ENTRANCE

POLLUTION PREVENTION NOTES:

1. EROSION AND SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THESE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS. BMP'S SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH FEDERAL, STATE, AND LOCAL REGULATIONS. [THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]
2. OFF SITE SURFACE WATER DISCHARGES, DISCHARGES TO ONSITE WETLANDS, OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU'S) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.
3. THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4)(C)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.
4. FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
5. IF CONTAMINATED SOIL AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE AND WATER RESOURCES SHALL BE CONTACTED.
6. PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.
7. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:
   A. NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT IN ACCORDANCE WITH RULE 62-621.300(4)(a), F.A.C.
   B. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(A) PART III.C.2, F.A.C.
   C. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE PROVIDED TO WATER RESOURCES IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART III.D.1, F.A.C.
   D. THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART V.D.6, F.A.C.
   E. A COPY OF THE SWPPP, AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE; AND SHALL BE READILY AVAILABLE TO COUNTY OR STATE INSPECTORS.
8. THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

MAINTENANCE NOTES:

N.P.D.E.S. PERMIT COMPLIANCE REQUIRES INSPECTIONS EVERY 7 CALENDAR DAYS BY A NPDES QUALIFIED INSPECTOR AND PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL EVENT OF 0.5" OR GREATER. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS FURTHER MAINTENANCE AS OUTLINED BELOW. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE N.P.D.E.S. COMPLIANCE.

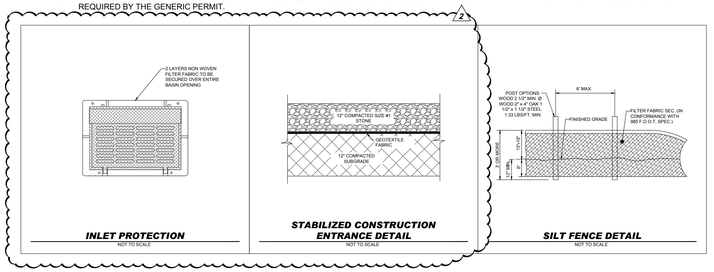
1. INSPECTIONS BY CONTRACTOR MUST OCCUR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM EVENT 0.5" OR GREATER.
2. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
3. CATCH BASIN INLET AND CONCRETE FLUME FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. WEEKLY INSPECTIONS WILL BE PERFORMED EVERY 7 CALENDAR DAYS. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT BY CONTRACTOR.
4. CONSTRUCTION ACCESS AND TRACKING MAT MUST BE MAINTAINED BY CONTRACTOR. REPLENISH CRUSHED AGGREGATE IF PRESENT LAYER IS FILLED WITH SEDIMENT, POOLING WATER, OR HAS RUTS. A NEW LAYER MAY BE ADDED IF OLD LAYERS BECOME COMPACTED.
5. SILT FENCE IS TO BE INSPECTED DAILY BY CONTRACTOR AND EVERY 7 CALENDAR DAYS BY N.P.D.E.S. QUALIFIED INSPECTOR. IF REPAIRS OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED IMMEDIATELY. THE SILT FENCE SHOULD BE TRENCHED IN, BACK-FILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT. WHEN THE SEDIMENT ACCUMULATES TO 1/3 OF THE HEIGHT OF THE FENCE, CONTRACTOR MAY HAVE TO REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL THE FENCE IF IT FAILS. IT WOULD ALSO BE NECESSARY TO REINSTALL IF ANY PORTION OF THE FENCING WAS DAMAGED BY CONSTRUCTION MACHINERY.
6. SEEDING OR RESEEDING MAY BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
7. THE CONTRACTOR SHALL CONTINUOUSLY ENSURE THAT THE PERIMETER OF THE SITE, INCLUDING CONSTRUCTION ENTRANCES, IS SECURED FROM ALLOWING DEBRIS TO LEAVE THE SITE DUE TO CONSTRUCTION ACTIVITY OR RAINFALL EVENTS. A WEEKLY LOG SHALL BE UPDATED AND KEPT ON-SITE IN ACCORDANCE WITH THE N.P.D.E.S. PERMIT. BY BIDDING DOCUMENTS CONTRACTOR ACKNOWLEDGES HE/SHE IS AWARE OF N.P.D.E.S. GUIDELINES AND POLICIES AS WELL AS BEST MANAGEMENT PRACTICES AND ASSUMES SOLE RESPONSIBILITY FOR FINES IMPOSED BY GOVERNMENTAL AGENCIES DUE TO VIOLATIONS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER,PARKING, LAYDOWN, PORTABLE RESTROOMS, WHEELED WASTE DISPOSAL DUMPSTER(S), WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC. IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN THEIR LOCATIONS ON THE SITE MAP.

PHASE 1
1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND INSTALL SILT FENCE.
2. INSTALL INLET PROTECTION AT EXISTING INLET(S).
3. PREPARE CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
4. INSTALL STORMWATER CONVEYANCE STRUCTURES AND CULVERTS, ENSURE THAT NEW INLETS ARE PROTECTED PRIOR TO MAKING THE OUTFALL CONNECTION.

PHASE 2
1. PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
2. START CONSTRUCTION OF THE PROPOSED BUILDING PAD AND STRUCTURES.
3. TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT THE CONSTRUCTION DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY THE GENERIC PERMIT.



THIS PLAN TO BE UTILIZED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY

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1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MORIEL — No. 77065 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Moriel
DN: c=US, o=BOHLER ENGINEERING PC, cn=Kyle Moriel, email=kmoriel@bohlerengineering.com
Reason: I have reviewed this document
Location: 10 Bora Haloo, St Pete
Date: 2025.03.21 11:38:03-04'00'

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Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30760

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WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

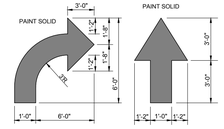
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EROSION CONTROL PLAN

DWG EDITION 02.4

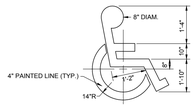
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CHECKED BY	: KK
CAD ID	: EROS

SHEET
C-303



1A C-400 DIRECTIONAL ARROW
NOT TO SCALE



1B C-200 ACCESSIBILITY SYMBOL
NOT TO SCALE

NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS (SEE DETAIL 5/C-400).
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE, UNLESS UPON VERIFICATION BY THE GENERAL CONTRACTOR IT IS DETERMINED THAT LOCAL, STATE, OR ADA CODES DIFFER, IN WHICH CASE THESE CODES SHALL GOVERN.

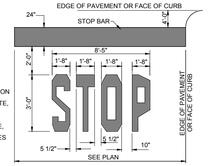
1 C-200 PAVEMENT MARKINGS - 1
NOT TO SCALE



2A C-200 DRIVE-THRU
NOT TO SCALE

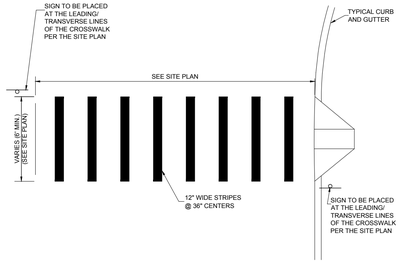
NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS.
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE, UNLESS UPON VERIFICATION BY THE GENERAL CONTRACTOR IT IS DETERMINED THAT LOCAL, STATE, OR ADA CODES DIFFER, IN WHICH CASE THESE CODES SHALL GOVERN.

NOTE:
IF STOP SIGN IS PROPOSED, "STOP" LETTERING GRAPHIC IS NOT REQUIRED.



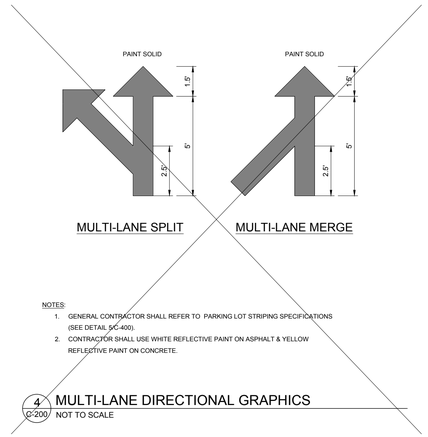
2B C-200 STOP BAR
NOT TO SCALE

2 C-200 PAVEMENT MARKINGS - 2
NOT TO SCALE



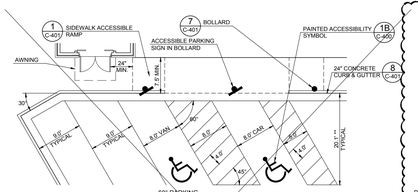
NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS (SEE DETAIL 5/C-400).
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT AND YELLOW REFLECTIVE PAINT ON CONCRETE.

3 C-200 CROSSWALK MARKINGS
NOT TO SCALE



NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS (SEE DETAIL 5/C-400).
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE.

4 C-200 MULTI-LANE DIRECTIONAL GRAPHICS
NOT TO SCALE

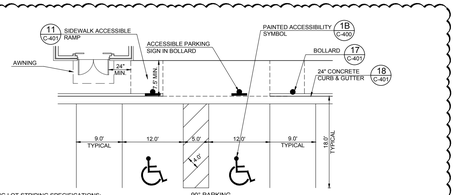


60° PARKING

** 60° PARKING STALL CAN BE REDUCED TO 18' MINIMUM IF SITE CONDITIONS REQUIRE IT

NOTES
1. ACCESSIBLE PARKING AND ACCESSIBLE AISLES SHALL NOT EXCEED 1.5% IN SLOPE IN ANY DIRECTION. IF ONLY ONE ACCESS AISLE IS INSTALLED, IT IS TO BE A VAN SIDE.
2. PARKING STALL DIMENSIONING SHALL BE IN ACCORDANCE WITH APPLICABLE GOVERNING AUTHORITY'S AND ADA STANDARDS. SEE SITE PLAN FOR COMPLETE STRIPING LAYOUT.
3. GENERAL CONTRACTOR SHALL REFER TO CHICK-FIL-A PARKING LOT STRIPING SPECIFICATIONS, THIS DETAIL.
4. CONTRACTOR SHALL USE 4" WIDE WHITE REFLECTIVE PAINT FOR STRIPING ON ASPHALT PARKING LOTS.
5. CONTRACTOR SHALL USE 4" WIDE YELLOW REFLECTIVE PAINT FOR STRIPING ON CONCRETE PARKING LOTS.
6. ACCESSIBLE PARKING AND ACCESSIBLE AISLE STRIPING COLOR SHALL BE IN ACCORDANCE WITH APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.
7. NO WHEEL STOPS TO BE INSTALLED WHEN PARKING IS ADJACENT TO SIDEWALK.
8. ADA SIGNS IN BOLLARDS AND BOLLARDS SHALL BE INSTALLED WHEN PARKING IS ADJACENT TO FLUSH CURB OR A RAMP.
9. ALL DIMENSIONS ARE TO CENTER OF STRIPE UNLESS OTHERWISE NOTED.
10. STRIPING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

5 C-200 PARKING STALL LAYOUT AND STRIPING
NOT TO SCALE



90° PARKING

PARKING LOT STRIPING SPECIFICATIONS:

STANDARDS:
1. ALWAYS FOLLOW ALL APPLICABLE GOVERNING AUTHORITY'S STANDARDS.
2. SURFACES SHOULD BE CLEAN, DRY, AND FREE FROM LOOSE OR PEELING PAINT. REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIALS TO ENSURE ADEQUATE ADHESION. DO NOT APPLY WHEN AIR OR SURFACE TEMPERATURES ARE BELOW 40°F.
3. APPLY SHERWIN-WILLIAMS SETFAST PREMIUM ALKYD ZONE MARKING PAINT A300 WHITE OR A303 YELLOW USING EITHER AIRLESS OR CONVENTIONAL LINE STRIPING EQUIPMENT. USE THE FOLLOWING SETTINGS AS A GUIDE-ACTUAL SETTINGS DEPEND ON ATMOSPHERIC CONDITIONS AT THE TIME OF APPLICATION:

AIRLESS

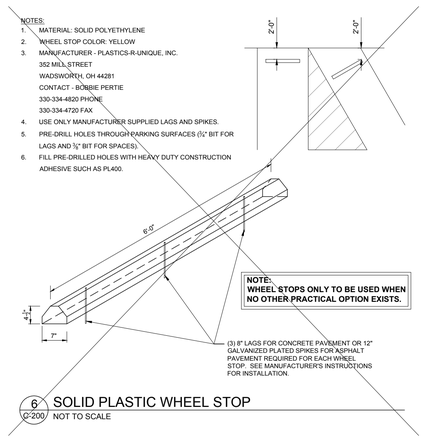
• PRESSURE	1800-2700 PSI
• HOSE	¾"-¼" ID
• TIP	0.015"-0.017"
• FILTER	60 MESH
• REDUCTION	ONLY IF NECESSARY, UP TO 1PT/GAL VM&P NAPTHA R1K3

CONVENTIONAL

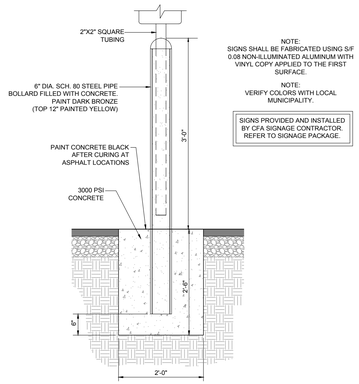
• GUN	BLINKS 21 (BLEEDER) OR EQUIVALENT
• FLUID NOZZLE	#68
• AIR NOZZLE	INTERNAL MIX, #709
• ATOMIZATION PRESSURE	45-80 PSI
• FLUID PRESSURE	40-70 PSI
• REDUCTION	ONLY IF NECESSARY, UP TO 1PT/GAL VM&P NAPTHA R1K3

- SHERWIN WILLIAMS, H&C SHARK GRIP SLIP RESISTANT ADDITIVE TO BE MEASURED AND ADDED TO ALL PAINT PER MANUFACTURER'S WRITTEN SPECIFICATIONS. MIX THOROUGHLY PER MANUFACTURER'S RECOMMENDATIONS SO THAT NO CLUMPING IS APPARENT AND UNTIL EVEN DISTRIBUTION IS ACHIEVED. MAINTAIN EVEN DISTRIBUTION OF ADDITIVE IN PAINT THROUGHOUT THE APPLICATION PROCESS.
- MIX PAINT THOROUGHLY BY BOXING, STIRRING, OR POWER AGITATION BEFORE USE. APPLY AT 15 MILS WET TO ACHIEVE A SPREAD RATE OF 400-500 LINEAL FEET OF STANDARD 4" STRIPE PER GALLON, APPLIED AT THIS RATE AT 70 DEGREES F AND 50% RELATIVE HUMIDITY, PAINT WILL DRY WITH NO TRAFFIC PICKUP AFTER 20 MINUTES.
- GENERAL CONTRACTOR TO RE-STRIPE THE LOT 45 DAYS AFTER OPENING.

2



6 C-200 SOLID PLASTIC WHEEL STOP
NOT TO SCALE

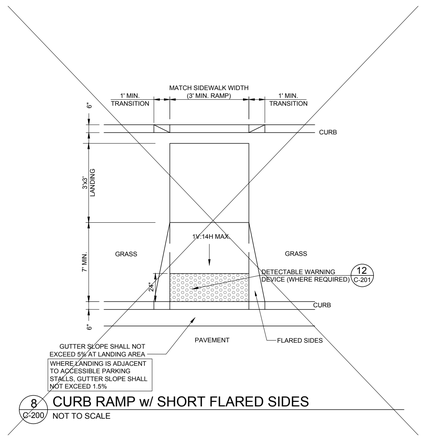


NOTE:
SIGNS SHALL BE FABRICATED USING 5/F 0.08 NON-ILLUMINATED ALUMINUM WITH VINYL COPY APPLIED TO THE FIRST SURFACE.

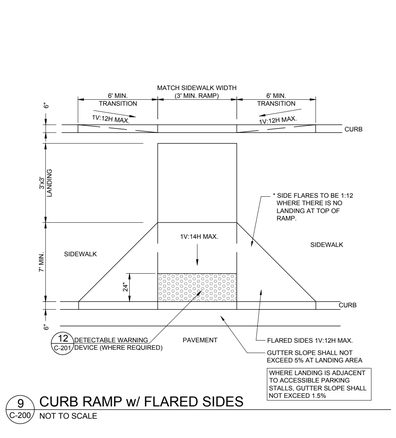
NOTE:
VERIFY COLORS WITH LOCAL MUNICIPALITY.

SIGNS PROVIDED AND INSTALLED BY CFA SIGNAGE CONTRACTOR. REFER TO SIGNAGE PACKAGE.

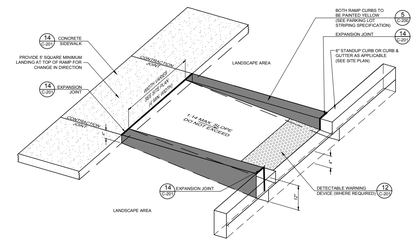
7 C-200 BOLLARD MOUNTED SIGN
NOT TO SCALE



8 C-200 CURB RAMP w/ SHORT FLARED SIDES
NOT TO SCALE



9 C-200 CURB RAMP w/ FLARED SIDES
NOT TO SCALE



10 C-200 RETURNED CURB RAMP
NOT TO SCALE

CFA
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Atlanta, Georgia 30349-2998

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4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MOREL — LICENSED PROFESSIONAL ENGINEER — No. 77085 — STATE OF FLORIDA
Digitally signed by Kyle Morel
DN: C=US, E=kyle.morel@bohlerengineering.com, CN=Kyle Morel, O=BOHLER ENGINEERING FL, OU=Civil, L=Winter Haven, S=Florida
Reason: I am the author of this document
Date: 2025.03.21 11:39:14-04'00'
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WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
CFA STANDARD DETAILS SHEET

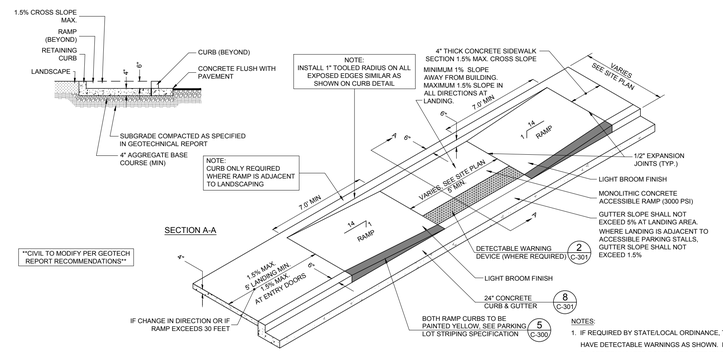
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CHECKED BY	KK
CAD ID	CNDS

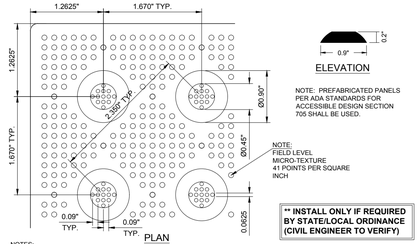
SHEET
C-400

REVISION 4 - 03/18/2025



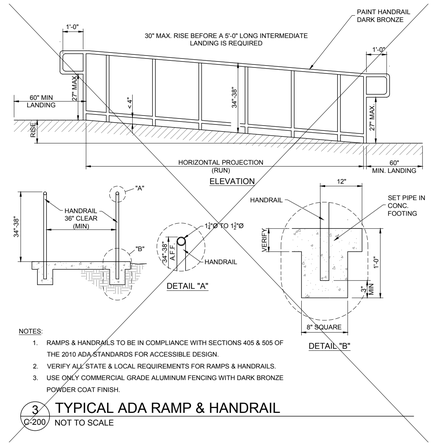
1 C-200 SIDEWALK ACCESSIBLE RAMP
NOT TO SCALE

NOTES:
1. IF REQUIRED BY STATE/LOCAL ORDINANCE, THE SURFACE OF THE RAMP LANDING SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.
2. CONSTRUCT PER A.D.A. STANDARDS.
3. REFER TO PLANS FOR ADJACENT SLOPES.
4. THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1.5%.
5. CONSTRUCTION OF THE RAMP SHALL MATCH ADJOINING SIDEWALK DETAIL.
6. CONCRETE SHALL BE P.C.C. 3000 PSI.



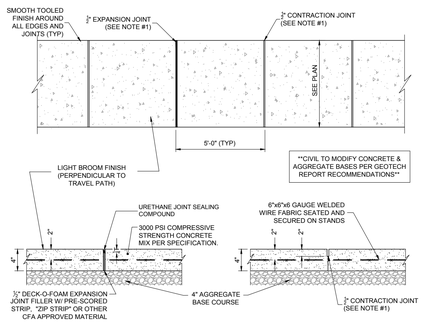
NOTES:
1. AT ADA CURB RAMPS, THE DETECTABLE WARNING DEVICE SHALL BE LOCATED ON THE SURFACE AT THE BOTTOM OF THE GRADE BREAK OR AT THE LOWER LANDING. FOR LANDINGS AND BLENDED TRANSITIONS, DETECTABLE WARNING DEVICES SHALL BE LOCATED ON THE LANDING OR BLENDED TRANSITION AT THE BACK OF CURB.
2. DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE RAMP OR FLUSH SURFACE.
3. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED BY TEXTURING PRODUCTS CONFORMING TO PROWAG R305. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS. CONTRACTOR SHALL CONFIRM LOCAL CODES ARE MET.
4. WHERE A CURB RAMP IS CONSTRUCTED WITHIN AN EXISTING CURB, CURB & GUTTER AND/OR SIDEWALK, THE EXISTING CURB & GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB & GUTTER IS LESS THAN 9' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5'.
5. THE PLAN MUST PROVIDE FOR DETECTABLE WARNING SURFACE COLORS OR MATERIALS THAT PROVIDE THE NECESSARY CONTRAST, EITHER DARK-ON-LIGHT, OR LIGHT-ON-DARK. STANDARD DOME COLOR IS BRICK RED.
6. TRUNCATED DOMES TO BE INSTALLED USING ARMOR TILE CAST IN PLACE DOME TACTILE TILE, PART NUMBER ADA-2424 OR OTHER EQUIVALENT APPROVED MATERIAL. PREFERRED MANUFACTURER ARMOR TILE TACTILE SYSTEMS LANCE MITCHELL@1FIVE22-4615 UNLESS PAVERS ARE REQUIRED, CONTRACTOR TO VERIFY THAT CURB RAMPS MEET LOCAL CODES AND ADA REQUIREMENTS.

2 C-200 DETECTABLE WARNING DEVICE
NOT TO SCALE



NOTES:
1. RAMPS & HANDRAILS TO BE IN COMPLIANCE WITH SECTIONS 405 & 505 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
2. VERIFY ALL STATE & LOCAL REQUIREMENTS FOR RAMPS & HANDRAILS.
3. USE ONLY COMMERCIAL GRADE ALUMINUM FENCING WITH DARK BRONZE POWDER COAT FINISH.

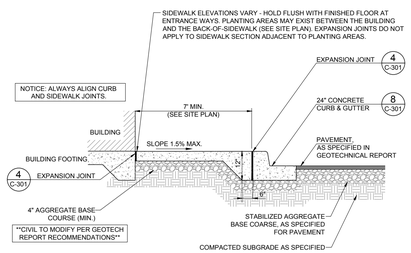
3 C-200 TYPICAL ADA RAMP & HANDRAIL
NOT TO SCALE



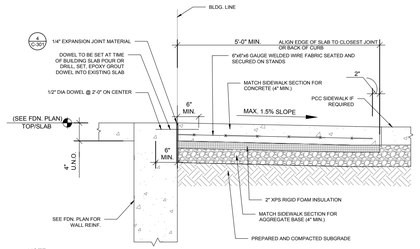
EXPANSION JOINT | CONTRACTION JOINT

NOTES:
1. CONTRACTION JOINTS AT 5'-0" O.C. TOOLED 1/4" WIDE, 1" DEEP OR MAX. 1/3 DEEP, WHICHEVER IS GREATER. EXPANSION JOINTS AT 20' MAX. & ALL P.C.s, UNLESS APPROVED OR INDICATED OTHERWISE ON PLAN VIEW JOINT PATTERN.

4 C-200 CONCRETE SIDEWALK
NOT TO SCALE

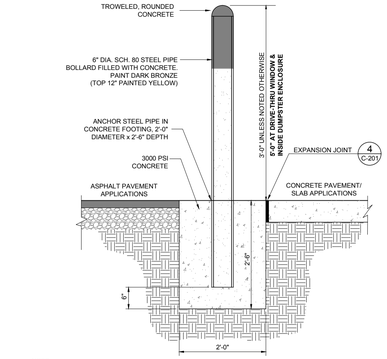


5 C-301 CONCRETE SIDEWALK w/ CURB & GUTTER
NOT TO SCALE



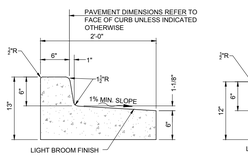
NOTE:
1. CONTRACTOR TO REFER TO STRUCTURAL PLANS FOR ADDITIONAL DETAILS. NOTIFY ENGINEER WITH ANY DISCREPANCIES FROM THIS DETAIL.
2. CONTRACTOR HAS THE OPTION TO DRILL, SET AND EPOXY GROUT DOWEL, IF NOT INSTALLED WHEN THE BUILDING SLAB WAS POURED.
3. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR LOCATIONS. DOOR STOOP SHALL EXTEND 12" PAST EACH SIDE OF DOOR MIN. STOOP IS TO BE SEPARATED ON ALL SIDES WITH 1/4" EXPANSION JOINT MATERIAL, TOPPED WITH SEALANT.
4. USE A 10'X5' SLAB MINIMUM AT A DOUBLE DOOR ENTRY.
5. USE A 5'X5' SLAB MINIMUM AT A SINGLE DOOR ENTRY.
5. DOWELS TO BE INSTALLED INTO THE BUILDING FOUNDATION ONLY. THE REMAINING THREE SIDES OF THE SLAB DO NOT GET TIED TO THE SURROUNDING SIDEWALK.

6 C-301 ENTRY DOOR FROST SLAB DETAIL
NOT TO SCALE

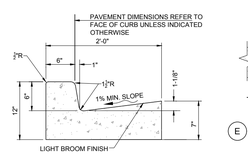


NOTE:
1. BOLLARD HEIGHT SHALL BE 5'-0" AT DRIVE-THRU WINDOW AND INSIDE DUMPSTER ENCLOSURE.

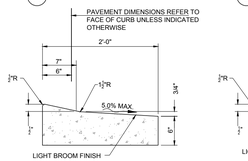
7 C-200 CONCRETE BOLLARD
NOT TO SCALE



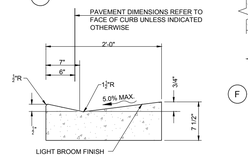
A SPILLING CURB AND GUTTER



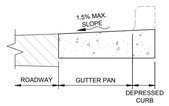
B CATCHING CURB AND GUTTER



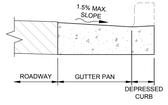
C DEPRESSED SPILLING CURB AND GUTTER



D DEPRESSED CATCHING CURB AND GUTTER



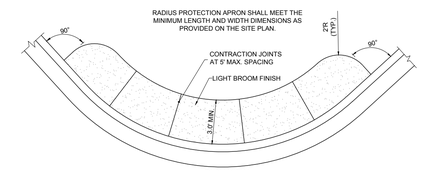
E SPILLING GUTTER SECTION AT ACCESSIBLE RAMP



F CATCHING GUTTER SECTION AT ACCESSIBLE RAMP

NOTES:
1. CONCRETE FOR CURBING SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3,000 PSI @ 28 DAYS.
2. CONSTRUCTION STAKING FOR CURBING INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
3. AT CONTRACTOR'S OPTION THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER PARALLEL WITH PAVING OF BASE COURSE.
4. CONTRACTION JOINTS @ 10'-0" O.C. TOOLED 1/4" (± 1/8", -0) WIDE, 1" OR MAX. D/4 DEPTH WHICHEVER IS GREATER. EXPANSION JOINTS @ 40'-0" MAX., AT ENDS OF RADIUS, AND A MINIMUM OF 5 FEET FROM INLET STRUCTURES, UNLESS APPROVED OR INDICATED OTHERWISE ON PLANS.
5. GUTTER SLOPE AT ACCESSIBLE SPACES TO MATCH ADJACENT PAVEMENT, TRAVERSE & LONGITUDINAL.
6. CONSTRUCTION STAKING FOR CURBING INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
7. LIGHT BROOM FINISH; PERPENDICULAR TO CURB.

8 C-200 CONCRETE CURB & GUTTER
NOT TO SCALE



NOTES:
1. MOUNTABLE CURB TO BE PAINTED YELLOW WITH 6" BLACK STRIPE PAINTED EVERY 24" O.C.

G M-4.18 MOUNTABLE CURB & GUTTER

NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

9 C-200 LANDSCAPE & IRRIGATION PROTECTOR
NOT TO SCALE

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Atlanta Georgia, 30349-2998

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: c=US, o=BOHLER ENGINEERING FL, ou=BOHLER, cn=Kyle Morel, email=kmorel@bohlereng.com
Date: 2025.03.31 13:36:33-04'00'
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600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

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WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
CFA STANDARD DETAILS SHEET

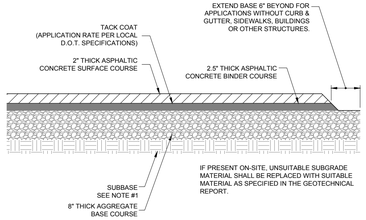
DWG EDITION 02.4

☒ PRELIMINARY
☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

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STORE	#05814
DATE	05/21/2024
DRAWN BY	RI
CHECKED BY	KK
CAD ID	CNDS

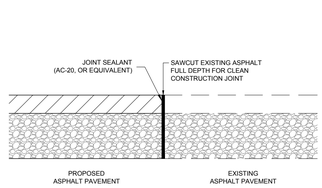
SHEET
C-401

REVISION 4 - 03/18/2025

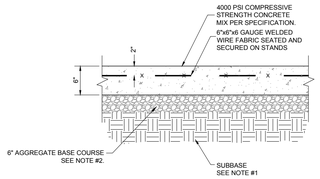


NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE SITE SPECIFIC GEOTECHNICAL REPORT FOR PAVEMENT, AGGREGATE, AND SUBGRADE SECTION REQUIREMENTS.
2. MINIMUM PAVEMENT THICKNESS SHOULD BE 8" GRADED AGGREGATE BASE, 2.5" ASPHALT PAVEMENT BINDER, 2" ASPHALT PAVEMENT SURFACE COURSE, AND TACK COAT.

1 C-301 TYPICAL HMAC PAVEMENT SECTION
NOT TO SCALE

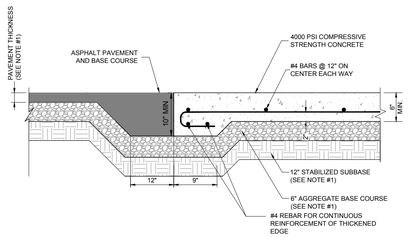


2 C-301 BUTT JOINT
NOT TO SCALE



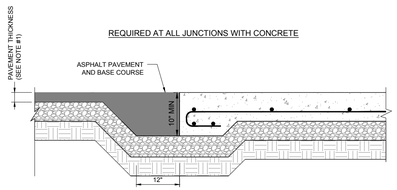
NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.
2. MINIMUM PAVEMENT THICKNESS SHALL BE 6" CONCRETE, 12" AGGREGATE BASE.

3 C-301 CONCRETE PAVEMENT DRIVE-THRU LANE
NOT TO SCALE



NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

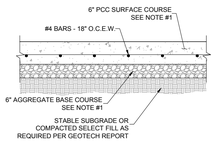
4 C-301 CONCRETE APRON AT TRASH ENCLOSURE
NOT TO SCALE



NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

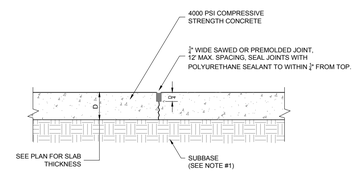
5 C-301 PAVEMENT EDGE DETAIL (START & END OF DRIVE-THRU LANES)
NOT TO SCALE

NOTES:
1. DESIGN PER GEOTECH REPORT PREPARED BY UNITED CONSULTING, DATED 04/19/2024.
2. PAVEMENTS & SUBGRADES INCLUDING MATERIALS & COMPACTION SHALL MEET STANDARDS & SPECIFICATIONS OF THE GOVERNING DEPARTMENT OF TRANSPORTATION.
3. JOINTING & SPACING SHALL BE PER CONCRETE JOINT DETAILS.
4. CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS.



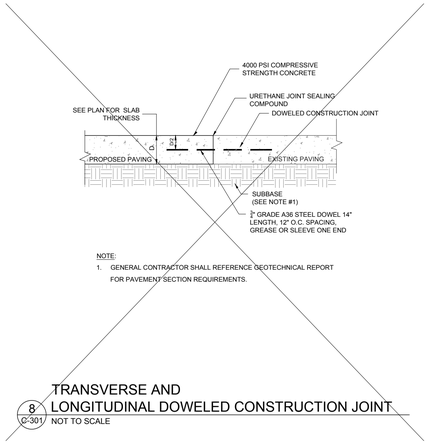
NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.
2. MINIMUM PAVEMENT THICKNESS SHALL BE 6" CONCRETE, 6" AGGREGATE BASE.

6 C-302 CONCRETE PAVEMENT
NOT TO SCALE



NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

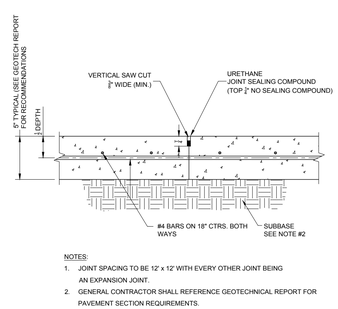
7 C-302 TRANSVERSE AND LONGITUDINAL CONTRACTION JOINT
NOT TO SCALE



NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

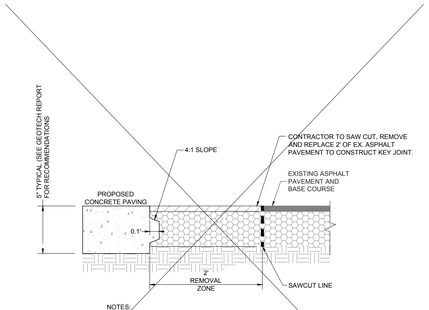
8 C-301 TRANSVERSE AND LONGITUDINAL DOWELED CONSTRUCTION JOINT
NOT TO SCALE

THESE DETAILS APPLY TO CONCRETE PAVED LOTS



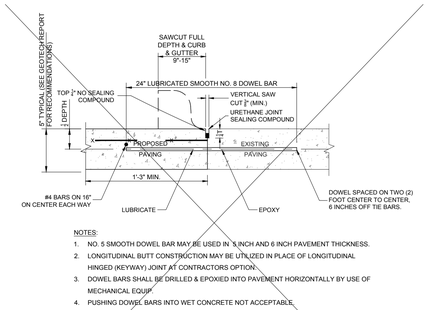
NOTES:
1. JOINT SPACING TO BE 12' x 12' WITH EVERY OTHER JOINT BEING AN EXPANSION JOINT.
2. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

9 C-302 CONTRACTION JOINT
NOT TO SCALE



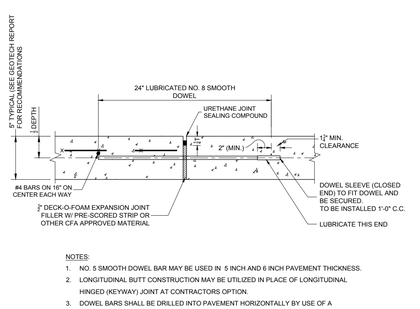
NOTES:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.

10 C-302 KEYED CONSTRUCTION JOINT
NOT TO SCALE



NOTES:
1. NO. 5 SMOOTH DOWEL BAR MAY BE USED IN 5 INCH AND 6 INCH PAVEMENT THICKNESS.
2. LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED (KEYWAY) JOINT AT CONTRACTORS OPTION.
3. DOWEL BARS SHALL BE DRILLED & EPOXIED INTO PAVEMENT HORIZONTALLY BY USE OF MECHANICAL EQUIP.
4. PUSHING DOWEL BARS INTO WET CONCRETE NOT ACCEPTABLE.

11 C-302 LONGITUDINAL BUTT JOINT
NOT TO SCALE



NOTES:
1. NO. 5 SMOOTH DOWEL BAR MAY BE USED IN 5 INCH AND 6 INCH PAVEMENT THICKNESS.
2. LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED (KEYWAY) JOINT AT CONTRACTORS OPTION.
3. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL EQUIPMENT.
4. DRILLING BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO WET CONCRETE NOT ACCEPTABLE.
5. JOINT SPACING TO BE 24'X24' (EVERY OTHER JOINT).

12 C-302 EXPANSION JOINT
NOT TO SCALE

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: c=US, o=BOHLER ENGINEERING, cn=Kyle Morel, e=kmorel@bohlereng.com
Reason: I am approving this document
Location: Winter Haven, FL
Date: 2025.03.31 11:56:43-04'00'
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WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

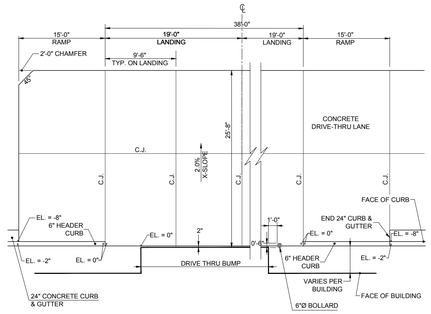
SHEET TITLE
CFA STANDARD DETAILS SHEET

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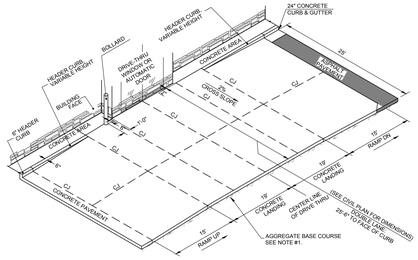
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STORE	: #05814
DATE	: 05/21/2024
DRAWN BY	: RI
CHECKED BY	: KK
CAD ID	: CNDS

SHEET
C-402



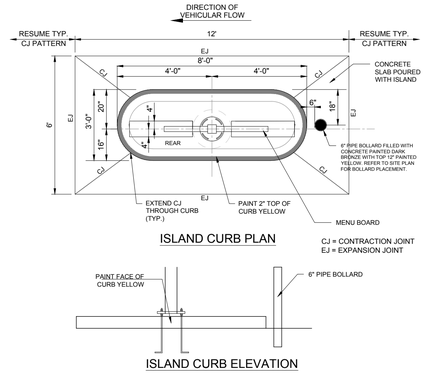
NOTE:
1. ALL ELEVATIONS ON THIS DETAIL ARE RELATIVE TO FFE = 0'.
2. FOR LC FOOTPRINT DECREASE LANDING FROM 38' TO 30'. LANDING SHOULD REMAIN CENTERED ON DRIVE-THRU WINDOW.

1 DRIVE-THRU PLAN - FLUSH WITH FFE
C-301 NOT TO SCALE



NOTE:
1. GENERAL CONTRACTOR SHALL REFERENCE GEOTECHNICAL REPORT FOR PAVEMENT SECTION REQUIREMENTS.
2. FOR LC FOOTPRINT DECREASE LANDING FROM 38' TO 30'. LANDING SHOULD REMAIN CENTERED ON DRIVE-THRU WINDOW.

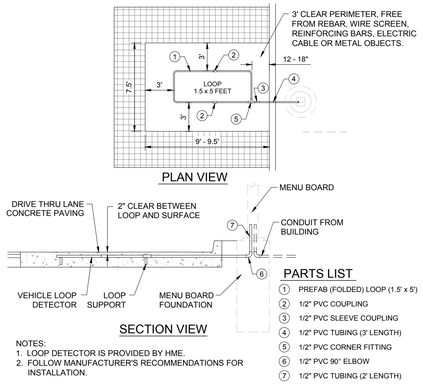
2 DRIVE-THRU ISOMETRIC
C-301 NOT TO SCALE



ISLAND CURB PLAN

ISLAND CURB ELEVATION

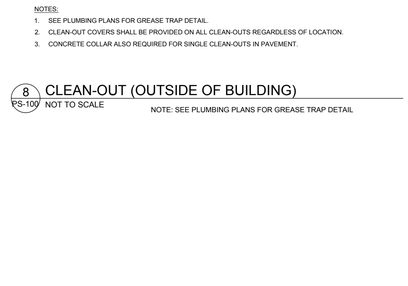
3 DRIVE-THRU ORDER POINT ISLAND
C-200 NOT TO SCALE



NOTES:
1. LOOP DETECTOR IS PROVIDED BY HME.
2. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.

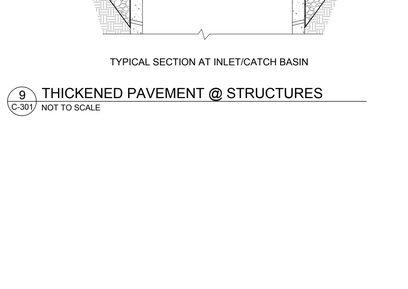
PARTS LIST
1. PREFAB (FOLDED) LOOP (1.5' x 5')
2. 1/2" PVC COUPLING
3. 1/2" PVC SLEEVE COUPLING
4. 1/2" PVC TUBING (3' LENGTH)
5. 1/2" PVC CORNER FITTING
6. 1/2" PVC 90° ELBOW
7. 1/2" PVC TUBING (2' LENGTH)

4 MENU BOARD LOOP DETECTION SYSTEM
C-200 NOT TO SCALE



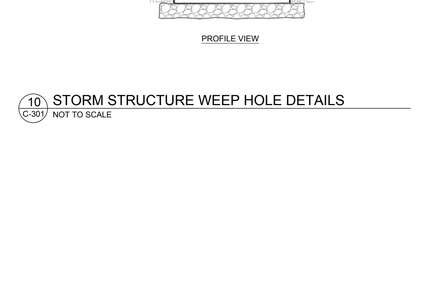
NOTES:
1. FOR ALL DEPTHS OF COVER LESS THAN TWO (2) FEET, PIPE MUST BE SCHEDULE 40 PVC. FOR DEPTHS OF COVER GREATER THAN TWO (2) FEET, FLEXIBLE PIPE MAY BE USED. REFER TO SPECIFICATIONS FOR ALLOWABLE PIPE TYPES.
2. A WATERTIGHT CONNECTION SHALL BE MAINTAINED WITH ANY TRANSITION FROM SCHEDULE 40 PVC PIPE TO ANY OTHER PIPE TYPE.
3. THE DOWNSPOUT COLLECTOR DRAIN SHALL BE INSTALLED BEFORE THE DOWNSPOUTS ARE INSTALLED ON THE BUILDING.
4. IF NECESSARY, ADJUST FOOTING TO ALLOW DOWNSPOUT TO BE INSTALLED TIGHT AGAINST BUILDING.

5 BUILDING DOWNSPOUT CONNECTION
C-301 NOT TO SCALE



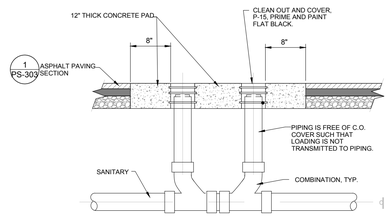
NOTES:
1. CANOPY FOOTING SHALL BE A MINIMUM 2'-0" BELOW DRIVE-THRU LANE PAVEMENT SURFACE. REFER TO CIVIL PLANS FOR EXACT CANOPY FOOTING ELEVATIONS.
2. FLEXIBLE FITTING (NON-SHEAR FERNCO) TO BE UTILIZED BETWEEN PIPE TRANSITIONS AS NECESSARY.
3. CONTRACTOR TO COORDINATE COLUMN DOWNSPOUT ORIENTATION WITH CANOPY VENDOR. ADJUST DOWNSPOUT PIPING AS NECESSARY TO MAKE CONNECTION TO COLLECTOR PIPE.

6 CANOPY DOWNSPOUT CONNECTION
C-301 NOT TO SCALE



REFUSE ENCLOSURE PLAN NOTES:
1. SEE SITE PLAN FOR LAYOUT OF CONCRETE APPROACH PAD.
2. SEE GRADING PLAN FOR ELEVATIONS ON DUMPSTER PAD & DRAINAGE OF INTERIOR TRASH ENCLOSURE.
3. PROVIDE POSITIVE DRAINAGE ON APPROACH PAD AWAY FROM DUMPSTER. (SEE GRADING PLAN)
4. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DIMENSIONS & DETAILS ON ENCLOSURE; COORDINATE & VERIFY SIZE WITH ARCHITECT & STRUCTURAL ENGINEER.
5. GENERAL CONTRACTOR SHALL DRILL HOLES FOR GATE PINS IN BOTH THE OPEN & CLOSED POSITION.

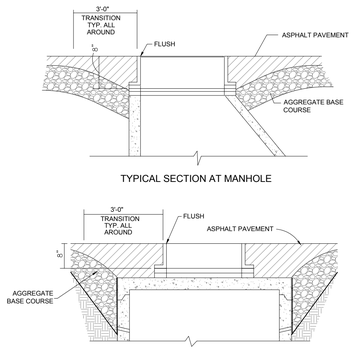
7 SCREENED REFUSE ENCLOSURE
C-200 NOT TO SCALE



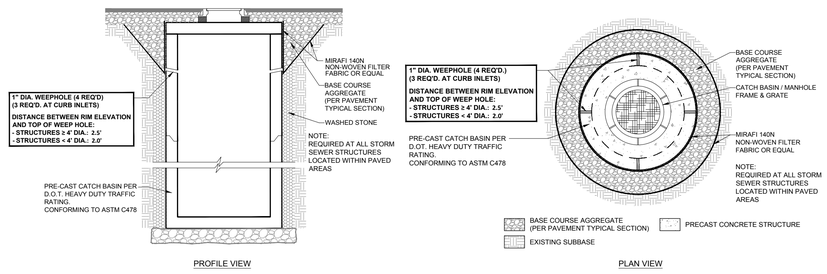
NOTES:
1. SEE PLUMBING PLANS FOR GREASE TRAP DETAIL.
2. CLEAN-OUT COVERS SHALL BE PROVIDED ON ALL CLEAN-OUTS REGARDLESS OF LOCATION.
3. CONCRETE COLLAR ALSO REQUIRED FOR SINGLE CLEAN-OUTS IN PAVEMENT.

8 CLEAN-OUT (OUTSIDE OF BUILDING)
PS-109 NOT TO SCALE

NOTE: SEE PLUMBING PLANS FOR GREASE TRAP DETAIL



9 THICKENED PAVEMENT @ STRUCTURES
C-301 NOT TO SCALE



10 STORM STRUCTURE WEEP HOLE DETAILS
C-301 NOT TO SCALE

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1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK
3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

KYLE STEVEN MOREL
LICENSE
No. 77585
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: c=US, o=Bohler Engineering, cn=Kyle Morel, e=kmorel@bohlereng.com
Date: 2025.03.21 11:38:54-04'00'

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Phone: (813) 812-4100
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CITY OF WINTER SPRINGS

SHEET TITLE
CFA STANDARD DETAILS SHEETS

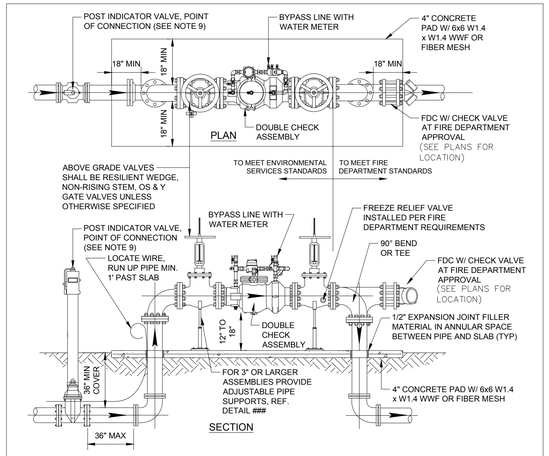
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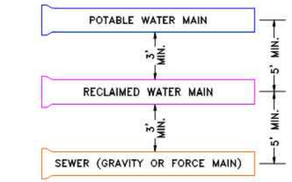


NOTES:
1. BY-PASS METER ASSEMBLY SHALL BE REQUIRED ON MONITORED FIRE SPRINKLER PROTECTION SYSTEMS.
2. THREE (3) INCH DIAMETER AND GREATER METER AND BACKFLOW ASSEMBLIES SHALL MEET REQUIREMENTS SET BY SEMINOLE COUNTY CROSS-CONNECTION CONTROL ORDINANCE 270.11, OR LATEST EDITION.
3. THE OWNER/CUSTOMER, AT HIS OR HER OWN EXPENSE, SHALL INSTALL, OPERATE, TEST, AND MAINTAIN APPROVED BACKFLOW PREVENTION ASSEMBLIES, AS DIRECTED BY SEMINOLE COUNTY ENVIRONMENTAL SERVICES.
4. ALL PIPE AND FITTINGS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
5. THREE (3) INCH DIAMETER AND GREATER ABOVE GRADE PIPE AND FITTINGS SHALL BE FLANGED DUCTILE IRON WITH 316 S.S. HARDWARE. BELOW GRADE FITTINGS SHALL BE RESTRAINED MECHANICAL JOINTS.
6. THREE (3) INCH DIAMETER AND GREATER FIRE LINES SHALL BE DUCTILE IRON PIPE FROM THE CONNECTION TO THE MAIN TO THE ASSEMBLE IF BOTH ARE LOCATED ON THE SAME SIDE OF THE STREET.
7. THE CHECK VALVE ASSEMBLY, VALVES, PIPING, BYPASS METER AND DOUBLE CHECK SHALL BE COATED IN ACCORDANCE TO THE SEMINOLE COUNTY UTILITY ENGINEERING MANUAL.
8. BYPASS METER AND BACKFLOW PREVENTER SHALL BE ASSEMBLED WITH APPROPRIATE FITTINGS TO ALLOW REMOVAL AND RE-INSTALLATION.
9. POST INDICATOR VALVE SHALL BE INSTALLED UPSTREAM OF DOUBLE DETECTOR CHECK VALVE ASSEMBLY AND DOWNSTREAM OF ALL OTHER POTABLE WATER CONNECTIONS.
10. CONCRETE PAD SHALL EXTEND 18 INCHES OUT FROM OUTSIDE EDGE OF ABOVE GRADE PIPING, ALL AROUND, AND SHALL BE A CONTINUOUS MONOLITHIC POUR, REINFORCED WITH 6"x6" W1.4xW1.4 WWF OR FIBER-MESH.
11. TAMPER SWITCHES SHALL BE INSTALLED PER AND INSPECTED BY FIRE DEPARTMENT.

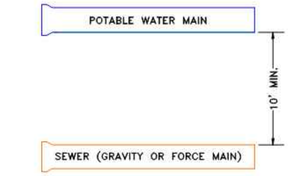
SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION

FIGURE: 203

DOUBLE DETECTOR CHECK VALVE ASSEMBLY

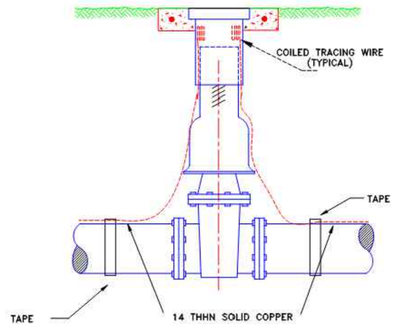


A MINIMUM HORIZONTAL SEPARATION OF 5' (CENTER TO CENTER) OR 3' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWER COLLECTION LINES.



A MINIMUM HORIZONTAL SEPARATION OF 10' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN SEWER COLLECTION LINES AND POTABLE WATER MAINS.

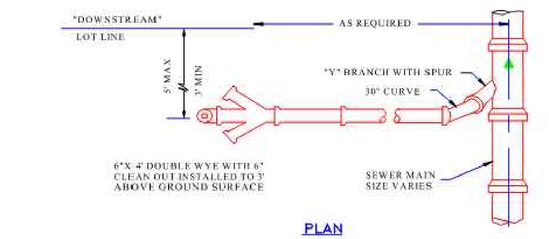
MINIMUM HORIZONTAL SEPARATION REQUIREMENTS FOR POTABLE, RECLAIMED, AND SEWER LINES



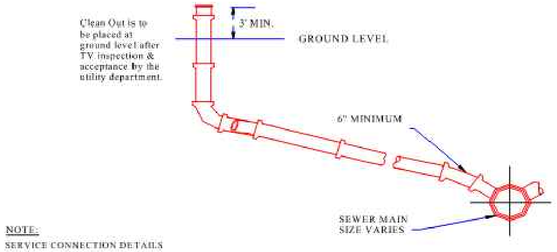
TRACING WIRE GENERAL NOTES:

1. PIPE LINE TRACING WIRE IS TO BE INSTALLED ON ALL POTABLE WATER RECLAIMED WATER AND SEWER FORCE MAINS.
2. SYSTEMS-TRACING WIRE SHALL ALLOW TRACABILITY OF ALL PIPE BRANCHES INCLUDING THOSE FOR HYDRANTS. TRACING WIRE SHALL BE INSTALLED OVER THE ENTIRE LENGTH OF THE MAIN AND SECURED TO THE MAIN EVERY 5 FEET WITH ADHESIVE TAPE. WIRE SHALL EXTEND A MINIMUM OF 12" ABOVE GRADE AT EACH INTERVAL AND SHALL BE COILED AND PLACED IN A VALVE BOX FOR EASY ACCESSIBILITY.
3. ON DEAD END MAINS THE TRACING WIRE SHALL BE PLACED IN A PROPERLY IDENTIFIED PVC VALVE BOX AT THE END OF THE RUN.

TRACING WIRE CONNECTION



PLAN



NOTE:
SERVICE CONNECTION DETAILS SHOWN IS FOR A DOUBLE PVC SERVICE A SINGLE WYE WOULD BE USED FOR A SINGLE SERVICE

PROFILE

SEWER LATERAL DETAIL

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Digitally signed by Kyle Steven Morel
DN: c=US, o=Bohler Engineering, Florida, ou=Bohler Engineering, cn=Kyle Steven Morel, PE, 0.9.2342.19200300.100.1.1=77085@bohlerengineering.com
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Fax: (813) 812-4101
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SHEET TITLE
CITY UTILITY DETAILS SHEET

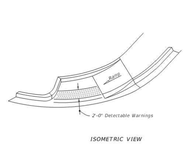
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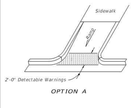
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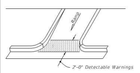
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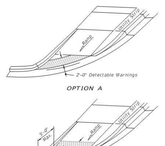
SHEET
C-500

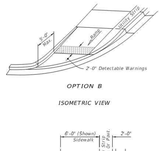
REVISION 4 - 03/18/2025

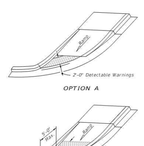


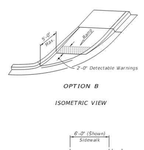


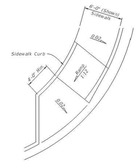


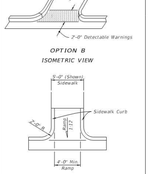


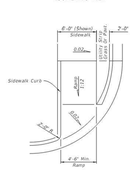


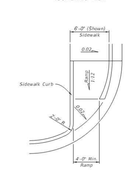












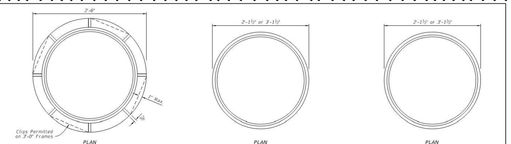
SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

LAST REVISION 11/01/21	DESCRIPTION:	FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 4 of 7

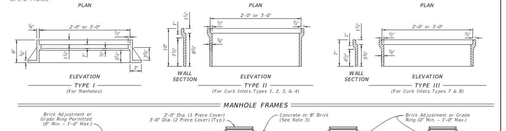
TABLE 1
WEIGHT OF CASTINGS (lb)

Frame Type	2'-0" OPENING Frame	2'-0" OPENING Cover (Std.)	2'-0" OPENING Frame	2'-0" OPENING 2-Piece Cover (Solid/Curb/Grate)	2'-0" OPENING Total
I	135	190	320	190 / 220 / 410	
II	135	190	755	190 / 220 / 410	
III	90	190	180	190 / 229 / 419	

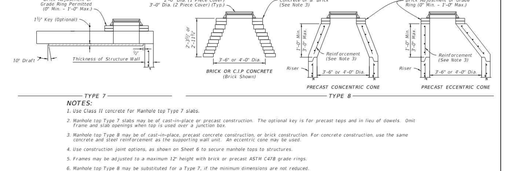
NOTE:
Frame Type I in Table 1, includes Adjustable frames.



MANHOLE FRAMES



TYPE 7 TYPE 8



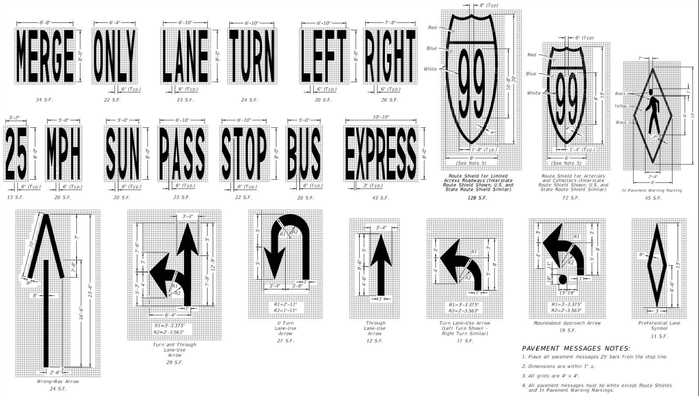
TYPE I ADJUSTABLE FRAME

NOTES:
1. Use Class II concrete for Manhole top Type 7 slabs.
2. Manhole top Type 7 slabs may be of cast-in-place or precast construction. The optional key is for precast tops and in lieu of dowels. Omit frame and slab openings when top is used over a junction box.
3. Manhole top Type 8 may be of cast-in-place, precast concrete construction, or brick construction. For concrete construction, use the same concrete and steel reinforcement as the supporting wall unit. An eccentric cone may be used.
4. Use construction joint options, as shown on Sheet 4 to secure manhole tops to structures.
5. Frames may be adjusted to a maximum 12" height with brick or precast ASTM C478 grade rings.
6. Manhole top Type 8 may be substituted for a Type 7, if the minimum dimensions are not reduced.
7. Manhole top Type 7 may be substituted for Type 8, if the minimum thickness (t) above pipe opening cannot be maintained with Type 8.

MANHOLE TOPS

MANHOLE FRAMES AND MANHOLE TOPS

LAST REVISION 11/01/20	DESCRIPTION:	FY 2024-25 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX 425-001	SHEET 2 of 8



PAVEMENT MESSAGES NOTES:
1. Make all pavement messages 25' back from the stop line.
2. Dimensions are within 1" ±.
3. All grids are 4' x 4'.
4. All pavement messages must be white except Route Shields and In Pavement Warning Markings.
5. Increase width of route shield for routes with three digits.

PAVEMENT MESSAGE AND ARROW DETAILS

LAST REVISION 11/01/21	DESCRIPTION:	FY 2024-25 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 1 of 13

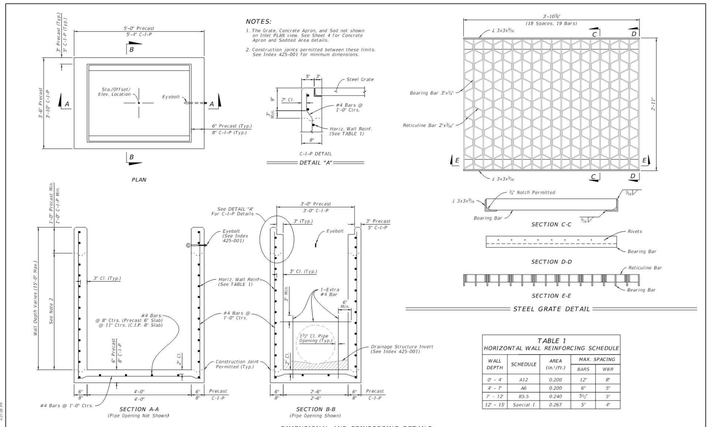


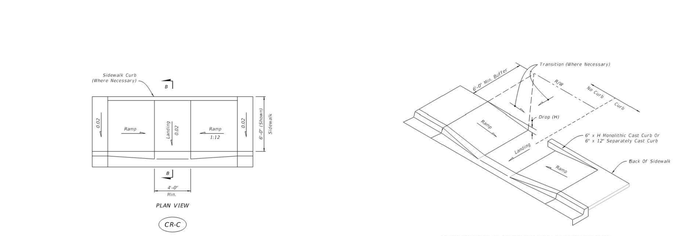
TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

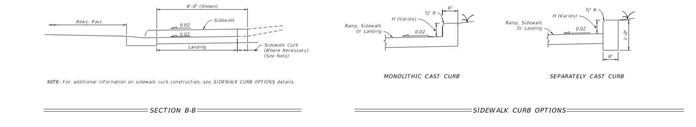
WALL DEPTH	SCHEDULE	AREA (in²/Ft.)	MAX. SPACING BARS	MAX. SPACING WIRE
0' - 4'	A12	0.200	12"	8"
4' - 7'	A6	0.200	6"	5"
7' - 12'	B5.5	0.240	5½"	3"
12' - 15'	Special 1	0.283	5"	4"

DIMENSIONAL AND REINFORCING DETAILS

TYPE F - DIMENSIONAL, REINFORCING, AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FY 2024-25 STANDARD PLANS	DITCH BOTTOM INLET TYPES F AND G	INDEX 425-053	SHEET 2 of 4

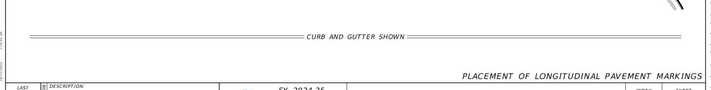




NOTE: For additional information on sidewalk curb construction, see SIDEWALK CURB OPTIONS details.

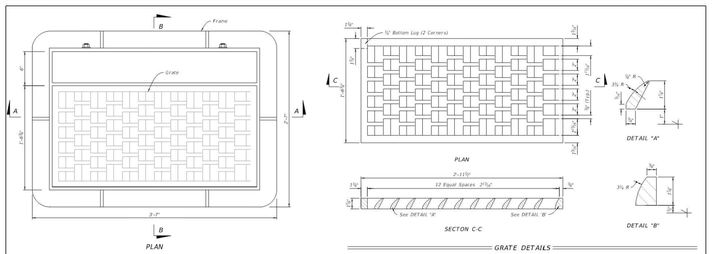
SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

LAST REVISION 11/01/20	DESCRIPTION:	FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 3 of 7



PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

LAST REVISION 11/01/21	DESCRIPTION:	FY 2024-25 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 5 of 13



FRAME AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FY 2024-25 STANDARD PLANS	CURB INLET TYPE 9	INDEX 425-024	SHEET 2 of 3

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3	02/03/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK/KM
4	03/18/2025	CITY OF WINTER SPRINGS	LS/RI / WG

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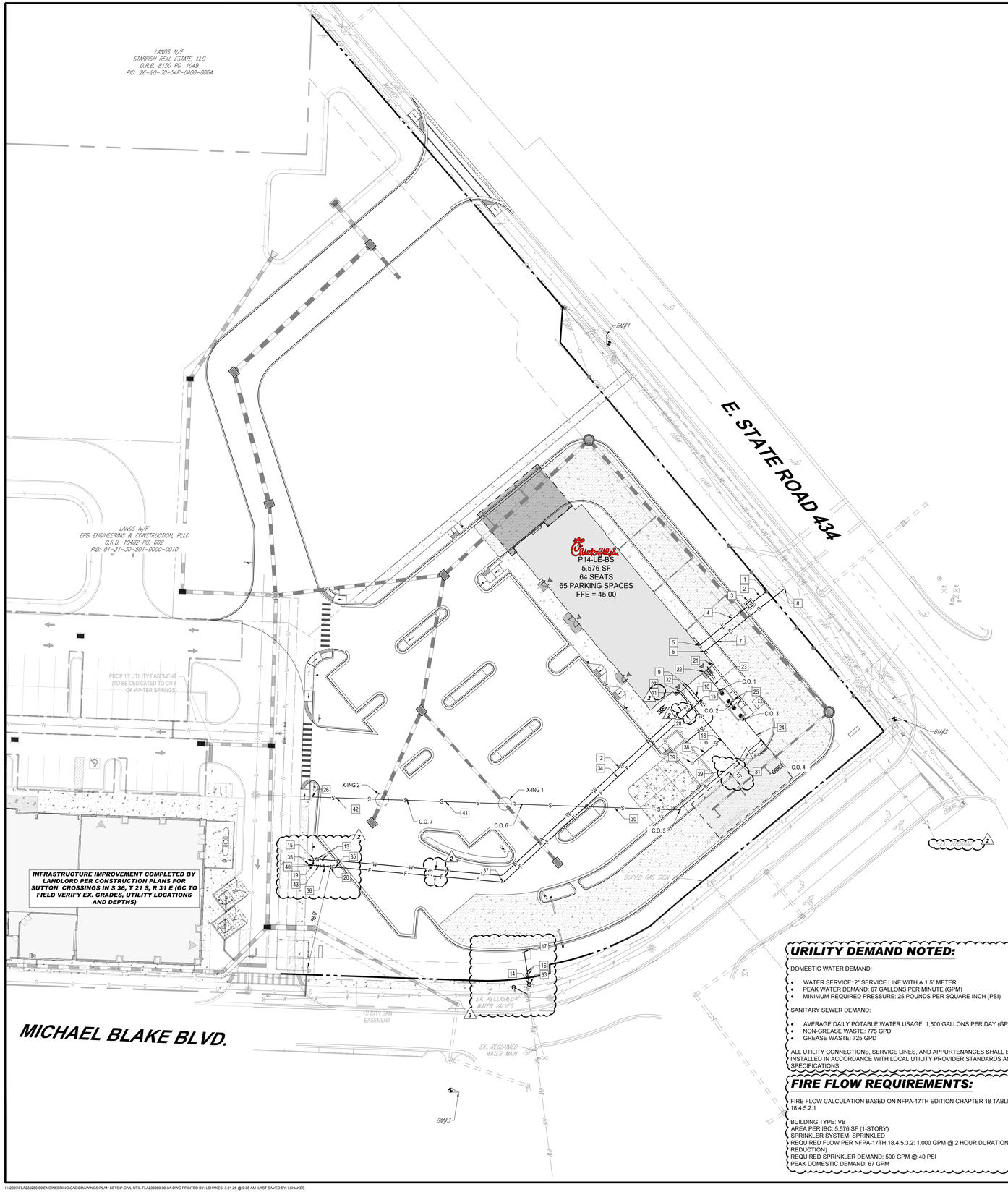
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C-501



GENERAL NOTE:

ALL ONSITE WATER AND SEWER DISTRIBUTION/COLLECTION LINES/MAINS TO BE PRIVATELY OWNED & MAINTAINED UNLESS OR UNTIL A UTILITY EASEMENT IS DESCRIBED & APPROVED BY ALL INVOLVED PARTIES.

SANITARY SEWER NOTES:

A. GENERAL:

1. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.
2. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR TO TELEVISE EXISTING SANITARY SEWER LINE FROM POINT OF CONNECTION THROUGH THE NEXT SEQUENTIAL DOWNSTREAM RUN OF PIPE. ADDITIONALLY, PRIOR TO COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL TELEVISE THE NEWLY INSTALLED SANITARY SEWER MAIN TO ENSURE NO DIPS OR DEBRIS WITHIN LINE.
3. EXISTING SERVICES WITHIN MANHOLES SHALL BE RELOCATED TO NEW SEWER.
4. BYPASS PUMPING MAY BE REQUIRED AND SANITARY SERVICE MAINTAINED WHILE EXISTING SEWER IS BEING REPLACED.
5. CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH CITY WITH MAKING CONNECTION TO PUMP STATION / MANHOLE.
6. CONTRACTOR MUST COORDINATE WITH CITY AND SHOPPING CENTER AND PROVIDE AT LEAST 48-HOURS NOTICE PRIOR TO REPLACING SERVICES.

B. MATERIALS:

1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.
2. ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
3. ALL SANITARY CLEANOUTS WITHIN PAVEMENT SHALL HAVE A LID THAT IS H20 LOADING.

C. INSTALLATION:

1. PIPE AND FITTINGS:
   a. SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, AND THE UNI-BELL PLASTICS PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE."
   b. BEDDING AND INITIAL BACKFILL (12") OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. PEA ROCK OR 3/4 " WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.
2. CLEANOUTS:
   a. CLEANOUTS SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM CLEAN SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
   b. ALL OPENINGS AND JOINTS SHALL BE SEALED WATER-TIGHT.
3. SERVICE:
   a. MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE 1.00%.
   b. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED PLUG.
   c. CONNECTION OF SERVICES TO BUILDING'S PLUMBING SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

D. TESTING:

1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER.
3. SEWER PIPE LEAKAGE ALLOWABLE SHALL NOT EXCEED 150 GALLONS PER DAY PER INCH DIAMETER PER MILE IN A TWO HOUR TEST PERIOD FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED.
4. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO THE CERTIFICATION TO ANY AGENCY.
5. GENERAL CONTRACTOR SHALL EMPLOY AN INDEPENDENT INSPECTOR FOR 1--% CONTINUOUS INSPECTION OF THE BEDDING AND BACKFILL OPERATION. COMPACTION TEST SHALL BE TAKEN AT THE BOTTOM OF TRENCH AND AT EACH LIFT OF BACKFILL.
6. GENERAL CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR AS-BUILT TOP OF PIPE ELEVATIONS TAKEN WHEN BEDDING OPERATIONS IS 75% COMPLETE. THESE ELEVATIONS SHALL BE TAKEN AT POINTS OF CONNECTION, CHANGES IN DIRECTION AND AT MINIMUM 20' INTERVALS ALONG THE LENGTH OF THE PIPE. THESE ELEVATIONS SHALL BE RECORDED AS AS-BUILT DIMENSIONS ON SITE PLAN REVIEW BY PROJECT ENGINEER.
7. ALL SANITARY LINES ARE TO BE FLUSHED PRIOR TO CONTRACTOR TURNOVER OF THE FACILITY.

WATER DISTRIBUTION NOTES:

1. CONTRACTOR SHALL FOLLOW GUIDELINES AND PROCEDURES OUTLINED BY UTILITY PROVIDER, AND HAVE UTILITY PROVIDER'S MANUAL ON-SITE AT ALL TIMES. THIS POLICY MANUAL SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS AS IT PERTAINS TO APPROVED MATERIALS, INSTALLATION METHODS, INSPECTION NOTIFICATION, AND AS-BUILT/PROJECT CLOSEOUT REQUIREMENTS.
2. ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.
3. CONTRACTOR TO COORDINATE WITH COUNTY AND ADJACENT PROPERTY OWNERS AND BUSINESSES FOR ANY ANTICIPATED WATER INTERRUPTIONS FOR CONNECTION TO EXISTING WATER LINE.
4. CONTRACTOR TO DEFLECT OR BEND WATER LINES AS NECESSARY TO MAINTAIN 12" VERTICAL SEPARATION FROM STORM SEWER PER FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. 2

SANITARY SEWER GRAVITY NOTES:

1. IF REQUIRED, THE CONTRACTOR SHALL RECONSTRUCT THE BENCH IN THE EXISTING MANHOLE TO ACCOMMODATE THE NEW FLOW DIRECTION.
2. WASTEWATER FLOW IN THE EXISTING SEWER MUST BE MAINTAINED DURING THE INSTALLATION OF THE LATERAL. IF A BY-PASS IS REQUIRED, THE CONTRACTOR MUST SUBMIT DETAILS OF THE SYSTEM FOR REVIEW AND APPROVAL TO THE CITY OF WINTER SPRINGS PUBLIC WORKS DEPARTMENT PRIOR TO STARTING CONSTRUCTION.

DATUM NOTE:

ELEVATIONS ARE BASED ON NAVD88 DATUM DETERMINED BY GPS OBSERVATIONS AND TIED IN TO THE NGS BENCHMARK NO. AI0227 WITH A PUBLISHED ELEVATION OF 37.81 FEET.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

URILITY DEMAND NOTED:

DOMESTIC WATER DEMAND:

- WATER SERVICE: 2" SERVICE LINE WITH A 1.5" METER
- PEAK WATER DEMAND: 67 GALLONS PER MINUTE (GPM)
- MINIMUM REQUIRED PRESSURE: 25 POUNDS PER SQUARE INCH (PSI)

SANITARY SEWER DEMAND:

- AVERAGE DAILY POTABLE WATER USAGE: 1,500 GALLONS PER DAY (GPD)
- NON-GREASE WASTE: 775 GPD
- GREASE WASTE: 725 GPD

ALL UTILITY CONNECTIONS, SERVICE LINES, AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL UTILITY PROVIDER STANDARDS AND SPECIFICATIONS. 4

FIRE FLOW REQUIREMENTS:

FIRE FLOW CALCULATION BASED ON NFPA-17TH EDITION CHAPTER 18 TABLE 18.4.5.2.1

BUILDING TYPE: VB
AREA PER IBC: 5,576 SF (1-STORY)
SPRINKLER SYSTEM: SPRINKLED
REQUIRED FLOW PER NFPA-17TH 18.4.5.3.2: 1,000 GPM @ 2 HOUR DURATION (75% REDUCTION)
REQUIRED SPRINKLER DEMAND: 590 GPM @ 40 PSI
PEAK DOMESTIC DEMAND: 67 GPM 2

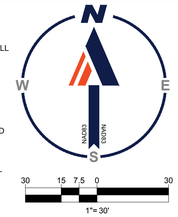
SANITARY CLEANOUT SCHEDULE:

CO-01 RIM ELEV = AT GRADE INV = 40.79	CO-02 RIM ELEV = AT GRADE INV = 40.52	CO-03 RIM ELEV = AT GRADE INV = 40.25	
CO-04 RIM ELEV = AT GRADE INV = 39.98	CO-05 RIM ELEV = AT GRADE INV = 39.07	CO-06 RIM ELEV = AT GRADE INV = 37.85	CO-07 RIM ELEV = AT GRADE INV = 37.15

UTILITY CROSSING SCHEDULE:

X-ING 1:	X-ING 2:
TOP UTILITY - 18" STORM	TOP UTILITY - 24" STORM
STORM INV. = 39.35	STORM INV. = 38.80
BOTTOM UTILITY - 6" SANITARY	BOTTOM UTILITY - 6" SANITARY
SAN. T/P = 38.33	SAN. T/P = 37.00

2



LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND FIRE LINE	F F
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	

UTILITY DESIGN NOTES & KEY PLAN

1. PROP CONNECTION TO EXISTING POWER POLE
2. PROP 9 LF OF ELECTRICAL PRIMARY
3. PROP TRANSFORMER & PULL BOX WITH BOLLARDS (IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. GC TO COORDINATE TRANSFORMER LOCATION, BOLLARDS PLACEMENT AND ALL OTHER REQUIREMENTS WITH THE UTILITY PROVIDER PRIOR TO CONSTRUCTION
4. PROP 35 LF OF ELECTRICAL SECONDARY TO TRANSFORMER
5. PROP ELECTRICAL SERVICE P.O.C. (SEE ARCH PLANS FOR CONTINUATION)
6. PROP GAS P.O.C. (SEE ARCH PLANS FOR CONTINUATION)
7. PROP 59 LF OF GAS MAIN & TRACER WIRE (SEE ARCH PLANS FOR CONTINUATION)
8. PROP CONNECTION INTO GAS MAIN IN ROW.
9. PROP 3/4" WATER P.O.C. (SEE ARCH PLANS FOR CONTINUATION)
10. PROP 45 LF OF 3/4" PE DOMESTIC WATER LINE TO DUMPSTER ENCLOSURE
11. PROP 2" WATER P.O.C. (SEE ARCH PLANS FOR CONTINUATION)
12. PROP 273 LF 2" PE DOMESTIC WATER LINE W/ TRACER WIRE
13. PROP 1 1/2" DOMESTIC WATER METER AND BACK FLOW PREVENTER
14. PROP CONNECTION TO EX. RECLAIMED WATER
15. PROP 90° BEND
16. PROP 1" IRRIGATION WATER METER AND BACK FLOW PREVENTER
17. PROP 1.5" STUB FOR IRRIGATION SERVICE CONNECTION (REFER TO IRRIGATION PLANS FOR CONTINUATION)
18. PROP 6"X6" WYE CONNECTION INV. = 40.10
19. PROP 6"X2" TEE
20. PROP 4" REMOTE FIRE DEPARTMENT CONNECTION WITH (2) 2.5" CONNECTION 2
21. PROP 2" VENTS FOR GREASE INTERCEPTORS
22. PROP 6" SAN P.O.C. @ INV: 41.00 (SEE ARCH PLANS FOR CONTINUATION)
23. PROP 15 LF OF 6" PVC SAN @ 1.50%
24. PROP 18 LF OF 6" PVC SAN @ 1.50%
25. PROP 750-GAL GREASE TRAP (REFER TO ARCH PLANS FOR CONTINUATION)
26. PROP CONNECTION TO EX. SAN STUB @ INV: 35.95
27. PROP 6" SAN P.O.C. @ INV: 41.00 (SEE ARCH PLANS FOR CONTINUATION)
28. PROP 53 LF OF 6" PVC SAN @ 2.45%
29. PROP 61 LF OF 6" PVC SAN @ 1.50%
30. PROP 95 LF OF 6" PVC SAN @ 1.28%
31. PROP 6"X6" WYE CONNECTION INV. = 39.70
32. PROP 6" FIRE LINE P.O.C. (SEE ARCH PLANS FOR CONTINUATION) 2
33. PROP RECLAIM GATE VALVE
34. PROP 304 LF OF 6" DIP FIRE LINE
35. PROP GATE VALVE
36. PROP 6" DDCVA W/ FDC (SEE DETAIL C-500)
37. PROP 6" DIP 45° BEND
38. PROP 21 LF OF 6" PVC SAN @ 4.28%
39. PROP DUMPSTER DRAIN CONNECTION @ INV: 41.00
40. PROP CONNECTION INTO EX. 6" WATER STUB OUT (FIRE P.O.S. PER NFPA 24 [SEC 6.2.1] W/ VALVE) 3
41. PROP 67 LF OF 6" PVC SAN @ 1.05%
42. PROP 55 LF OF 6" PVC SAN @ 1.05%
43. PROP 6" POST INDICATOR VALVE (SEE DETAIL C-500) 3

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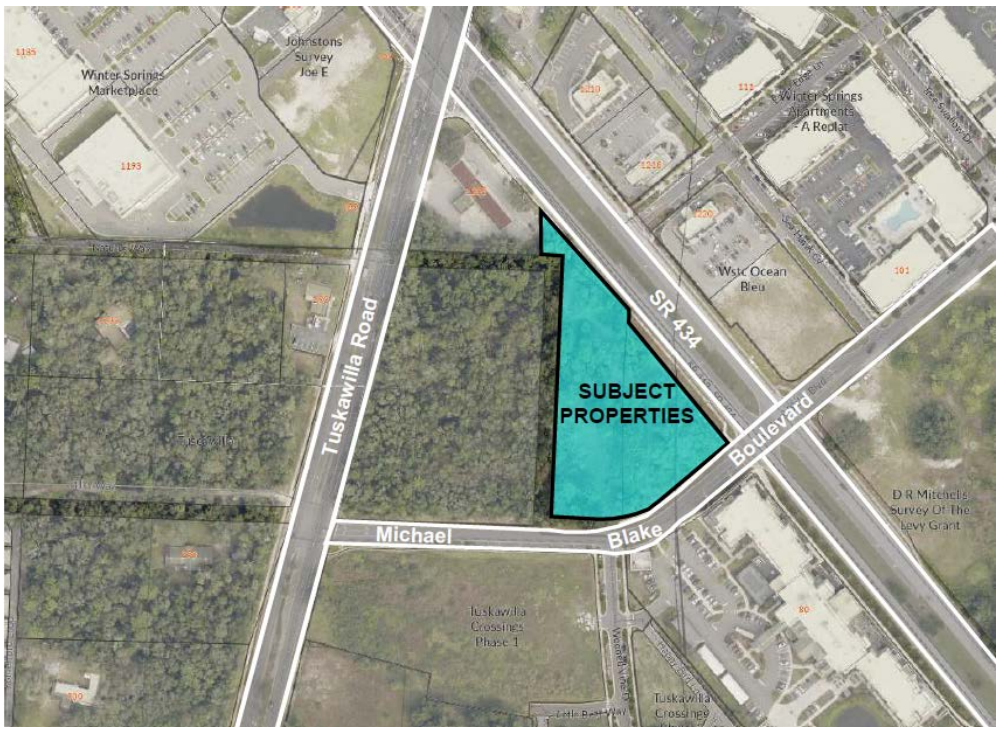
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COMMUNITY WORKSHOP

Date: Tuesday, October 15th @ 6:00 P.M.

Location: Indian Trails Middle School, Library - 105
415 Tuskawilla Rd., Winter Springs, FL 32708

Community Workshop for Site Plan, Waiver, Aesthetics, etc.



Project: Chick-Fil-A, Winter Springs

Project Location: SR434/Michael Blake Blvd
Parcel IDs: 26-20-30-5AR-0A00-008D
26-20-30-5AR-0A00-008H
Acreage: ± 2.30 acres
Existing Zoning: T-C; T-5: Urban Center Zone
Existing Future Land Use: Town Center District
Applicant: Bohler Engineering FL, LLC

DRAINAGE CALCULATION BOOK

For

Sutton Crossings
Tuskawilla Rd and Micheal Blake Blvd.
SEC 38/TWN 21 S/RGE 31 E

Winter Springs, FL 32708

Seminole County

Prepared For:

ACE® Hardware

Prepared By

BOHLER

Florida Business COA # 30780

600 North Westshore Blvd., Suite 950
Tampa, FL 33609

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAS20240828673826, C=US
Date: 2025.02.11 15:32:50-05'00'

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Kyle Morel, P.E.
Florida Professional Engineer License No. 77085

January 20, 2025

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Stormwater Narrative

Appendix A..... Project Maps

- Vicinity Map
- Aerial Map
- Pre-Basin Exhibit
- Post-Basin Exhibit
- Perimeter Rings Exhibit
- FEMA Map
- USGS Soils Map

Appendix B.....Stormwater Calculations

Appendix C .....ICPR4 – Summary Tables

STORMWATER NARRATIVE

Project Name: Ace Hardware
Location: Winter Springs, Fl 32708
Permittee: EPB Engineering & Construction, PLLC
Operating Entity: EPB Engineering & Construction, PLLC
Project Area: 6.13 acres
Project Land Use: Commercial use (Zoning T-5)

I. INTRODUCTION

This report provides the necessary engineering information to support the construction plan approval for the Ace Hardware project in Winter Springs, Florida. It addresses drainage and related engineering considerations required for approval.

The project involves the construction of a commercial development, including a 17,170 sq-ft building, a 6,163 sq-ft outdoor storage area, parking, and utility infrastructure. The site comprises Parcel Numbers 01-21-30-501-0000-001 (Schoen property) and 26-20-30-5AR-0A00-008D/H (Schrimsher property), located northeast of the intersection of Tuskawilla Road and Michael Blake Boulevard, and south of State Route 434.

In addition to the Ace Hardware development, the remainder of the site will be cleared, graded, and seeded for future mixed-use commercial development. Proposed drive aisles will provide access from Tuskawilla Road and Michael Blake Boulevard.

II. SUMMARY

The Sutton Crossings – Ace Hardware project is a 6.13-acre development located in Winter Springs, Florida, northeast of Tuskawilla Road and Michael Blake Boulevard, and south of State Route 434. The undeveloped site is primarily wooded with sporadic grass cover. Aerial imagery illustrating the project location is included in the Aerial Exhibit.

Stormwater management for the development will utilize two interconnected stormwater chamber systems and two interconnected dry retention ponds. These systems will discharge via a control structure into the existing stormwater infrastructure along Michael Blake Boulevard. The design complies with the requirements of the St. John’s River Water Management District (SJRWMD) and the City of Winter Springs.

III. OFF-SITE STORMWATER ANALYSIS

Currently, most stormwater runoff from the site flows south toward Michael Blake Boulevard, where it is collected by the existing stormwater system and directed to "Pond 1" within the Tuskawilla Crossings Subdivision.

A review of previously approved downstream projects indicates that runoff from this site was not accounted for. Pegasus Engineering has been tasked with designing repairs and rehabilitation for Pond 1 and evaluating stormwater management options for the Sutton Crossings development.

A Stormwater Management Design Criteria Memo, dated May 8, 2024, concluded that stormwater runoff from Sutton Crossings must be regulated to prevent adverse impacts on existing infrastructure, specifically drainage structures CB-1 and CB-3 in the Tuskawilla Crossings Construction Plans. The memo specifies:

- Maximum Discharge Rate: 15 cfs to Pond 1 with upsized pipes (CB-3 to CB-4 and CB-4 to CB-6) to 24-inch RCP storm sewer pipes.
- Alternative Discharge Rate: 12 cfs without upsizing the existing pipes.

Off-site pipe upsizing will be addressed by Pegasus Engineering.

IV. EXISTING CONDITIONS

Topography:
The Schoen property slopes gently from approximately elevation 45 ft in the northwest to 42 ft in the southeast. Runoff generally flows toward Michael Blake Boulevard.

Flood Zone:
The site lies within FEMA Zone “X” per Map Panel No. 12117C0160F, dated September 28, 2007.

Soil Conditions:
Geotechnical evaluations by Yovaish Engineering Services identified fine sands classified as Paola-St. Lucie sands (#24) and Tavares-Millhopper fine sands (#31). Permeability tests showed vertical hydraulic conductivity ranging from 17 to 38 ft/day, with horizontal conductivity estimated at 1.5 to 2 times the vertical rate.

The project site covers approximately 6.13 acres and is located northeast of the intersection of Tuskawilla Road and Michael Blake Boulevard and south of State Route 434 in Winter Springs, Florida. The site is currently undeveloped. Vegetation consists of mostly woods with sporadic grass coverage across the site.

Summary of Groundwater Observations

Boring	Depth to Encountered Groundwater (feet)	Boring	Depth to Encountered Groundwater (feet)
TB-1	6.2	RB-2	5.8
TB-2	6.7	RB-3	6.7
TB-3	5.9	RB-4	6.7
PB-1	4.5	RB-5	6.1
PB-2	5.5		

V. DEVELOPED SITE CONDITIONS

The proposed development includes:

- A 17,170 sq-ft Ace Hardware building with three additional units and a covered outdoor area.
- Utilities, parking, and drive aisles.
- Stormwater and water quality BMPs designed for the entire 6.13-acre site.

Approximately 1.57 acres of impervious surfaces are proposed for the Ace Hardware site, with future commercial parcels modeled at 85% impervious coverage. Stormwater will drain to either the storm chamber system or dry retention ponds.

VI. STORMWATER MANAGEMENT & FLOW CONTROL

Pre-Development Conditions:
The site consists of a single undeveloped basin with a pervious CN of 30. Runoff flows southeast toward Michael Blake Boulevard.

Post-Development Conditions:
Stormwater will be managed using storm chambers and dry retention ponds designed to attenuate runoff and meet water quality requirements. The 25-year post-development flow rate is limited to 15 cfs, complying with the Stormwater Management Design Criteria Memo.

Runoff calculations and detailed analyses for pre- and post-development conditions are included in Appendices B and C.

Water Quality Treatment:
Storm chambers and dry retention ponds will provide water quality treatment by infiltrating the first flush of runoff. The treatment volume is designed for the greater of 0.5 inches of runoff or 1.25 inches from impervious areas.

PRE-DEVELOPMENT FLOOD ROUTING MODEL

The site pre-development condition consists of a single-basin undeveloped parcel with a pervious CN of 30.0. The basin is modeled as a hydrograph and flows southeast towards the Michael Blake Blvd right-of-way via sheet and overland flows. Basin (PRE) is 6.13 acres with a time of concentration of 28.1 minutes and discharges at Node (PRE).

Drainage calculations including the pervious CN, time of concentration, and ICPR analysis for pre-development conditions can be found in Appendix B of this report.

POST-DEVELOPMENT FLOOD ROUTING MODEL

The post-development condition incorporates storm chambers and two dry retention ponds to meet water quality and quantity requirements. Infiltration into the underlying soils will be utilized for additional treatment and attenuation.

Due to the existing site topography, a portion of the off-site developed area and some on-site areas on the southern portion of the project site cannot be captured and directed to the proposed on-site stormwater system. These areas will discharge unretained into the existing stormwater infrastructure within the Michael Blake Blvd right-of-way. This bypassed area was modeled as directly discharging off-site and included in the total runoff rate leaving the site.

The post-development site consists of a mixed-use commercial development divided into six drainage basins. A summary of the post-development conditions is provided below:

Post Development Basin	Basin Area (acres)	Impervious Area (acres)	Curve Number, CN	Time of Concentration (Minutes)
Basin 1	1.91	1.47	84.4	10
Basin 2	0.52	0.17	58.3	10
Basin 3	1.13	0.96	89.2	10
Basin 4A	1.66	1.41	89.2	10
Basin 4B	0.91	0.77	89.2	10
Bypass	0.39	0.12	57.2	10

ICPR modeling was used to calculate the 25-year flow under developed conditions. The maximum discharge rate for the combined basins was determined to be less than 15 cfs. Detailed drainage calculations, including pervious CN, required treatment volume, and stage-storage volumes for storm chambers and ponds, are provided in Appendix B, while the ICPR analysis for post-development conditions is included in Appendix C..

TAILWATER CONSIDERATIONS

Stormwater from the treatment and attenuation systems will discharge into an existing catch basin located on the north side of Michael Blake Blvd. The catch basin has an invert elevation of 37.67 feet.

WATER QUALITY TREATMENT VOLUME

The stormwater treatment system incorporates storm chambers and dry retention ponds as BMPs to reduce discharges to the downstream basin. The first flush of runoff will be collected within the aggregate storage layer and infiltrated into the surrounding soils to meet water quality treatment volume requirements. The design treatment volume is based on the greater of:

- The first 0.5 inches of runoff from the total site area, or
- 1.25 inches of runoff from the impervious area.

Detailed calculations and treatment volume requirements are included in Appendix B.

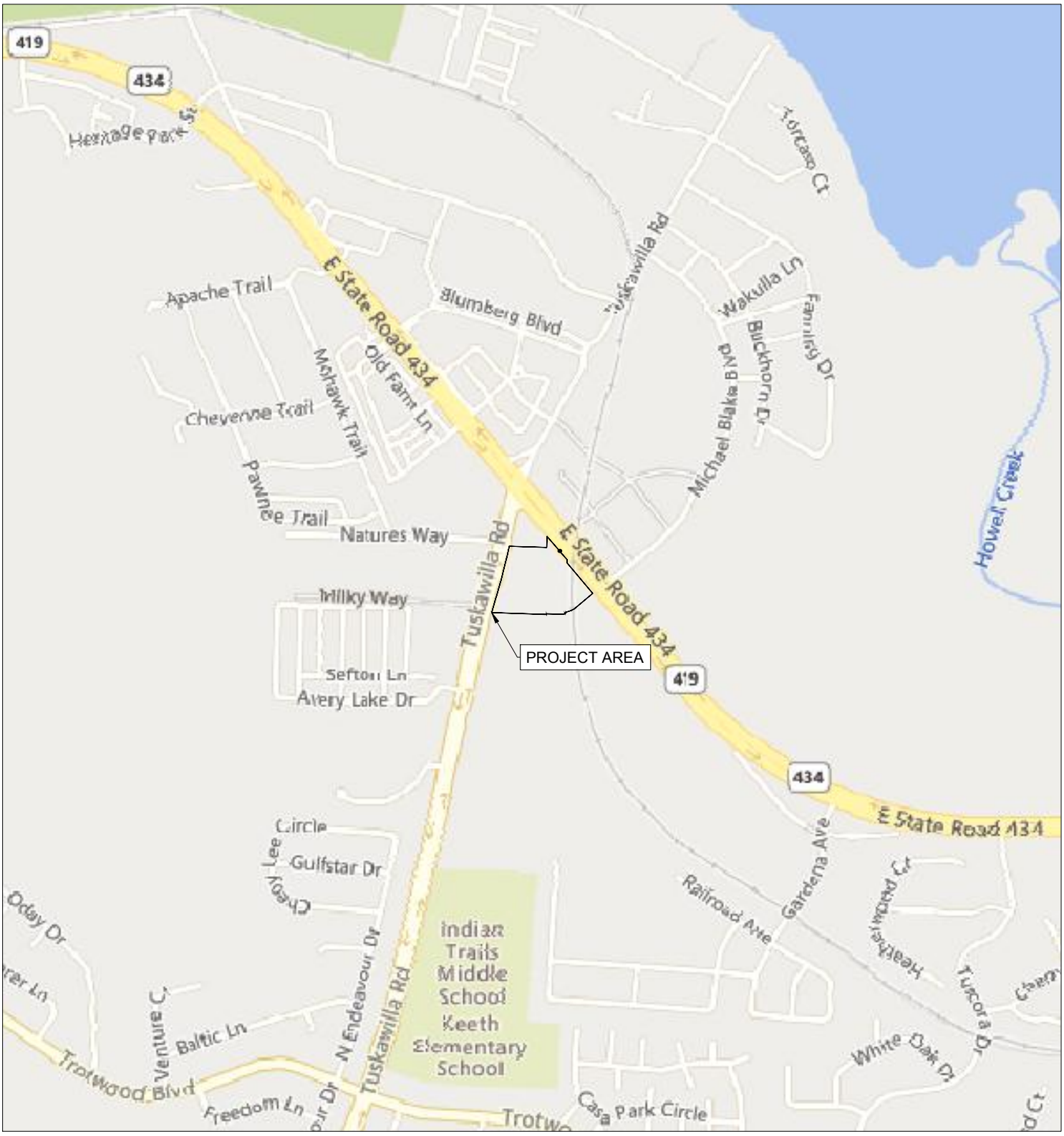
EROSION AND SEDIMENT CONTROL PLANS

Erosion and sediment control measures will be implemented to minimize soil loss and prevent off-site sediment transport during construction. These measures include:

- Planting trees, shrubs, and sod on all pervious surfaces.
- Installing a 1.5-foot sump in all inlets to trap sediment and fines.
- Sodding or seeding and mulching all lawn and pervious areas.
- Providing a temporary gravel construction entrance to prevent the tracking of fines and sands onto adjacent roadways.
- Installing silt fencing around the site perimeter and inlets to retain sediment on-site.

These measures will ensure compliance with state water quality standards and prevent violations from sediment-laden discharges.

Appendix A
Project Maps



H:\2024\FLA240162.00\CAD\DRAWINGS\EXHIBITS\PRE-POST BASIN EXHIBIT\P-EXHA-FLA240162.00-0A----->LAYOUT: VICINITY MAP

VICINITY MAP

1/8/25| LS | P-EXHA-FLA240162.00-0A | Rev. 0

BOHLER

600 N WESTSHORE BLVD., SUITE 950
TAMPA, FLORIDA 33624
Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

TUSKAWILLA RD & E STATE RD 434
WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

1000 500 250 0 1000

1"=1000'



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AERIAL EXHIBIT

1/14/25| LS | P-EXHA-FLA240162.00-0A | Rev. 0

BOHLER

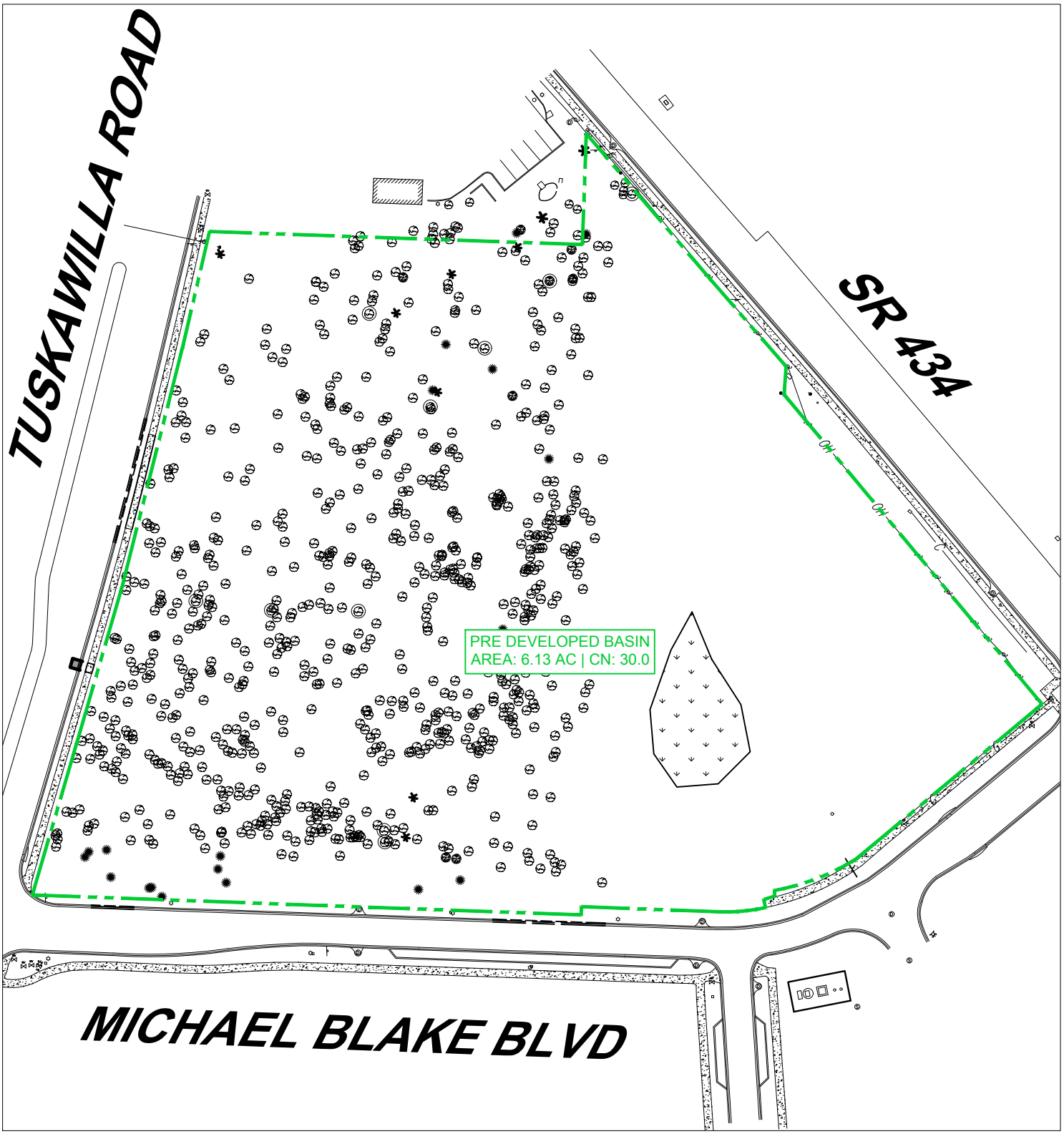
600 N WESTSHORE BLVD., SUITE 950
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Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

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WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

N

150 75 37.5 0
1"=150'



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PRE-BASIN EXHIBIT

7/2/2024 | LS | P-EXHA-FLA240162.00-0A | Rev. 0

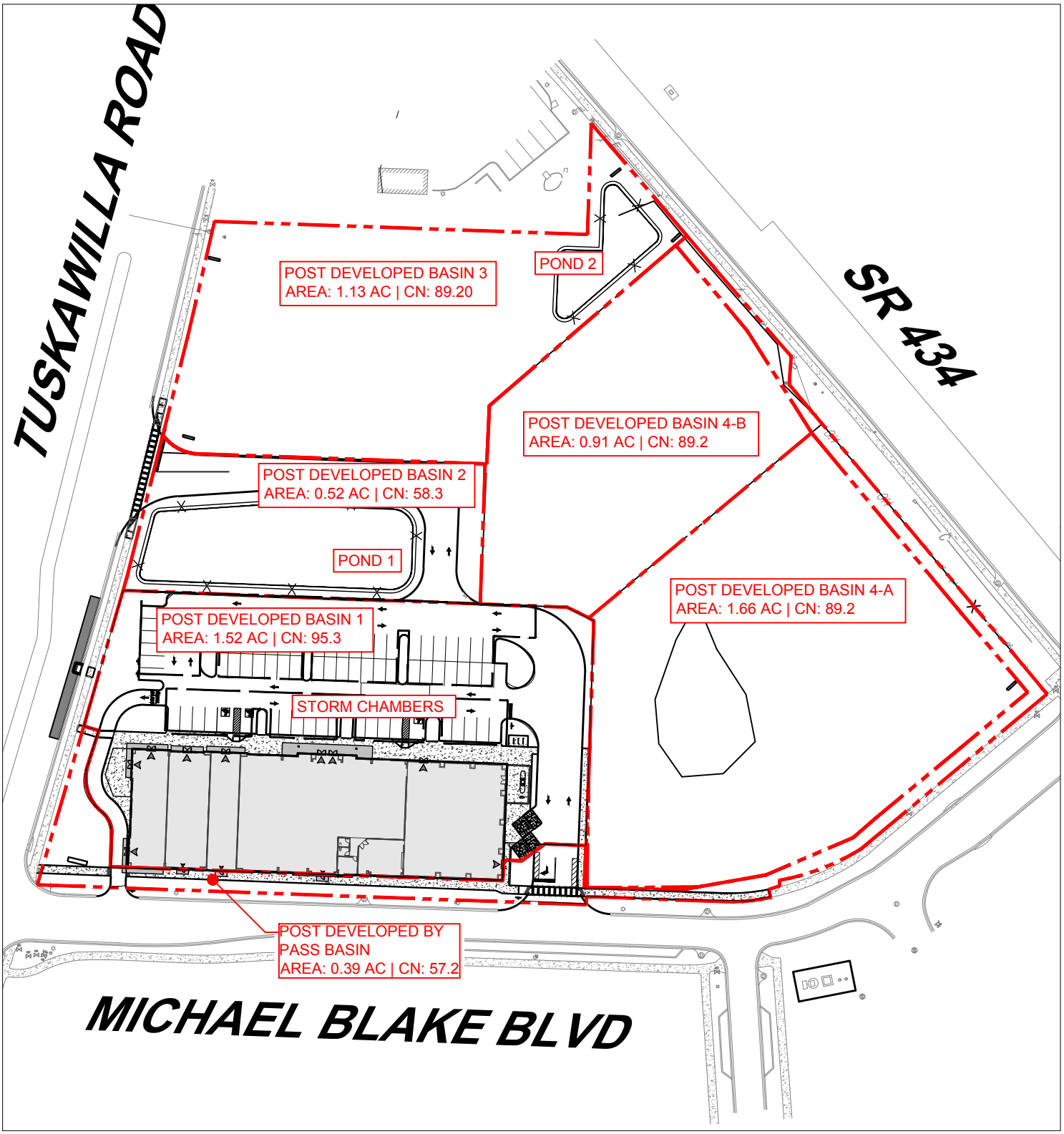
BOHLER

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Phone: (813) 812-4100
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FLORIDA BUSINESS CERT. OF AUTH. No. 30780

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WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

100 50 25 0
1"= 100'



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POST-BASIN EXHIBIT

7/2/2024 | LS | P-EXHA-FLA240162.00-0AKK | Rev. 0

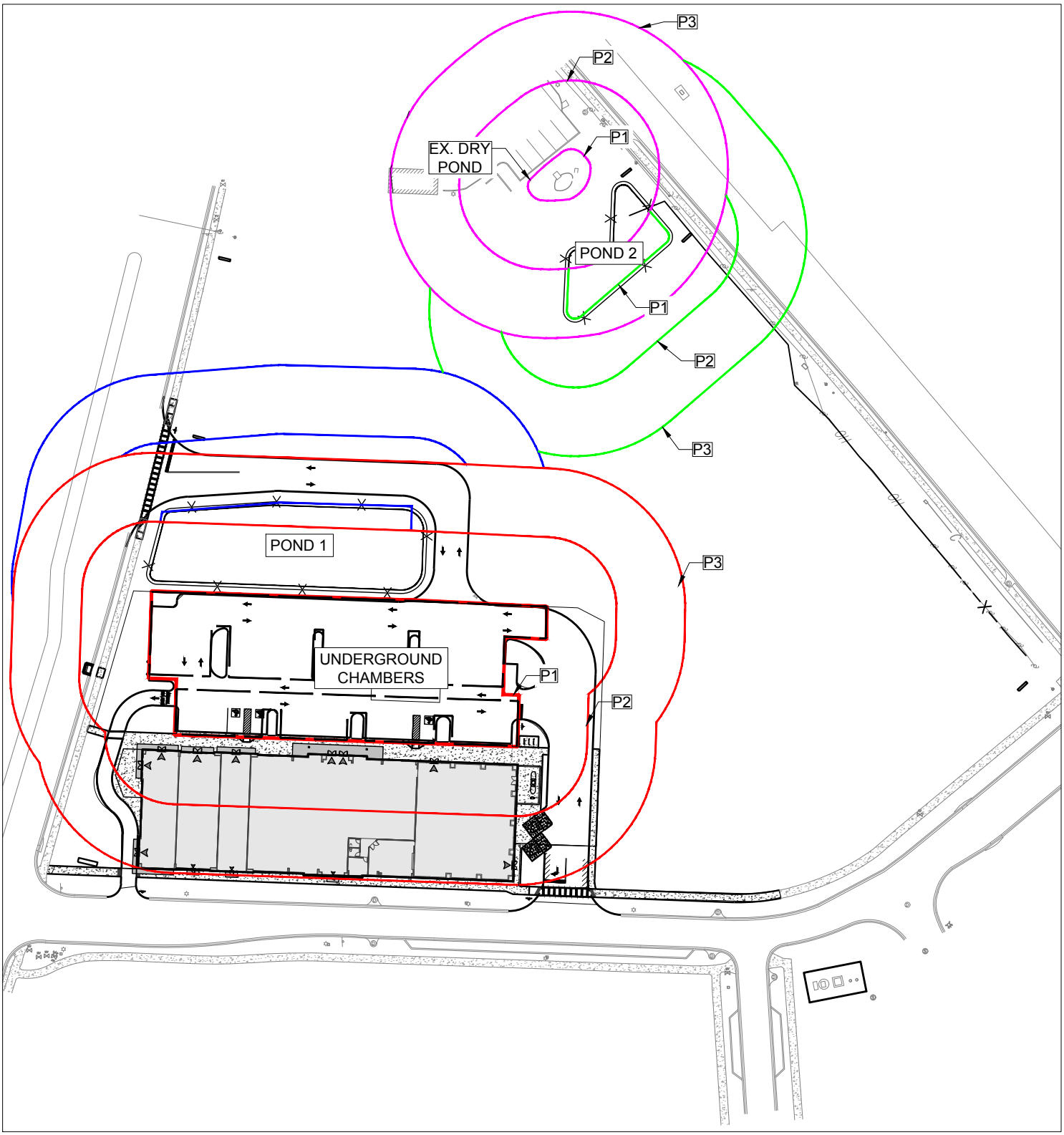
BOHLER

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Phone: (813) 812-4100
Fax: (813) 812-4101

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WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

100 50 25 0
1"= 100'



H:\2024\FLA240162.00\CAD\DRAWINGS\EXHIBITS\PRE-POST BASIN EXHIBIT\P-EXHA-FLA240162.00-0AKK----->LAYOUT: PERIMETER RINGS EXHIBIT

2/11/2025 | LS | P-EXHA-FLA240162.00-0AKK | Rev. 0

PERIMETER RINGS EXHIBIT

TUSKAWILLA RD & E STATE RD 434
WINTER SPRINGS, FL 32708
SEMINOLE COUNTY | PLAN REV. 0

BOHLER //
600 N WESTSHORE BLVD., SUITE 950
TAMPA, FLORIDA 33624
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

N

100 50 25 0
1"= 100'

National Flood Hazard Layer FIRMette

FEMA

81°16'2"W 28°41'58"N



81°15'25"W 28°41'26"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/9/2025 at 6:02 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.


81° 15' 48" W
81° 15' 37" W
28° 41' 45" N
28° 41' 38" N
474260
474290
474320
474350
474380
474410
474440
474470
474500
474530
474560
3174310
3174280
3174250
3174220
3174190
3174160
3174130
Natures Way
Ramp
24
27
31
E State Road 434
419
Tuskawilla
Soil Map may not be valid at this scale.
Map Scale: 1:1,420 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 20 40 80 120
Feet
0 50 100 200 300
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Seminole County, Florida
Survey Area Data: Version 23, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
24	Paola-St. Lucie sands, 0 to 5 percent slopes	1.7	23.4%
27	Pomello fine sand, 0 to 5 percent slopes	1.6	22.1%
31	Tavares-Millhopper fine sands, 0 to 5 percent slopes	4.0	54.6%
Totals for Area of Interest		**7.2**	**100.0%**

Seminole County, Florida

24—Paola-St. Lucie sands, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1lmq8
Elevation: 20 to 130 feet
Mean annual precipitation: 46 to 54 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 332 to 362 days
Farmland classification: Not prime farmland

Map Unit Composition

Paola and similar soils: 52 percent
St. lucie and similar soils: 43 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paola

Setting

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 3 inches: sand
E - 3 to 25 inches: sand
C - 25 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 39.96 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A

Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Description of St. Lucie

Setting

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Eolian or sandy marine deposits

Typical profile

A - 0 to 2 inches: sand
C - 2 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 39.96 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Minor Components

Tavares

Percent of map unit: 5 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Seminole County, Florida
Survey Area Data: Version 23, Aug 26, 2024

Seminole County, Florida

27—Pomello fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2v16w
Elevation: 0 to 130 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 287 to 317 days
Farmland classification: Not prime farmland

Map Unit Composition

Pomello and similar soils: 91 percent
Minor components: 9 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pomello

Setting

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser, rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
E - 4 to 55 inches: fine sand
Bh - 55 to 67 inches: fine sand
Bw - 67 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A
Ecological site: F154XA008FL - Moist Sandy Scrubby Flatwoods
Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G154XB131FL)
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G154XB131FL), South Florida Flatwoods (R154XY003FL)
Hydric soil rating: No

Minor Components

Myakka, non-hydric
Percent of map unit: 4 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F154XA007FL - Moist Sandy Wet-Mesic Flatwoods
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)
Hydric soil rating: No

Eaugallie, non-hydric
Percent of map unit: 2 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F154XA007FL - Moist Sandy Wet-Mesic Flatwoods
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)
Hydric soil rating: No

Basinger, hydric
Percent of map unit: 2 percent
Landform: Drainageways
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave, convex
Across-slope shape: Concave, linear
Ecological site: F154XA007FL - Moist Sandy Wet-Mesic Flatwoods
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Hydric soil rating: Yes

Sparr
Percent of map unit: 1 percent
Landform: Flats on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F154XA004FL - Moist Sandy Pine-Hardwood Woodlands

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G154XB131FL)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Seminole County, Florida
Survey Area Data: Version 23, Aug 26, 2024

Seminole County, Florida

31—Tavares-Millhopper fine sands, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2w4gz
Elevation: 20 to 150 feet
Mean annual precipitation: 45 to 56 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Tavares and similar soils: 58 percent
Millhopper and similar soils: 32 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tavares

Setting

Landform: Flats on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits and/or eolian deposits

Typical profile

A - 0 to 6 inches: fine sand
C - 6 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 42 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A

Ecological site: R155XY180FL - Sandy Scrub on Rises, Ridges, and Knolls of Mesic Uplands
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

Description of Millhopper

Setting

Landform: Rises on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: fine sand
E - 6 to 64 inches: fine sand
Bt - 64 to 76 inches: fine sandy loam
Btg - 76 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F154XA004FL - Moist Sandy Pine-Hardwood Woodlands
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

Minor Components

Candler

Percent of map unit: 3 percent
Landform: Ridges on marine terraces, hills on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve, side slope, riser, rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R155XY230FL - Sandy Scrub on Ridges, Knolls, and Dunes of Xeric Uplands
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Felda

Percent of map unit: 2 percent
Landform: Depressions on marine terraces, flats on marine terraces
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear
Across-slope shape: Linear, concave
Ecological site: R155XY080FL - Sandy over Loamy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Astatula

Percent of map unit: 2 percent
Landform: Knolls on marine terraces, ridges on marine terraces, hills on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve, side slope, riser, rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R155XY230FL - Sandy Scrub on Ridges, Knolls, and Dunes of Xeric Uplands
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Myakka

Percent of map unit: 2 percent
Landform: Drainageways on flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear
Across-slope shape: Linear, concave

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Pomello

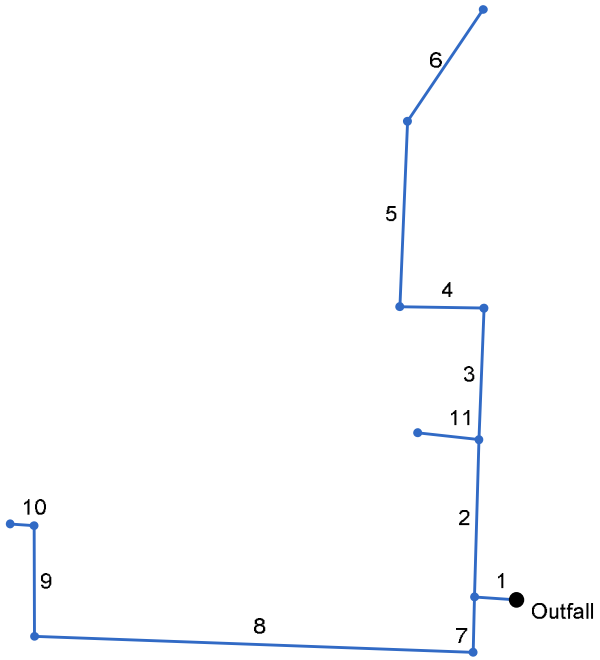
Percent of map unit: 1 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Interfluve, side slope, riser
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: F155XY150FL - Sandy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Seminole County, Florida
Survey Area Data: Version 23, Aug 26, 2024

Appendix B
Stormwater Calculations

Sutton Crossings



Project File: Sutton Crossings Storm Tabs.stm	Number of lines: 11	Date: 2/11/2025

FL-DOT Report 25 YR 24 Hr Storm

Line No	To Line	Type of struc	n - Value	Len (ft)	Drainage Area C1 = 0.3 C2 = 0.95 C3 = 0.9 Increment (ac)	Drainage Area Sub-Total (ac)	Drainage Area Sum CA	Time of conc (min)	Time of Flow in sect (min)	Inten (I) (in/hr)	Total CA	Add Q / Total Flow Q (cfs)	Inlet elev (ft)	Elev of HGL / Elev of Crown / Elev of Invert Up (ft)	Down (ft)	Fall (ft)	Rise / Span Size (in)	HGL / Pipe Slope (%)	ADD / Full Flow Vel (ft/s)	Cap (cfs)	Date: 2/11/2025 / Frequency: 25 yrs / Proj: Sutton Crossings Sto — Line description
1	End	Grate	0.012	28.000	0.00 0.07 0.00	1.13 1.73 0.00	0.34 1.64 0.00	18.01	0.17	6.78	1.98	0.00 13.45	42.55	42.42 40.64 38.14	42.39 40.50 38.00	0.03 0.14	30 30 Cir	0.09 0.50	2.74 6.40	13.45 31.42	
2	1	Grate	0.012	105.000	0.00 0.14 0.00	1.13 1.02 0.00	0.34 0.97 0.00	16.77	0.59	7.03	1.31	0.00 9.20	43.17	42.74 40.98 38.98	42.59 40.14 38.14	0.15 0.84	24 24 Cir	0.14 0.80	2.93 6.98	9.20 21.92	
3	2	MH	0.013	88.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	14.96	1.81	7.44	0.34	0.00 2.52	43.40	42.95 41.24 39.24	42.94 40.98 38.98	0.01 0.26	24 24 Cir	0.01 0.30	0.80 3.91	2.52 12.29	
4	3	MH	0.013	56.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	13.84	1.12	7.72	0.34	0.00 2.62	43.85	42.97 41.41 39.41	42.96 41.24 39.24	0.01 0.17	24 24 Cir	0.01 0.30	0.83 3.97	2.62 12.46	
5	4	MH	0.012	124.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	11.56	2.28	8.39	0.34	0.00 2.84	43.85	42.99 41.66 39.66	42.98 41.41 39.41	0.02 0.25	24 24 Cir	0.01 0.20	0.91 3.50	2.84 11.00	
6	5	Genr	0.012	90.000	1.13 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	10.00	1.56	8.92	0.34	0.00 3.03	44.00	43.02 42.00 40.00	43.00 41.66 39.66	0.01 0.34	24 24 Cir	0.02 0.38	0.96 4.79	3.03 15.06	
7	1	MH	0.013	37.000	0.00 0.00 0.00	0.00 0.64 0.00	0.00 0.61 0.00	17.55	0.46	6.87	0.61	0.00 4.18	43.00	42.60 40.27 38.27	42.59 40.14 38.14	0.01 0.13	24 24 Cir	0.03 0.35	1.33 4.27	4.18 13.41	
8	7	Grate	0.013	292.000	0.00 0.56 0.00	0.00 0.64 0.00	0.00 0.61 0.00	14.26	3.29	7.62	0.61	0.00 4.63	44.10	42.75 41.16 39.16	42.63 40.27 38.27	0.12 0.89	24 24 Cir	0.04 0.30	1.47 3.97	4.63 12.49	
9	8	Grate	0.013	74.000	0.00 0.02 0.00	0.00 0.08 0.00	0.00 0.08 0.00	10.93	3.34	8.60	0.08	0.00 0.65	44.66	42.81 41.03 39.53	42.80 40.66 39.16	0.00 0.37	18 18 Cir	0.00 0.50	0.37 4.20	0.65 7.43	
10	9	Grate	0.013	16.000	0.00 0.06 0.00	0.00 0.06 0.00	0.00 0.06 0.00	10.00	0.93	8.92	0.06	0.00 0.51	43.54	42.81 41.08 39.58	42.81 41.03 39.53	0.00 0.05	18 18 Cir	0.00 0.31	0.29 3.32	0.51 5.87	

NOTES: Intensity = 73.72 / (Inlet time + 7.70) ^ 0.73 (in/hr)

Sutton Crossings

FL-DOT Report 25 YR 24 Hr Storm

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q / Total Flow	Inlet elev	Elev of HGL / Elev of Crown / Elev of Invert			Rise / Span	HGL / Pipe	ADD / Full Flow		Date: 2/11/2025 / Frequency: 25 yrs / Proj: Sutton Crossings Sto
					C1 = 0.3 C2 = 0.95 C3 = 0.9																
					Increment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
11	2	Grate	0.012	41.000	0.00 0.88 0.00	0.00 0.88 0.00	0.00 0.84 0.00	10.00	0.29	8.92	0.84	0.00 7.46	43.12	42.98 41.50 39.50	42.94 40.98 38.98	0.04 0.52	24 24 Cir	0.09 1.27	2.37 8.78	7.46 27.59	

NOTES: Intensity = 73.72 / (Inlet time + 7.70) ^ 0.73 (in/hr)

Sutton Crossings

FL-DOT Report

100 YR 24 Hr Storm

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q	Inlet elev	Elev of HGL			Rise	HGL	ADD		Date: 2/11/2025
					C1 = 0.3 C2 = 0.95 C3 = 0.9							Total Flow		Elev of Crown			Span	Pipe	Full Flow		Frequency: 100 yrs
														Elev of Invert							Proj: Sutton Crossings Sto
					Increment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
1	End	Grate	0.012	28.000	0.00 0.07 0.00	1.13 1.73 0.00	0.34 1.64 0.00	17.60	0.16	7.27	1.98	0.00 14.42	42.55	43.09 40.64 38.14	43.06 40.50 38.00	0.03 0.14	30 30 Cir	0.11 0.50	2.94 6.40	14.42 31.42	
2	1	Grate	0.012	105.000	0.00 0.14 0.00	1.13 1.02 0.00	0.34 0.97 0.00	16.43	0.55	7.51	1.31	0.00 9.83	43.17	43.46 40.98 38.98	43.29 40.14 38.14	0.17 0.84	24 24 Cir	0.16 0.80	3.13 6.98	9.83 21.92	
3	2	MH	0.013	88.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	14.72	1.71	7.90	0.34	0.00 2.68	43.40	43.70 41.24 39.24	43.69 40.98 38.98	0.01 0.26	24 24 Cir	0.01 0.30	0.85 3.91	2.68 12.29	
4	3	MH	0.013	56.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	13.66	1.06	8.17	0.34	0.00 2.77	43.85	43.72 41.41 39.41	43.71 41.24 39.24	0.01 0.17	24 24 Cir	0.02 0.30	0.88 3.97	2.77 12.46	
5	4	MH	0.012	124.000	0.00 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	11.49	2.17	8.81	0.34	0.00 2.99	43.85	43.75 41.66 39.66	43.73 41.41 39.41	0.02 0.25	24 24 Cir	0.01 0.20	0.95 3.50	2.99 11.00	
6	5	Genr	0.012	90.000	1.13 0.00 0.00	1.13 0.00 0.00	0.34 0.00 0.00	10.00	1.49	9.33	0.34	0.00 3.16	44.00	43.77 42.00 40.00	43.76 41.66 39.66	0.01 0.34	24 24 Cir	0.02 0.38	1.01 4.79	3.16 15.06	
7	1	MH	0.013	37.000	0.00 0.00 0.00	0.00 0.64 0.00	0.00 0.61 0.00	17.18	0.43	7.36	0.61	0.00 4.47	43.00	43.31 40.27 38.27	43.29 40.14 38.14	0.01 0.13	24 24 Cir	0.04 0.35	1.42 4.27	4.47 13.41	
8	7	Grate	0.013	292.000	0.00 0.56 0.00	0.00 0.64 0.00	0.00 0.61 0.00	14.07	3.11	8.07	0.61	0.00 4.90	44.10	43.47 41.16 39.16	43.34 40.27 38.27	0.14 0.89	24 24 Cir	0.05 0.30	1.56 3.97	4.90 12.49	
9	8	Grate	0.013	74.000	0.00 0.02 0.00	0.00 0.08 0.00	0.00 0.08 0.00	10.89	3.18	9.01	0.08	0.00 0.68	44.66	43.53 41.03 39.53	43.53 40.66 39.16	0.00 0.37	18 18 Cir	0.00 0.50	0.39 4.20	0.68 7.43	
10	9	Grate	0.013	16.000	0.00 0.06 0.00	0.00 0.06 0.00	0.00 0.06 0.00	10.00	0.89	9.33	0.06	0.00 0.53	43.54	43.54 41.08 39.58	43.54 41.03 39.53	0.00 0.05	18 18 Cir	0.00 0.31	0.30 3.32	0.53 5.87	

NOTES: Intensity = 52.22 / (Inlet time + 5.60) ^ 0.63 (in/hr)

Sutton Crossings

FL-DOT Report

100 YR 24 Hr Storm

Line No	To Line	Type of struc	n - Value	Len	Drainage Area			Time of conc	Time of Flow in sect	Inten (I)	Total CA	Add Q / Total Flow	Inlet elev	Elev of HGL / Elev of Crown / Elev of Invert			Rise / Span	HGL / Pipe	ADD / Full Flow		Date: 2/11/2025 / Frequency: 100 yrs / Proj: Sutton Crossings Sto
					C1 = 0.3 C2 = 0.95 C3 = 0.9																
					Incre-ment (ac)	Sub-Total (ac)	Sum CA					Q		Up	Down	Fall	Size	Slope	Vel	Cap	
				(ft)				(min)	(min)	(in/hr)		(cfs)	(ft)	(ft)	(ft)	(ft)	(in)	(%)	(ft/s)	(cfs)	Line description
11	2	Grate	0.012	41.000	0.00 0.88 0.00	0.00 0.88 0.00	0.00 0.84 0.00	10.00	0.28	9.33	0.84	0.00 7.80	43.12	43.73 41.50 39.50	43.69 40.98 38.98	0.04 0.52	24 24 Cir	0.10 1.27	2.48 8.78	7.80 27.59	

NOTES: Intensity = 52.22 / (Inlet time + 5.60) ^ 0.63 (in/hr)

Sutton Crossings

PROJECT NAME: **SUTTON CROSSINGS**
PROJECT #: **FLA240162.00**

SUMMARY OF GROUND COVER DATA

ON-SITE AREA

BASIN	Land Use Description	Runoff Coefficient	CN	Area (ac.)	Total Area (ac)	Weighted CN	Weighted Runoff Coefficient
PRE-DEVELOPMENT BASIN	Impervious	0.95	98	0.00	6.13	**30.0**	**0.3**
	Woods (Hydrologic Soil Group A)	0.30	30	6.13			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 1	Impervious	0.95	98	1.45	1.52	**95.3**	**0.9**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.07			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 2	Impervious	0.95	98	0.17	0.52	**58.3**	**0.5**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.35			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 3	Impervious	0.95	98	0.96	1.13	**89.1**	**0.9**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.17			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 4-A	Impervious	0.95	98	1.41	1.66	**89.1**	**0.9**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.25			
	Open Water	1.00	100	0.00			
POST-DEVELOPMENT BASIN 4-B	Impervious	0.95	98	0.77	0.91	**88.9**	**0.9**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.14			
	Open Water	1.00	100	0.00			
POST-BP BYPASS	Impervious	0.95	98	0.12	0.39	**57.2**	**0.5**
	Open Space (Hydrologic Soil Group A)	0.30	39	0.27			
	Open Water	1.00	100	0.00			

Notes:
1.) See Appendix D for NRCS Soils Map
2.) CN Values based on Hydrologic Soil Group information provided within the geotechnical report
3.) CN numbers per TR-55, Urban Hydrology for Small Watersheds

LOT	AREA (AC)	PROPOSED IMPERVIOUS AREA (AC)	TOTAL ALLOWABLE IMPERVIOUS (AC)	TOTAL REMIAINING IMPERVIOUS (AC)	%
LOT 1	1.91	1.57	1.57	0.00	82%
LOT 2	0.52	0.17	0.17	0.00	33%
LOT 3	1.13	0.00	0.96	0.96	85%
LOT 4-A	1.66	0.00	1.41	1.41	85%
LOT 4-B	0.91	0.00	0.77	0.77	85%
TOTAL	6.13	1.74	4.88	3.14	

PROJECT: **SUTTON CROSSINGS**
PROJECT #: **FLA240162.00**

PRE DEVELOPMENT - Time of Concentration (Tc) Summary

Flow Parameter	Pre Development
Overland Flow	
Length (ft)	100
Slope (%)	1.00%
Manning n (1)	0.4
P (in) (2)	4.50
Tc (min) (3)	23.89
Shallow Concentrated Flow	
Swale Length (ft)	425
Swale Slope (%)	1.10%
Tc (min) (4)	4.19
TOTAL Tc	**28.1**

NOTES:

(1) From Table 2.2 of FDOT Drainage Manual, 2020 dense grass
(2) 2yr/24hr rainfall depth from NOAA rainfall data
(3) From Eq. 1 of "Tc Methodology by Flow Regime"
(4) From Eqs. 2 and 3 of "Tc Methodology by Flow Regime"
(5) Cross sectional area of inner pipe
(6) Perimeter of inner pipe
(7) Hydraulic Radius where R=A/P
(8) From Table T-1 of FDOT Hydrology Handbook, 2000

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 1)

IMPERVIOUS AREA	**(ac)**	1.45
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.151 6579

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 1)

BASIN AREA	**(ac)**	1.52
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.063 2759

SJRWMD ADDTIONAL REQUIRED TREATMENT

BASIN AREA	**(ac)**	1.52
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.063 2759

TOTAL REQUIRED TREATMENT (BASIN 1)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.214 9338

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 2)

IMPERVIOUS AREA	**(ac)**	0.17
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.018 771

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 2)

BASIN AREA	**(ac)**	0.52
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.022 946

SJRWMD ADDTIONAL REQUIRED TREATMENT (BASIN 2)

BASIN AREA	**(ac)**	0.52
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.022 946

TOTAL REQUIRED TREATMENT (BASIN 2)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.043 1891

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 3)

IMPERVIOUS AREA	**(ac)**	0.96
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.100 4356

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 3)

BASIN AREA	**(ac)**	1.13
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.047 2051

SJRWMD ADDTIONAL REQUIRED TREATMENT (BASIN 3)

BASIN AREA	**(ac)**	1.13
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.047 2051

TOTAL REQUIRED TREATMENT (BASIN 3)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.147 6407

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 4-A)

IMPERVIOUS AREA	**(ac)**	1.41
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.147 6398

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 4-A)

BASIN AREA	**(ac)**	1.66
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.069 3013

SJRWMD ADDTIONAL REQUIRED TREATMENT (BASIN 4-A)

BASIN AREA	**(ac)**	1.66
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.069 3013

TOTAL REQUIRED TREATMENT (BASIN 4-A)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.216 9411

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

SJRWMD REQUIRED TREATMENT OVER IMPERVIOUS AREA (BASIN 4-B)

IMPERVIOUS AREA	**(ac)**	0.77
DEPTH OF TREATMENT	**(in)**	1.25
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.080 3494

SJRWMD REQUIRED TREATMENT OVER DRAINAGE AREA (BASIN 4-B)

BASIN AREA	**(ac)**	0.91
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.038 1652

SJRWMD ADDTIONAL REQUIRED TREATMENT (BASIN 4-B)

BASIN AREA	**(ac)**	0.91
DEPTH OF TREATMENT	**(in)**	0.50
WATER QUALITY VOLUME	**(ac-ft)** **(cu-ft)**	0.038 1652

TOTAL REQUIRED TREATMENT (BASIN 4-B)

TOTAL QUALITY WATER VOLUME	**(ac-ft)** **(cu-ft)**	0.118 5146

PROJECT NAME: SUTTON CROSSINGS
PROJECT #: FLA240162.00

Stage - Storage Calculations

DRY RETENTION - POND 1

Elevation+7:787:18 (ft NGVD)	Area (sq ft)	Area (acres)	Incremental Volume (ac-ft)	Cumulative Volume (ac-ft)	Cumulative Volume (c-ft)
40.00	10,800	0.248	0.000	0.000	0
40.07	10,800	0.248	0.017	0.017	720
40.15	10,800	0.248	0.021	0.037	1620
40.23	10,800	0.248	0.021	0.058	2520
40.32	10,800	0.248	0.021	0.079	3420
40.40	10,800	0.248	0.021	0.099	4320
40.48	10,800	0.248	0.021	0.120	5220
40.57	10,800	0.248	0.021	0.140	6120
40.65	10,800	0.248	0.021	0.161	7020
40.73	10,800	0.248	0.021	0.182	7920
40.82	10,800	0.248	0.021	0.202	8820
40.90	10,800	0.248	0.021	0.223	9720
40.98	10,800	0.248	0.021	0.244	10620
41.07	10,800	0.248	0.021	0.264	11520
41.15	10,800	0.248	0.021	0.285	12420
41.23	10,800	0.248	0.021	0.306	13320
41.32	10,800	0.248	0.021	0.326	14220
41.40	10,800	0.248	0.021	0.347	15120
41.48	10,800	0.248	0.021	0.368	16020
41.57	10,800	0.248	0.021	0.388	16920
41.65	10,800	0.248	0.021	0.409	17820
41.73	10,800	0.248	0.021	0.430	18720
41.82	10,800	0.248	0.021	0.450	19620
41.90	10,800	0.248	0.021	0.471	20520
41.98	10,800	0.248	0.021	0.492	21420
42.07	10,800	0.248	0.021	0.512	22320
42.15	10,800	0.248	0.021	0.533	23220
42.23	10,800	0.248	0.021	0.554	24120
44.00	10,800	0.248	0.438	0.992	43200

DRY RETENTION - POND 2

Elevation (ft NGVD)	Area (sq ft)	Area (acres)	Incremental Volume (ac-ft)	Cumulative Volume (ac-ft)	Cumulative Volume (c-ft)
40.00	3,104	0.071	0.000	0.000	0
40.07	3,104	0.071	0.005	0.005	207
40.15	3,104	0.071	0.006	0.011	466
40.23	3,104	0.071	0.006	0.017	724
40.32	3,104	0.071	0.006	0.023	983
40.40	3,104	0.071	0.006	0.029	1242
40.48	3,104	0.071	0.006	0.034	1500
40.57	3,104	0.071	0.006	0.040	1759
40.65	3,104	0.071	0.006	0.046	2018
40.73	3,104	0.071	0.006	0.052	2276
40.82	3,104	0.071	0.006	0.058	2535
40.90	3,104	0.071	0.006	0.064	2794
40.98	3,104	0.071	0.006	0.070	3052
41.07	3,104	0.071	0.006	0.076	3311
41.15	3,104	0.071	0.006	0.082	3570
41.23	3,104	0.071	0.006	0.088	3828
41.32	3,104	0.071	0.006	0.094	4087
41.40	3,104	0.071	0.006	0.100	4346
41.48	3,104	0.071	0.006	0.106	4604
41.57	3,104	0.071	0.006	0.112	4863
41.65	3,104	0.071	0.006	0.118	5122
41.73	3,104	0.071	0.006	0.124	5380
41.82	3,104	0.071	0.006	0.129	5639
41.90	3,104	0.071	0.006	0.135	5898
41.98	3,104	0.071	0.006	0.141	6156
42.07	3,104	0.071	0.006	0.147	6415
42.15	3,104	0.071	0.006	0.153	6674
42.23	3,104	0.071	0.006	0.159	6932
44.00	3,104	0.071	0.126	0.285	12416

DRY RETENTION - UNDERGROUND CHAMBERS

Elevation (ft NGVD)	Area (sq ft)	Area (acres)	Incremental Volume (ac-ft)	Cumulative Volume (ac-ft)	Cumulative Volume (c-ft)
39.90	8961.54	0.206	**0**	**0**	**0**
39.98	8961.54	0.206	0.017	0.017	747
40.00	8961.54	0.206	0.003	0.021	896
40.07	8961.54	0.206	0.014	0.034	1494
40.15	8961.54	0.206	0.017	0.051	2240
40.23	8961.54	0.206	0.017	0.069	2987
40.32	8961.54	0.206	0.017	0.086	3734
40.40	8961.54	0.206	0.017	0.103	4481
40.48	19507.70	0.448	0.027	0.130	5667
40.57	19289.96	0.443	0.037	0.167	7284
40.65	18995.82	0.436	0.037	0.204	8879
40.73	18698.69	0.429	0.036	0.240	10449
40.82	18333.45	0.421	0.035	0.275	11992
40.90	17892.81	0.411	0.035	0.310	13502
40.98	17446.90	0.401	0.034	0.344	14974
41.07	17007.82	0.390	0.033	0.377	16410
41.15	16422.99	0.377	0.032	0.409	17803
41.23	15758.15	0.362	0.031	0.439	19144
41.32	15022.83	0.345	0.029	0.469	20426
41.40	14137.10	0.325	0.028	0.497	21641
41.48	12966.42	0.298	0.026	0.523	22771
41.57	10915.95	0.251	0.023	0.546	23766
41.65	10098.87	0.232	0.020	0.566	24641
41.73	9393.81	0.216	0.019	0.584	25454
41.82	8961.54	0.206	0.018	0.602	26218
41.90	8961.54	0.206	0.017	0.619	26965
41.98	8961.54	0.206	0.017	0.636	27712
42.07	8961.54	0.206	0.017	0.653	28459
42.15	8961.54	0.206	0.017	0.670	29206
42.23	8961.54	0.206	0.017	0.688	29952

TOTAL STAGE VOLUME

Elevation (ft NGVD)	Incremental Volume (ac-ft)	Cumulative Volume (ac-ft)	Cumulative Volume (c-ft)
39.90	0.000	0.000	0
39.98	0.017	0.017	747
40.00	0.003	0.021	896
40.07	0.035	0.056	2421
40.15	0.044	0.099	4326
40.23	0.044	0.143	6231
40.32	0.044	0.187	8137
40.40	0.044	0.231	10042
40.48	0.054	0.284	12387
40.57	0.064	0.348	15162
40.65	0.063	0.411	17916
40.73	0.063	0.474	20646
40.82	0.062	0.536	23347
40.90	0.061	0.597	26015
40.98	0.060	0.658	28647
41.07	0.060	0.717	31241
41.15	0.059	0.776	33792
41.23	0.057	0.833	36292
41.32	0.056	0.889	38733
41.40	0.054	0.944	41107
41.48	0.053	0.996	43395
41.57	0.049	1.046	45549
41.65	0.047	1.092	47583
41.73	0.045	1.138	49554
41.82	0.044	1.182	51477
41.90	0.044	1.225	53383
41.98	0.044	1.269	55288
42.07	0.044	1.313	57194
42.15	0.044	1.357	59099
42.23	0.044	1.400	61005
44.00	0.564	1.964	85568

TOTAL QUALITY WATER BASIN 1

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.214
	(cu-ft)	9338

TOTAL QUALITY WATER BASIN 2

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.043
	(cu-ft)	1891

TOTAL QUALITY WATER BASIN 3

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.147
	(cu-ft)	6407

TOTAL QUALITY WATER BASIN 4-A

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.216
	(cu-ft)	9411

TOTAL QUALITY WATER BASIN 4-B

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.118
	(cu-ft)	5146

TOTAL QUALITY WATER BASIN

TOTAL QUALITY WATER VOLUME	**(ac-ft)**	0.739
	(cu-ft)	32193
WATER QUALITY ELEVATION	**(ft)**	41.10

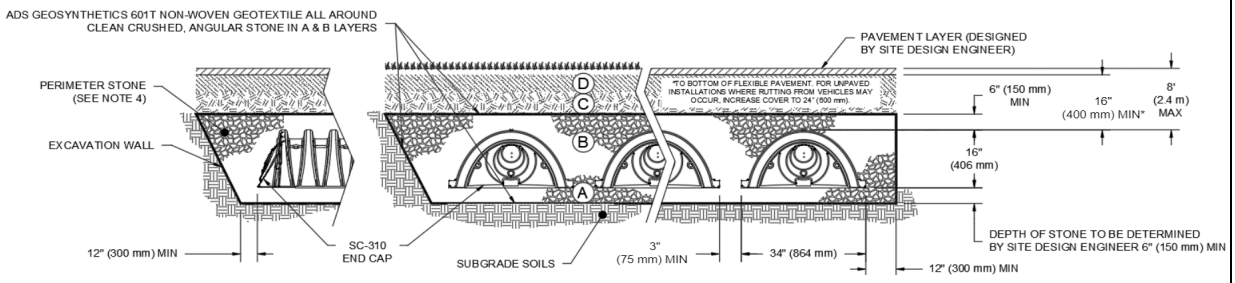
Project: SUTTON CROSSINGS

Area of System	22405	*sf*
Stone Porosity	40	*%*
Bottom of System EL	39.90	*ft*
Top of Storage EL		*ft*
Bottom of Storage EL		*ft*
Chamber Height	16	*in*
Chamber Length	85.4	*in*
Chamber Width	34	*in*
Row Space	3	*in*
Chamber Installed Footprint	21.9	*sf*
Stone Above Chambers	6	*in*
Stone Below Chambers	6	*in*
Chamber Total in System Area	1021	*qty*

Total Volume	
29952.32	
Vol. Below Top EL	
29952.32	
Vol. Below Bot EL	
0.00	
Design Volume	
29952.32	

StormTech SC-310 Cumulative Storage Volumes

Height of System *(inches)*	Incremental Chamber Storage *(cubic feet)*	Incremental Stone Storage *(cubic feet)*	Incremental Chamber & Stone *(cubic feet)*	Cumulative Total *(cubic feet)*	Elevation *(feet)*
28	0.00	746.80	746.80	29952.32	42.23
27	0.00	746.80	746.80	29205.52	42.15
26	0.00	746.80	746.80	28458.73	42.07
25	0.00	746.80	746.80	27711.93	41.98
24	0.00	746.80	746.80	26965.14	41.90
23	0.00	746.80	746.80	26218.34	41.82
22	60.04	722.78	782.82	25471.54	41.73
21	157.96	683.61	841.57	24688.73	41.65
20	271.45	638.22	909.66	23847.16	41.57
19	556.23	524.30	1080.54	22937.49	41.48
18	718.83	459.26	1178.09	21856.96	41.40
17	841.85	410.06	1251.90	20678.87	41.32
16	943.97	369.21	1313.18	19426.96	41.23
15	1036.31	332.27	1368.58	18113.78	41.15
14	1117.54	299.78	1417.32	16745.20	41.07
13	1178.52	275.39	1453.91	15327.88	40.98
12	1240.45	250.61	1491.07	13873.97	40.90
11	1301.65	226.13	1527.79	12382.91	40.82
10	1352.38	205.84	1558.22	10855.12	40.73
9	1393.65	189.34	1582.99	9296.90	40.65
8	1434.50	172.99	1607.50	7713.91	40.57
7	1464.74	160.90	1625.64	6106.41	40.48
6	0.00	746.80	746.80	4480.77	40.40
5	0.00	746.80	746.80	3733.98	40.32
4	0.00	746.80	746.80	2987.18	40.23
3	0.00	746.80	746.80	2240.39	40.15
2	0.00	746.80	746.80	1493.59	40.07
1	0.00	746.80	746.80	746.80	39.98



NOTE: If the software program being used allows for Stage Volume data, it is recommended to use the stage volume data from this spreadsheet. Software programs typically use linear interpolation to take stage area data and estimate stage volume data. Due to rounding differences over the total number of stages provided in this spreadsheet, the accuracy of the estimated volume could be off as much as 1%. It is recommended that the user check the software estimated volume and compare it to the volume listed in this spreadsheet to ensure the accuracy is within acceptable levels.

Stage Area Data

Height of System *(inches)*	Depth *(feet)*	Elevation *(feet)*	Area *(ft^2)*	Area *(acres)*
28	2.33	42.23	8961.54	0.2057
27	2.25	42.15	8961.54	0.2057
26	2.17	42.07	8961.54	0.2057
25	2.08	41.98	8961.54	0.2057
24	2.00	41.90	8961.54	0.2057
23	1.92	41.82	8961.54	0.2057
22	1.83	41.73	9393.81	0.2157
21	1.75	41.65	10098.87	0.2318
20	1.67	41.57	10915.95	0.2506
19	1.58	41.48	12966.42	0.2977
18	1.50	41.40	14137.10	0.3245
17	1.42	41.32	15022.83	0.3449
16	1.33	41.23	15758.15	0.3618
15	1.25	41.15	16422.99	0.3770
14	1.17	41.07	17007.82	0.3904
13	1.08	40.98	17446.90	0.4005
12	1.00	40.90	17892.81	0.4108
11	0.92	40.82	18333.45	0.4209
10	0.83	40.73	18698.69	0.4293
9	0.75	40.65	18995.82	0.4361
8	0.67	40.57	19289.96	0.4428
7	0.58	40.48	19507.70	0.4478
6	0.50	40.40	8961.54	0.2057
5	0.42	40.32	8961.54	0.2057
4	0.33	40.23	8961.54	0.2057
3	0.25	40.15	8961.54	0.2057
2	0.17	40.07	8961.54	0.2057
1	0.08	39.98	8961.54	0.2057
0	0.00	39.90	8961.54	0.2057

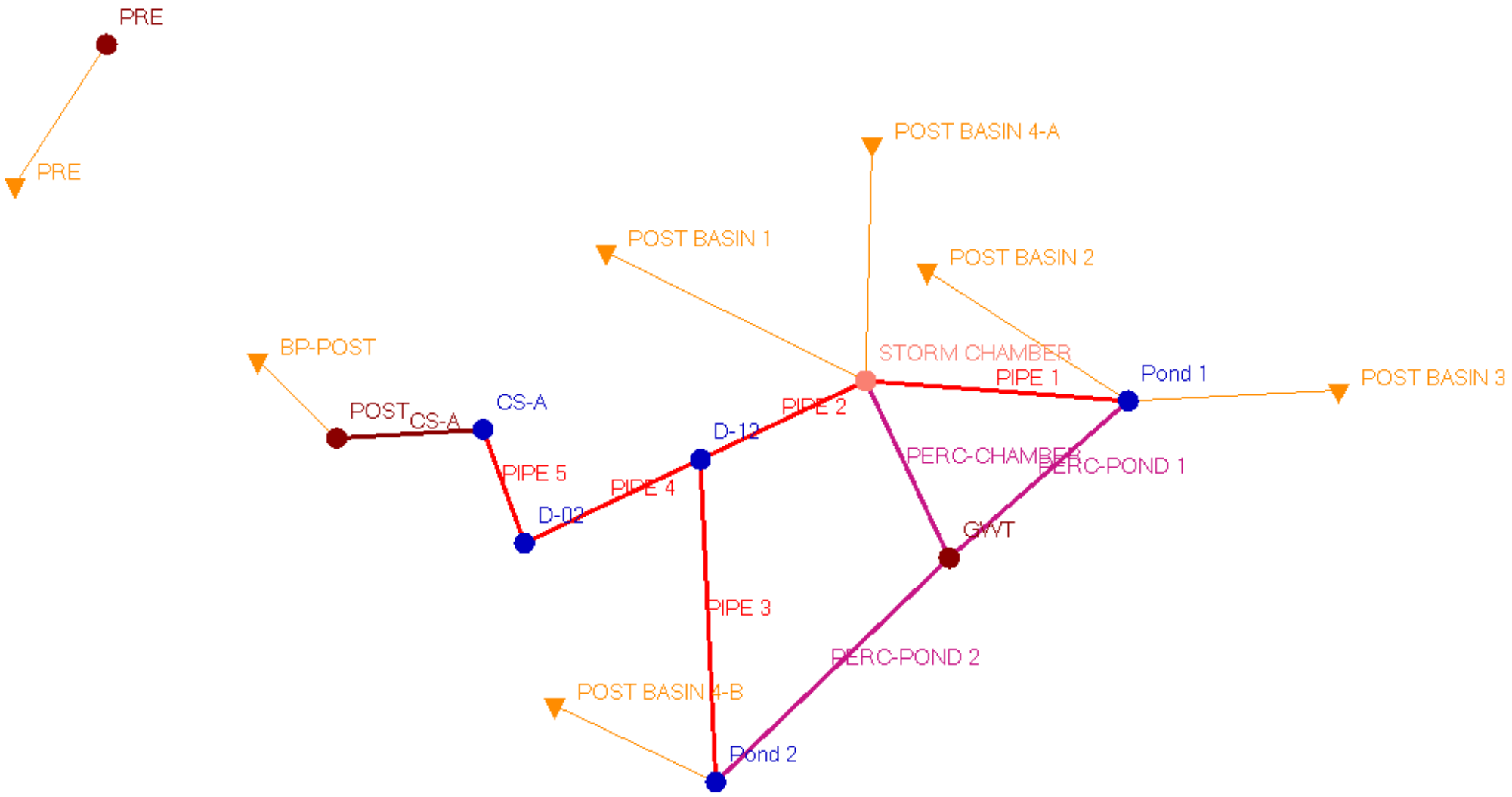
PROJECT NAME: **SUTTON CROSSINGS**
PROJECT NUMBER: **FLA240162.00**

Max Stage		
Simulation	**Node Name**	**Pond Stage (ft)**
010Y-24H	POND 1	41.79
010Y-24H	POND 2	41.78
010Y-24H	STORM CHAMBER	41.79
100Y-24H	POND 1	43.06
100Y-24H	POND 2	42.99
100Y-24H	STORM CHAMBER	43.05
025Y-24H	POND 1	42.39
025Y-24H	POND 2	42.36
025Y-24H	STORM CHAMBER	42.39
MEAN	POND 1	41.28
MEAN	POND 2	41.28
MEAN	STORM CHAMBER	41.28

Simulation	**Pre Q (cfs)**	**Post Q (cfs)**
MEAN	0	0.28
010Y-24H	0.14	5.20
025Y-24H	0.57	11.60
100Y-24H	2.01	16.08

Appendix C

ICPR4 - Summary Tables


PRE
PRE
POST BASIN 4-A
POST BASIN 1
POST BASIN 2
BP-POST
STORM CHAMBER
PIPE 1
Pond 1
POST BASIN 3
POST
CS-A
CS-A
PIPE 2
D-12
PERC-CHAMBER
PERC-POND 1
PIPE 5
PIPE 4
D-02
GWT
PIPE 3
PERC-POND 2
POST BASIN 4-B
Pond 2

Simple Basin:

Scenario:	Scenario1
Node:	
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	0.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	
Peaking Factor:	0.0
Area:	0.0000 ac
Curve Number:	0.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: BP-POST

Scenario:	Scenario1
Node:	POST
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.3900 ac
Curve Number:	57.2
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 1

Scenario:	Scenario1
Node:	STORM CHAMBER
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1.5200 ac
Curve Number:	95.3
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 2

Scenario:	Scenario1
Node:	Pond 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.5200 ac
Curve Number:	58.3
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 3

Scenario:	Scenario1
Node:	Pond 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	99999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1.1300 ac
Curve Number:	89.2
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 4-A

Scenario:	Scenario1
Node:	STORM CHAMBER
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	1.6600 ac
Curve Number:	89.2
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST BASIN 4-B

Scenario:	Scenario1
Node:	Pond 2
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	0.9100 ac
Curve Number:	89.2
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: PRE

Scenario:	Scenario1
Node:	PRE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	28.1000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	6.1300 ac
Curve Number:	30.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: CS-A

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	38.90 ft
Warning Stage:	44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0001	4
999.00	0.0010	44

Comment:

Node: D-02

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	38.90 ft
Warning Stage:	44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0010	44
999.00	0.0010	44

Comment:

Node: D-12

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0001	4
999.00	0.0010	44

Comment:

Node: GWT

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 38.90 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	38.90
0	0	0	72.0000	38.90

Comment:

Node: POST

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Comment:

Node: PRE

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs

Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage:

Comment:

Node: Pond 1

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
40.00	0.2480	10803
41.00	0.2480	10803
42.00	0.2480	10803
43.00	0.2480	10803
44.00	0.2480	10803

Comment:

Node: Pond 2

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 44.00 ft

Stage [ft]	Area [ac]	Area [ft2]
40.00	0.0710	3093
41.00	0.0710	3093
42.00	0.0710	3093
43.00	0.0710	3093
44.00	0.0710	3093

Comment:

Node: STORM CHAMBER

Scenario: Scenario1
Type: Stage/Volume

Base Flow: 0.00 cfs
Initial Stage: 38.90 ft
Warning Stage: 44.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
39.90	0.00	0
40.48	0.14	6098
40.90	0.32	13939
41.40	0.50	21780
41.90	0.62	27007
42.23	0.69	30056

Comment: Used StormTech Calculator to developed Z-V table.

SC-310 chambers

Drop Structure Link: CS-A		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario1	Invert:	38.00 ft	Invert:	37.67 ft
From Node:	CS-A	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	POST	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	94.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Sharp Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	41.20 ft	Ref Node:	
Control Elevation:	41.20 ft	Discharge Coefficients	
Max Depth:	9999.00 ft	Weir Default:	3.200
Max Width:	4.00 ft	Weir Table:	
Fillet:	0.00 ft		

Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Percolation Link: PERC-CHAMBER

Scenario:	Scenario1	Surface Area Option:	User Specified
From Node:	STORM CHAMBER	Bottom Elevation:	39.90 ft
To Node:	GWT	Surface Area:	0.6000 ac
Link Count:	1	Vertical Flow Termination:	Horizontal Flow Algorithm
Flow Direction:	Both	Perimeter 1:	807.00 ft
Aquifer Base Elevation:	34.00 ft	Perimeter 2:	1074.00 ft
Water Table Elevation:	38.90 ft	Perimeter 3:	1385.00 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	22.250 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	14.830 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.250	# of Cells P2 to P3:	29
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: PERC-POND 1

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond 1		
To Node:	GWT	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	208.00 ft
Flow Direction:	Both	Perimeter 2:	262.00 ft
Aquifer Base Elevation:	34.00 ft	Perimeter 3:	519.00 ft
Water Table Elevation:	38.90 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	16.270 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	10.120 fpd	# of Cells P2 to P3:	29
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment:

Percolation Link: PERC-POND 2

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond 2		
To Node:	GWT	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	156.00 ft

Flow Direction:	Both		
Aquifer Base Elevation:	36.00 ft	Perimeter 2:	272.00 ft
Water Table Elevation:	38.07 ft	Perimeter 3:	594.00 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	14.290 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	8.890 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.250	# of Cells P2 to P3:	29
Layer Thickness:	1.93 ft		

Comment:

Pipe Link: PIPE 1		Upstream		Downstream	
Scenario:	Scenario1	Invert:	40.00 ft	Invert:	40.00 ft
From Node:	Pond 1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	STORM CHAMBER	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	8.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: PIPE 2		Upstream		Downstream	
Scenario:	Scenario1	Invert:	39.50 ft	Invert:	38.98 ft
From Node:	STORM CHAMBER	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	D-12	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	40.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: PIPE 3		Upstream		Downstream	
Scenario:	Scenario1	Invert:	40.00 ft	Invert:	38.98 ft
From Node:	Pond 2	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	D-12	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	349.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: PIPE 4		Upstream		Downstream	
Scenario:	Scenario1	Invert:	38.98 ft	Invert:	38.14 ft
From Node:	D-12	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	D-02	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	106.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: PIPE 5		Upstream		Downstream	
Scenario:	Scenario1	Invert:	38.14 ft	Invert:	38.00 ft
From Node:	D-02	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	CS-A	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	28.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			

Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Simulation: 010Y-24H

Scenario: Scenario1
Run Date/Time: 2/11/2025 1:02:36 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	30.0000	0.0500
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSIII-24
		Rainfall Amount:	6.80 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 025Y-24H

Scenario: Scenario1
Run Date/Time: 2/11/2025 1:03:17 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	30.0000	0.0500
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSIII-24
		Rainfall Amount:	8.60 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100Y-24H

Scenario: Scenario1
Run Date/Time: 2/11/2025 1:04:16 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

Year	Month	Day	Hour [hr]

Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	10.80 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2

Energy Switch (1D): Energy

Comment:

Simulation: MEAN

Scenario: Scenario1
Run Date/Time: 2/11/2025 1:05:00 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		60.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	4.50 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
POST	010Y-24H	0.00	0.00	0.0000	5.20	0.00	0
PRE	010Y-24H	0.00	0.00	0.0000	0.14	0.00	0
Pond 1	010Y-24H	44.00	41.79	0.0007	8.87	1.63	10811
Pond 2	010Y-24H	44.00	41.78	0.0008	3.91	1.65	3431
STORM CHAMBER	010Y-24H	44.00	41.79	0.0010	15.25	4.75	17215
POST	025Y-24H	0.00	0.00	0.0000	11.60	0.00	0
PRE	025Y-24H	0.00	0.00	0.0000	0.57	0.00	0
Pond 1	025Y-24H	44.00	42.39	0.0006	11.10	3.84	10811
Pond 2	025Y-24H	44.00	42.36	0.0006	5.05	2.40	3430
STORM CHAMBER	025Y-24H	44.00	42.39	-0.0010	18.15	9.95	17216
POST	100Y-24H	0.00	0.00	0.0000	16.08	0.00	0
PRE	100Y-24H	0.00	0.00	0.0000	2.01	0.00	0
Pond 1	100Y-24H	44.00	43.06	0.0010	14.99	5.70	10811
Pond 2	100Y-24H	44.00	42.99	0.0009	6.98	3.33	3430
STORM CHAMBER	100Y-24H	44.00	43.05	0.0010	24.71	13.63	17216
POST	MEAN	0.00	0.00	0.0000	0.28	0.00	0
PRE	MEAN	0.00	0.00	0.0000	0.00	0.00	0
Pond 1	MEAN	44.00	41.28	0.0010	6.71	1.27	10811
Pond 2	MEAN	44.00	41.28	0.0005	2.60	1.25	3431
STORM CHAMBER	MEAN	44.00	41.28	0.0010	10.34	4.73	17216

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	0.0000	41.10	0.00
RECOVERY	Pond 1	0.2506	40.75	1.27
RECOVERY	Pond 1	0.5003	40.68	1.27
RECOVERY	Pond 1	0.7506	40.62	0.24
RECOVERY	Pond 1	1.0000	40.60	0.28
RECOVERY	Pond 1	1.2509	40.58	0.25
RECOVERY	Pond 1	1.5001	40.56	0.23
RECOVERY	Pond 1	1.7510	40.54	0.14
RECOVERY	Pond 1	2.0026	40.53	0.13
RECOVERY	Pond 1	2.2513	40.52	0.11
RECOVERY	Pond 1	2.5010	40.51	0.10
RECOVERY	Pond 1	2.7501	40.51	0.09
RECOVERY	Pond 1	3.0006	40.50	0.09
RECOVERY	Pond 1	3.2503	40.49	0.08
RECOVERY	Pond 1	3.5032	40.48	0.08
RECOVERY	Pond 1	3.7509	40.48	0.07
RECOVERY	Pond 1	4.0036	40.47	0.07
RECOVERY	Pond 1	4.2515	40.47	0.07
RECOVERY	Pond 1	4.5007	40.46	0.07
RECOVERY	Pond 1	4.7506	40.45	0.06
RECOVERY	Pond 1	5.0034	40.45	0.06
RECOVERY	Pond 1	5.2506	40.44	0.06
RECOVERY	Pond 1	5.5001	40.44	0.06
RECOVERY	Pond 1	5.7514	40.43	0.06
RECOVERY	Pond 1	6.0001	40.43	0.06
RECOVERY	Pond 1	6.2539	40.42	0.05
RECOVERY	Pond 1	6.5024	40.42	0.05
RECOVERY	Pond 1	6.7536	40.42	0.05
RECOVERY	Pond 1	7.0025	40.41	0.05
RECOVERY	Pond 1	7.2526	40.41	0.05
RECOVERY	Pond 1	7.5022	40.40	0.05
RECOVERY	Pond 1	7.7509	40.40	0.05
RECOVERY	Pond 1	8.0012	40.40	0.05
RECOVERY	Pond 1	8.2529	40.39	0.05
RECOVERY	Pond 1	8.5043	40.39	0.04
RECOVERY	Pond 1	8.7504	40.38	0.04
RECOVERY	Pond 1	9.0037	40.38	0.04
RECOVERY	Pond 1	9.2512	40.38	0.04
RECOVERY	Pond 1	9.5001	40.37	0.04
RECOVERY	Pond 1	9.7515	40.37	0.04
RECOVERY	Pond 1	10.0002	40.37	0.04
RECOVERY	Pond 1	10.2502	40.36	0.04

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	10.5008	40.36	0.04
RECOVERY	Pond 1	10.7553	40.36	0.04
RECOVERY	Pond 1	11.0053	40.35	0.04
RECOVERY	Pond 1	11.2547	40.35	0.04
RECOVERY	Pond 1	11.5039	40.35	0.04
RECOVERY	Pond 1	11.7501	40.34	0.04
RECOVERY	Pond 1	12.0022	40.34	0.04
RECOVERY	Pond 1	12.2518	40.34	0.04
RECOVERY	Pond 1	12.5036	40.34	0.04
RECOVERY	Pond 1	12.7510	40.33	0.04
RECOVERY	Pond 1	13.0000	40.33	0.03
RECOVERY	Pond 1	13.2531	40.33	0.03
RECOVERY	Pond 1	13.5018	40.32	0.03
RECOVERY	Pond 1	13.7507	40.32	0.03
RECOVERY	Pond 1	14.0037	40.32	0.03
RECOVERY	Pond 1	14.2539	40.32	0.03
RECOVERY	Pond 1	14.5037	40.31	0.03
RECOVERY	Pond 1	14.7505	40.31	0.03
RECOVERY	Pond 1	15.0045	40.31	0.03
RECOVERY	Pond 1	15.2535	40.30	0.03
RECOVERY	Pond 1	15.5033	40.30	0.03
RECOVERY	Pond 1	15.7518	40.30	0.03
RECOVERY	Pond 1	16.0009	40.30	0.03
RECOVERY	Pond 1	16.2534	40.29	0.03
RECOVERY	Pond 1	16.5040	40.29	0.03
RECOVERY	Pond 1	16.7519	40.29	0.03
RECOVERY	Pond 1	17.0036	40.29	0.03
RECOVERY	Pond 1	17.2514	40.28	0.03
RECOVERY	Pond 1	17.5006	40.28	0.03
RECOVERY	Pond 1	17.7580	40.28	0.03
RECOVERY	Pond 1	18.0023	40.28	0.03
RECOVERY	Pond 1	18.2545	40.27	0.03
RECOVERY	Pond 1	18.5003	40.27	0.03
RECOVERY	Pond 1	18.7519	40.27	0.03
RECOVERY	Pond 1	19.0023	40.27	0.03
RECOVERY	Pond 1	19.2501	40.27	0.03
RECOVERY	Pond 1	19.5012	40.26	0.03
RECOVERY	Pond 1	19.7524	40.26	0.03
RECOVERY	Pond 1	20.0035	40.26	0.03
RECOVERY	Pond 1	20.2536	40.26	0.03
RECOVERY	Pond 1	20.5044	40.25	0.03
RECOVERY	Pond 1	20.7500	40.25	0.03

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	21.0043	40.25	0.03
RECOVERY	Pond 1	21.2515	40.25	0.03
RECOVERY	Pond 1	21.5010	40.25	0.03
RECOVERY	Pond 1	21.7511	40.24	0.03
RECOVERY	Pond 1	22.0003	40.24	0.03
RECOVERY	Pond 1	22.2548	40.24	0.03
RECOVERY	Pond 1	22.5027	40.24	0.03
RECOVERY	Pond 1	22.7568	40.23	0.02
RECOVERY	Pond 1	23.0025	40.23	0.02
RECOVERY	Pond 1	23.2534	40.23	0.02
RECOVERY	Pond 1	23.5040	40.23	0.02
RECOVERY	Pond 1	23.7501	40.23	0.02
RECOVERY	Pond 1	24.0009	40.22	0.02
RECOVERY	Pond 1	24.2516	40.22	0.02
RECOVERY	Pond 1	24.5016	40.22	0.02
RECOVERY	Pond 1	24.7532	40.22	0.02
RECOVERY	Pond 1	25.0002	40.22	0.02
RECOVERY	Pond 1	25.2506	40.21	0.02
RECOVERY	Pond 1	25.5037	40.21	0.02
RECOVERY	Pond 1	25.7531	40.21	0.02
RECOVERY	Pond 1	26.0063	40.21	0.02
RECOVERY	Pond 1	26.2590	40.21	0.02
RECOVERY	Pond 1	26.5071	40.20	0.02
RECOVERY	Pond 1	26.7543	40.20	0.02
RECOVERY	Pond 1	27.0066	40.20	0.02
RECOVERY	Pond 1	27.2529	40.20	0.02
RECOVERY	Pond 1	27.5005	40.20	0.02
RECOVERY	Pond 1	27.7509	40.20	0.02
RECOVERY	Pond 1	28.0058	40.19	0.02
RECOVERY	Pond 1	28.2501	40.19	0.02
RECOVERY	Pond 1	28.5018	40.19	0.02
RECOVERY	Pond 1	28.7551	40.19	0.02
RECOVERY	Pond 1	29.0017	40.19	0.02
RECOVERY	Pond 1	29.2553	40.18	0.02
RECOVERY	Pond 1	29.5062	40.18	0.02
RECOVERY	Pond 1	29.7509	40.18	0.02
RECOVERY	Pond 1	30.0084	40.18	0.02
RECOVERY	Pond 1	30.2504	40.18	0.02
RECOVERY	Pond 1	30.5069	40.18	0.02
RECOVERY	Pond 1	30.7572	40.17	0.02
RECOVERY	Pond 1	31.0048	40.17	0.02
RECOVERY	Pond 1	31.2509	40.17	0.02

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	31.5063	40.17	0.02
RECOVERY	Pond 1	31.7513	40.17	0.02
RECOVERY	Pond 1	32.0009	40.17	0.02
RECOVERY	Pond 1	32.2502	40.16	0.02
RECOVERY	Pond 1	32.5024	40.16	0.02
RECOVERY	Pond 1	32.7543	40.16	0.02
RECOVERY	Pond 1	33.0020	40.16	0.02
RECOVERY	Pond 1	33.2562	40.16	0.02
RECOVERY	Pond 1	33.5007	40.16	0.02
RECOVERY	Pond 1	33.7505	40.15	0.02
RECOVERY	Pond 1	34.0057	40.15	0.02
RECOVERY	Pond 1	34.2533	40.15	0.02
RECOVERY	Pond 1	34.5098	40.15	0.02
RECOVERY	Pond 1	34.7527	40.15	0.02
RECOVERY	Pond 1	35.0001	40.15	0.02
RECOVERY	Pond 1	35.2570	40.14	0.02
RECOVERY	Pond 1	35.5107	40.14	0.02
RECOVERY	Pond 1	35.7598	40.14	0.02
RECOVERY	Pond 1	36.0040	40.14	0.02
RECOVERY	Pond 1	36.2528	40.14	0.02
RECOVERY	Pond 1	36.5027	40.14	0.02
RECOVERY	Pond 1	36.7544	40.13	0.02
RECOVERY	Pond 1	37.0082	40.13	0.02
RECOVERY	Pond 1	37.2515	40.13	0.02
RECOVERY	Pond 1	37.5050	40.13	0.02
RECOVERY	Pond 1	37.7578	40.13	0.02
RECOVERY	Pond 1	38.0028	40.13	0.02
RECOVERY	Pond 1	38.2500	40.13	0.02
RECOVERY	Pond 1	38.5006	40.12	0.02
RECOVERY	Pond 1	38.7534	40.12	0.02
RECOVERY	Pond 1	39.0062	40.12	0.02
RECOVERY	Pond 1	39.2532	40.12	0.02
RECOVERY	Pond 1	39.5025	40.12	0.02
RECOVERY	Pond 1	39.7512	40.12	0.02
RECOVERY	Pond 1	40.0032	40.12	0.02
RECOVERY	Pond 1	40.2535	40.11	0.02
RECOVERY	Pond 1	40.5023	40.11	0.02
RECOVERY	Pond 1	40.7550	40.11	0.02
RECOVERY	Pond 1	41.0056	40.11	0.02
RECOVERY	Pond 1	41.2574	40.11	0.02
RECOVERY	Pond 1	41.5058	40.11	0.02
RECOVERY	Pond 1	41.7566	40.10	0.02

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	42.0041	40.10	0.02
RECOVERY	Pond 1	42.2522	40.10	0.02
RECOVERY	Pond 1	42.5031	40.10	0.02
RECOVERY	Pond 1	42.7517	40.10	0.02
RECOVERY	Pond 1	43.0011	40.10	0.02
RECOVERY	Pond 1	43.2573	40.10	0.02
RECOVERY	Pond 1	43.5045	40.10	0.02
RECOVERY	Pond 1	43.7549	40.09	0.02
RECOVERY	Pond 1	44.0022	40.09	0.02
RECOVERY	Pond 1	44.2506	40.09	0.02
RECOVERY	Pond 1	44.5054	40.09	0.02
RECOVERY	Pond 1	44.7505	40.09	0.02
RECOVERY	Pond 1	45.0072	40.09	0.02
RECOVERY	Pond 1	45.2520	40.09	0.02
RECOVERY	Pond 1	45.5009	40.08	0.02
RECOVERY	Pond 1	45.7538	40.08	0.02
RECOVERY	Pond 1	46.0015	40.08	0.02
RECOVERY	Pond 1	46.2502	40.08	0.02
RECOVERY	Pond 1	46.5029	40.08	0.02
RECOVERY	Pond 1	46.7508	40.08	0.02
RECOVERY	Pond 1	47.0005	40.08	0.02
RECOVERY	Pond 1	47.2537	40.07	0.02
RECOVERY	Pond 1	47.5043	40.07	0.02
RECOVERY	Pond 1	47.7561	40.07	0.02
RECOVERY	Pond 1	48.0094	40.07	0.02
RECOVERY	Pond 1	48.2507	40.07	0.02
RECOVERY	Pond 1	48.5043	40.07	0.02
RECOVERY	Pond 1	48.7500	40.07	0.01
RECOVERY	Pond 1	49.0008	40.07	0.01
RECOVERY	Pond 1	49.2513	40.06	0.01
RECOVERY	Pond 1	49.5033	40.06	0.01
RECOVERY	Pond 1	49.7518	40.06	0.01
RECOVERY	Pond 1	50.0039	40.06	0.01
RECOVERY	Pond 1	50.2533	40.06	0.01
RECOVERY	Pond 1	50.5023	40.06	0.01
RECOVERY	Pond 1	50.7528	40.06	0.01
RECOVERY	Pond 1	51.0020	40.06	0.01
RECOVERY	Pond 1	51.2547	40.06	0.01
RECOVERY	Pond 1	51.5020	40.05	0.01
RECOVERY	Pond 1	51.7504	40.05	0.01
RECOVERY	Pond 1	52.0024	40.05	0.01
RECOVERY	Pond 1	52.2537	40.05	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	52.5045	40.05	0.01
RECOVERY	Pond 1	52.7526	40.05	0.01
RECOVERY	Pond 1	53.0059	40.05	0.01
RECOVERY	Pond 1	53.2521	40.05	0.01
RECOVERY	Pond 1	53.5037	40.05	0.01
RECOVERY	Pond 1	53.7560	40.05	0.01
RECOVERY	Pond 1	54.0015	40.04	0.01
RECOVERY	Pond 1	54.2523	40.04	0.01
RECOVERY	Pond 1	54.5007	40.04	0.01
RECOVERY	Pond 1	54.7511	40.04	0.01
RECOVERY	Pond 1	55.0066	40.04	0.01
RECOVERY	Pond 1	55.2511	40.04	0.01
RECOVERY	Pond 1	55.5018	40.04	0.01
RECOVERY	Pond 1	55.7546	40.04	0.01
RECOVERY	Pond 1	56.0049	40.04	0.01
RECOVERY	Pond 1	56.2505	40.04	0.01
RECOVERY	Pond 1	56.5047	40.04	0.01
RECOVERY	Pond 1	56.7556	40.04	0.01
RECOVERY	Pond 1	57.0017	40.04	0.01
RECOVERY	Pond 1	57.2509	40.04	0.01
RECOVERY	Pond 1	57.5000	40.03	0.01
RECOVERY	Pond 1	57.7510	40.03	0.01
RECOVERY	Pond 1	58.0043	40.03	0.01
RECOVERY	Pond 1	58.2516	40.03	0.01
RECOVERY	Pond 1	58.5070	40.03	0.01
RECOVERY	Pond 1	58.7510	40.03	0.01
RECOVERY	Pond 1	59.0039	40.03	0.01
RECOVERY	Pond 1	59.2515	40.03	0.01
RECOVERY	Pond 1	59.5012	40.03	0.01
RECOVERY	Pond 1	59.7567	40.03	0.01
RECOVERY	Pond 1	60.0038	40.03	0.01
RECOVERY	Pond 1	60.2557	40.03	0.01
RECOVERY	Pond 1	60.5019	40.03	0.01
RECOVERY	Pond 1	60.7551	40.03	0.01
RECOVERY	Pond 1	61.0023	40.03	0.01
RECOVERY	Pond 1	61.2552	40.03	0.01
RECOVERY	Pond 1	61.5026	40.03	0.01
RECOVERY	Pond 1	61.7544	40.02	0.01
RECOVERY	Pond 1	62.0015	40.02	0.01
RECOVERY	Pond 1	62.2534	40.02	0.01
RECOVERY	Pond 1	62.5025	40.02	0.01
RECOVERY	Pond 1	62.7537	40.02	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	63.0021	40.02	0.01
RECOVERY	Pond 1	63.2546	40.02	0.01
RECOVERY	Pond 1	63.5039	40.02	0.01
RECOVERY	Pond 1	63.7504	40.02	0.01
RECOVERY	Pond 1	64.0005	40.02	0.01
RECOVERY	Pond 1	64.2520	40.02	0.01
RECOVERY	Pond 1	64.5042	40.02	0.01
RECOVERY	Pond 1	64.7517	40.02	0.01
RECOVERY	Pond 1	65.0050	40.02	0.01
RECOVERY	Pond 1	65.2576	40.02	0.01
RECOVERY	Pond 1	65.5005	40.02	0.01
RECOVERY	Pond 1	65.7530	40.02	0.01
RECOVERY	Pond 1	66.0037	40.02	0.01
RECOVERY	Pond 1	66.2567	40.02	0.01
RECOVERY	Pond 1	66.5031	40.02	0.01
RECOVERY	Pond 1	66.7552	40.02	0.00
RECOVERY	Pond 1	67.0034	40.02	0.00
RECOVERY	Pond 1	67.2515	40.01	0.00
RECOVERY	Pond 1	67.5013	40.01	0.00
RECOVERY	Pond 1	67.7505	40.01	0.00
RECOVERY	Pond 1	68.0044	40.01	0.00
RECOVERY	Pond 1	68.2517	40.01	0.00
RECOVERY	Pond 1	68.5040	40.01	0.00
RECOVERY	Pond 1	68.7553	40.01	0.00
RECOVERY	Pond 1	69.0061	40.01	0.00
RECOVERY	Pond 1	69.2535	40.01	0.00
RECOVERY	Pond 1	69.5009	40.01	0.00
RECOVERY	Pond 1	69.7577	40.01	0.00
RECOVERY	Pond 1	70.0009	40.01	0.00
RECOVERY	Pond 1	70.2528	40.01	0.00
RECOVERY	Pond 1	70.5051	40.01	0.01
RECOVERY	Pond 1	70.7525	40.01	0.01
RECOVERY	Pond 1	71.0003	40.01	0.01
RECOVERY	Pond 1	71.2550	40.01	0.01
RECOVERY	Pond 1	71.5005	40.01	0.01
RECOVERY	Pond 1	71.7556	40.01	0.01
RECOVERY	Pond 1	72.0006	40.01	0.01
RECOVERY	Pond 1	72.2524	40.01	0.01
RECOVERY	Pond 1	72.5040	40.01	0.01
RECOVERY	Pond 1	72.7569	40.01	0.01
RECOVERY	Pond 1	73.0019	40.00	0.01
RECOVERY	Pond 1	73.2550	40.00	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	73.5028	40.00	0.01
RECOVERY	Pond 1	73.7513	40.00	0.00
RECOVERY	Pond 1	74.0023	40.00	0.00
RECOVERY	Pond 1	74.2544	40.00	0.00
RECOVERY	Pond 1	74.5030	40.00	0.00
RECOVERY	Pond 1	74.7535	40.00	0.00
RECOVERY	Pond 1	75.0004	40.00	0.00
RECOVERY	Pond 1	75.2524	40.00	0.00
RECOVERY	Pond 1	75.5008	40.00	0.00
RECOVERY	Pond 1	75.7504	40.00	0.00
RECOVERY	Pond 1	76.0014	40.00	0.00
RECOVERY	Pond 1	76.2518	40.00	0.00
RECOVERY	Pond 1	76.5020	40.00	0.00
RECOVERY	Pond 1	76.7537	40.00	0.00
RECOVERY	Pond 1	77.0008	40.00	0.00
RECOVERY	Pond 1	77.2541	40.00	0.00
RECOVERY	Pond 1	77.5012	40.00	0.00
RECOVERY	Pond 1	77.7542	40.00	0.00
RECOVERY	Pond 1	78.0023	40.00	0.00
RECOVERY	Pond 1	78.2543	40.00	0.00
RECOVERY	Pond 1	78.5023	40.00	0.00
RECOVERY	Pond 1	78.7542	40.00	0.00
RECOVERY	Pond 1	79.0074	40.00	0.00
RECOVERY	Pond 1	79.2532	40.00	0.00
RECOVERY	Pond 1	79.5023	40.00	0.00
RECOVERY	Pond 1	79.7506	40.00	0.00
RECOVERY	Pond 1	80.0040	40.00	0.00
RECOVERY	Pond 1	80.2560	40.00	0.00
RECOVERY	Pond 1	80.5008	40.00	0.00
RECOVERY	Pond 1	80.7520	40.00	0.00
RECOVERY	Pond 1	81.0017	40.00	0.00
RECOVERY	Pond 1	81.2505	40.00	0.00
RECOVERY	Pond 1	81.5049	40.00	0.00
RECOVERY	Pond 1	81.7509	40.00	0.00
RECOVERY	Pond 1	82.0030	40.00	0.00
RECOVERY	Pond 1	82.2517	40.00	0.00
RECOVERY	Pond 1	82.5032	40.00	0.00
RECOVERY	Pond 1	82.7524	40.00	0.00
RECOVERY	Pond 1	83.0022	40.00	0.00
RECOVERY	Pond 1	83.2567	40.00	0.00
RECOVERY	Pond 1	83.5039	40.00	0.00
RECOVERY	Pond 1	83.7512	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	84.0025	40.00	0.00
RECOVERY	Pond 1	84.2505	40.00	0.00
RECOVERY	Pond 1	84.5068	40.00	0.00
RECOVERY	Pond 1	84.7530	40.00	0.00
RECOVERY	Pond 1	85.0002	40.00	0.00
RECOVERY	Pond 1	85.2513	40.00	0.00
RECOVERY	Pond 1	85.5037	40.00	0.00
RECOVERY	Pond 1	85.7535	40.00	0.00
RECOVERY	Pond 1	86.0072	40.00	0.00
RECOVERY	Pond 1	86.2505	40.00	0.00
RECOVERY	Pond 1	86.5037	40.00	0.00
RECOVERY	Pond 1	86.7509	40.00	0.00
RECOVERY	Pond 1	87.0052	40.00	0.00
RECOVERY	Pond 1	87.2544	40.00	0.00
RECOVERY	Pond 1	87.5039	40.00	0.00
RECOVERY	Pond 1	87.7541	40.00	0.00
RECOVERY	Pond 1	88.0016	40.00	0.00
RECOVERY	Pond 1	88.2507	40.00	0.00
RECOVERY	Pond 1	88.5063	40.00	0.00
RECOVERY	Pond 1	88.7509	40.00	0.00
RECOVERY	Pond 1	89.0012	40.00	0.00
RECOVERY	Pond 1	89.2513	40.00	0.00
RECOVERY	Pond 1	89.5038	40.00	0.00
RECOVERY	Pond 1	89.7513	40.00	0.00
RECOVERY	Pond 1	90.0035	40.00	0.00
RECOVERY	Pond 1	90.2503	40.00	0.00
RECOVERY	Pond 1	90.5014	40.00	0.00
RECOVERY	Pond 1	90.7530	40.00	0.00
RECOVERY	Pond 1	91.0033	40.00	0.00
RECOVERY	Pond 1	91.2538	40.00	0.00
RECOVERY	Pond 1	91.5048	40.00	0.00
RECOVERY	Pond 1	91.7518	40.00	0.00
RECOVERY	Pond 1	92.0053	40.00	0.00
RECOVERY	Pond 1	92.2524	40.00	0.00
RECOVERY	Pond 1	92.5013	40.00	0.00
RECOVERY	Pond 1	92.7537	40.00	0.00
RECOVERY	Pond 1	93.0072	40.00	0.00
RECOVERY	Pond 1	93.2535	40.00	0.00
RECOVERY	Pond 1	93.5063	40.00	0.00
RECOVERY	Pond 1	93.7509	40.00	0.00
RECOVERY	Pond 1	94.0010	40.00	0.00
RECOVERY	Pond 1	94.2560	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	94.5104	40.00	0.00
RECOVERY	Pond 1	94.7507	40.00	0.00
RECOVERY	Pond 1	95.0011	40.00	0.00
RECOVERY	Pond 1	95.2523	40.00	0.00
RECOVERY	Pond 1	95.5059	40.00	0.00
RECOVERY	Pond 1	95.7536	40.00	0.00
RECOVERY	Pond 1	96.0022	40.00	0.00
RECOVERY	Pond 1	96.2528	40.00	0.00
RECOVERY	Pond 1	96.5046	40.00	0.00
RECOVERY	Pond 1	96.7522	40.00	0.00
RECOVERY	Pond 1	97.0013	40.00	0.00
RECOVERY	Pond 1	97.2554	40.00	0.00
RECOVERY	Pond 1	97.5027	40.00	0.00
RECOVERY	Pond 1	97.7534	40.00	0.00
RECOVERY	Pond 1	98.0035	40.00	0.00
RECOVERY	Pond 1	98.2517	40.00	0.00
RECOVERY	Pond 1	98.5008	40.00	0.00
RECOVERY	Pond 1	98.7501	40.00	0.00
RECOVERY	Pond 1	99.0024	40.00	0.00
RECOVERY	Pond 1	99.2526	40.00	0.00
RECOVERY	Pond 1	99.5063	40.00	0.00
RECOVERY	Pond 1	99.7535	40.00	0.00
RECOVERY	Pond 1	100.0025	40.00	0.00
RECOVERY	Pond 1	100.2548	40.00	0.00
RECOVERY	Pond 1	100.5041	40.00	0.00
RECOVERY	Pond 1	100.7520	40.00	0.00
RECOVERY	Pond 1	101.0065	40.00	0.00
RECOVERY	Pond 1	101.2569	40.00	0.00
RECOVERY	Pond 1	101.5038	40.00	0.00
RECOVERY	Pond 1	101.7506	40.00	0.00
RECOVERY	Pond 1	102.0030	40.00	0.00
RECOVERY	Pond 1	102.2542	40.00	0.00
RECOVERY	Pond 1	102.5014	40.00	0.00
RECOVERY	Pond 1	102.7540	40.00	0.00
RECOVERY	Pond 1	103.0040	40.00	0.00
RECOVERY	Pond 1	103.2558	40.00	0.00
RECOVERY	Pond 1	103.5028	40.00	0.00
RECOVERY	Pond 1	103.7512	40.00	0.00
RECOVERY	Pond 1	104.0032	40.00	0.00
RECOVERY	Pond 1	104.2503	40.00	0.00
RECOVERY	Pond 1	104.5050	40.00	0.00
RECOVERY	Pond 1	104.7545	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	105.0016	40.00	0.00
RECOVERY	Pond 1	105.2542	40.00	0.00
RECOVERY	Pond 1	105.5022	40.00	0.00
RECOVERY	Pond 1	105.7528	40.00	0.00
RECOVERY	Pond 1	106.0002	40.00	0.00
RECOVERY	Pond 1	106.2539	40.00	0.00
RECOVERY	Pond 1	106.5039	40.00	0.00
RECOVERY	Pond 1	106.7527	40.00	0.00
RECOVERY	Pond 1	107.0019	40.00	0.00
RECOVERY	Pond 1	107.2509	40.00	0.00
RECOVERY	Pond 1	107.5039	40.00	0.00
RECOVERY	Pond 1	107.7551	40.00	0.00
RECOVERY	Pond 1	108.0038	40.00	0.00
RECOVERY	Pond 1	108.2512	40.00	0.00
RECOVERY	Pond 1	108.5008	40.00	0.00
RECOVERY	Pond 1	108.7522	40.00	0.00
RECOVERY	Pond 1	109.0028	40.00	0.00
RECOVERY	Pond 1	109.2554	40.00	0.00
RECOVERY	Pond 1	109.5006	40.00	0.00
RECOVERY	Pond 1	109.7517	40.00	0.00
RECOVERY	Pond 1	110.0054	40.00	0.00
RECOVERY	Pond 1	110.2503	40.00	0.00
RECOVERY	Pond 1	110.5041	40.00	0.00
RECOVERY	Pond 1	110.7525	40.00	0.00
RECOVERY	Pond 1	111.0005	40.00	0.00
RECOVERY	Pond 1	111.2532	40.00	0.00
RECOVERY	Pond 1	111.5013	40.00	0.00
RECOVERY	Pond 1	111.7517	40.00	0.00
RECOVERY	Pond 1	112.0020	40.00	0.00
RECOVERY	Pond 1	112.2582	40.00	0.00
RECOVERY	Pond 1	112.5021	40.00	0.00
RECOVERY	Pond 1	112.7529	40.00	0.00
RECOVERY	Pond 1	113.0010	40.00	0.00
RECOVERY	Pond 1	113.2528	40.00	0.00
RECOVERY	Pond 1	113.5022	40.00	0.00
RECOVERY	Pond 1	113.7533	40.00	0.00
RECOVERY	Pond 1	114.0009	40.00	0.00
RECOVERY	Pond 1	114.2504	40.00	0.00
RECOVERY	Pond 1	114.5017	40.00	0.00
RECOVERY	Pond 1	114.7507	40.00	0.00
RECOVERY	Pond 1	115.0046	40.00	0.00
RECOVERY	Pond 1	115.2512	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 1	115.5036	40.00	0.00
RECOVERY	Pond 1	115.7533	40.00	0.00
RECOVERY	Pond 1	116.0057	40.00	0.00
RECOVERY	Pond 1	116.2516	40.00	0.00
RECOVERY	Pond 1	116.5025	40.00	0.00
RECOVERY	Pond 1	116.7520	40.00	0.00
RECOVERY	Pond 1	117.0059	40.00	0.00
RECOVERY	Pond 1	117.2547	40.00	0.00
RECOVERY	Pond 1	117.5003	40.00	0.00
RECOVERY	Pond 1	117.7521	40.00	0.00
RECOVERY	Pond 1	118.0021	40.00	0.00
RECOVERY	Pond 1	118.2516	40.00	0.00
RECOVERY	Pond 1	118.5029	40.00	0.00
RECOVERY	Pond 1	118.7567	40.00	0.00
RECOVERY	Pond 1	119.0054	40.00	0.00
RECOVERY	Pond 1	119.2505	40.00	0.00
RECOVERY	Pond 1	119.5013	40.00	0.00
RECOVERY	Pond 1	119.7546	40.00	0.00
RECOVERY	Pond 1	120.0011	40.00	0.00
RECOVERY	Pond 2	0.0000	41.10	0.00
RECOVERY	Pond 2	0.2506	40.75	0.32
RECOVERY	Pond 2	0.5003	40.68	0.32
RECOVERY	Pond 2	0.7506	40.62	0.32
RECOVERY	Pond 2	1.0000	40.59	0.32
RECOVERY	Pond 2	1.2509	40.57	0.32
RECOVERY	Pond 2	1.5001	40.55	0.32
RECOVERY	Pond 2	1.7510	40.54	0.10
RECOVERY	Pond 2	2.0026	40.53	0.09
RECOVERY	Pond 2	2.2513	40.52	0.07
RECOVERY	Pond 2	2.5010	40.51	0.06
RECOVERY	Pond 2	2.7501	40.50	0.06
RECOVERY	Pond 2	3.0006	40.49	0.05
RECOVERY	Pond 2	3.2503	40.49	0.04
RECOVERY	Pond 2	3.5032	40.48	0.04
RECOVERY	Pond 2	3.7509	40.47	0.04
RECOVERY	Pond 2	4.0036	40.47	0.04
RECOVERY	Pond 2	4.2515	40.46	0.03
RECOVERY	Pond 2	4.5007	40.46	0.03
RECOVERY	Pond 2	4.7506	40.45	0.03
RECOVERY	Pond 2	5.0034	40.45	0.03
RECOVERY	Pond 2	5.2506	40.44	0.03
RECOVERY	Pond 2	5.5001	40.44	0.03

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	5.7514	40.43	0.02
RECOVERY	Pond 2	6.0001	40.43	0.02
RECOVERY	Pond 2	6.2539	40.42	0.02
RECOVERY	Pond 2	6.5024	40.42	0.02
RECOVERY	Pond 2	6.7536	40.41	0.02
RECOVERY	Pond 2	7.0025	40.41	0.02
RECOVERY	Pond 2	7.2526	40.41	0.02
RECOVERY	Pond 2	7.5022	40.40	0.02
RECOVERY	Pond 2	7.7509	40.40	0.02
RECOVERY	Pond 2	8.0012	40.39	0.02
RECOVERY	Pond 2	8.2529	40.39	0.02
RECOVERY	Pond 2	8.5043	40.39	0.02
RECOVERY	Pond 2	8.7504	40.38	0.02
RECOVERY	Pond 2	9.0037	40.38	0.02
RECOVERY	Pond 2	9.2512	40.38	0.02
RECOVERY	Pond 2	9.5001	40.37	0.02
RECOVERY	Pond 2	9.7515	40.37	0.02
RECOVERY	Pond 2	10.0002	40.36	0.02
RECOVERY	Pond 2	10.2502	40.36	0.02
RECOVERY	Pond 2	10.5008	40.36	0.02
RECOVERY	Pond 2	10.7553	40.35	0.02
RECOVERY	Pond 2	11.0053	40.35	0.02
RECOVERY	Pond 2	11.2547	40.35	0.02
RECOVERY	Pond 2	11.5039	40.35	0.01
RECOVERY	Pond 2	11.7501	40.34	0.01
RECOVERY	Pond 2	12.0022	40.34	0.01
RECOVERY	Pond 2	12.2518	40.34	0.01
RECOVERY	Pond 2	12.5036	40.33	0.01
RECOVERY	Pond 2	12.7510	40.33	0.01
RECOVERY	Pond 2	13.0000	40.33	0.01
RECOVERY	Pond 2	13.2531	40.32	0.01
RECOVERY	Pond 2	13.5018	40.32	0.01
RECOVERY	Pond 2	13.7507	40.32	0.01
RECOVERY	Pond 2	14.0037	40.32	0.01
RECOVERY	Pond 2	14.2539	40.31	0.01
RECOVERY	Pond 2	14.5037	40.31	0.01
RECOVERY	Pond 2	14.7505	40.31	0.01
RECOVERY	Pond 2	15.0045	40.30	0.01
RECOVERY	Pond 2	15.2535	40.30	0.01
RECOVERY	Pond 2	15.5033	40.30	0.01
RECOVERY	Pond 2	15.7518	40.30	0.01
RECOVERY	Pond 2	16.0009	40.29	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	16.2534	40.29	0.01
RECOVERY	Pond 2	16.5040	40.29	0.01
RECOVERY	Pond 2	16.7519	40.29	0.01
RECOVERY	Pond 2	17.0036	40.28	0.01
RECOVERY	Pond 2	17.2514	40.28	0.01
RECOVERY	Pond 2	17.5006	40.28	0.01
RECOVERY	Pond 2	17.7580	40.28	0.01
RECOVERY	Pond 2	18.0023	40.27	0.01
RECOVERY	Pond 2	18.2545	40.27	0.01
RECOVERY	Pond 2	18.5003	40.27	0.01
RECOVERY	Pond 2	18.7519	40.27	0.01
RECOVERY	Pond 2	19.0023	40.27	0.01
RECOVERY	Pond 2	19.2501	40.26	0.01
RECOVERY	Pond 2	19.5012	40.26	0.01
RECOVERY	Pond 2	19.7524	40.26	0.01
RECOVERY	Pond 2	20.0035	40.26	0.01
RECOVERY	Pond 2	20.2536	40.25	0.01
RECOVERY	Pond 2	20.5044	40.25	0.01
RECOVERY	Pond 2	20.7500	40.25	0.01
RECOVERY	Pond 2	21.0043	40.25	0.01
RECOVERY	Pond 2	21.2515	40.25	0.01
RECOVERY	Pond 2	21.5010	40.24	0.01
RECOVERY	Pond 2	21.7511	40.24	0.01
RECOVERY	Pond 2	22.0003	40.24	0.01
RECOVERY	Pond 2	22.2548	40.24	0.01
RECOVERY	Pond 2	22.5027	40.23	0.01
RECOVERY	Pond 2	22.7568	40.23	0.01
RECOVERY	Pond 2	23.0025	40.23	0.01
RECOVERY	Pond 2	23.2534	40.23	0.01
RECOVERY	Pond 2	23.5040	40.23	0.01
RECOVERY	Pond 2	23.7501	40.22	0.01
RECOVERY	Pond 2	24.0009	40.22	0.01
RECOVERY	Pond 2	24.2516	40.22	0.01
RECOVERY	Pond 2	24.5016	40.22	0.01
RECOVERY	Pond 2	24.7532	40.22	0.01
RECOVERY	Pond 2	25.0002	40.21	0.01
RECOVERY	Pond 2	25.2506	40.21	0.01
RECOVERY	Pond 2	25.5037	40.21	0.01
RECOVERY	Pond 2	25.7531	40.21	0.01
RECOVERY	Pond 2	26.0063	40.21	0.01
RECOVERY	Pond 2	26.2590	40.20	0.01
RECOVERY	Pond 2	26.5071	40.20	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	26.7543	40.20	0.01
RECOVERY	Pond 2	27.0066	40.20	0.01
RECOVERY	Pond 2	27.2529	40.20	0.01
RECOVERY	Pond 2	27.5005	40.19	0.01
RECOVERY	Pond 2	27.7509	40.19	0.01
RECOVERY	Pond 2	28.0058	40.19	0.01
RECOVERY	Pond 2	28.2501	40.19	0.01
RECOVERY	Pond 2	28.5018	40.19	0.01
RECOVERY	Pond 2	28.7551	40.19	0.01
RECOVERY	Pond 2	29.0017	40.18	0.01
RECOVERY	Pond 2	29.2553	40.18	0.01
RECOVERY	Pond 2	29.5062	40.18	0.01
RECOVERY	Pond 2	29.7509	40.18	0.01
RECOVERY	Pond 2	30.0084	40.18	0.01
RECOVERY	Pond 2	30.2504	40.18	0.01
RECOVERY	Pond 2	30.5069	40.17	0.01
RECOVERY	Pond 2	30.7572	40.17	0.01
RECOVERY	Pond 2	31.0048	40.17	0.01
RECOVERY	Pond 2	31.2509	40.17	0.01
RECOVERY	Pond 2	31.5063	40.17	0.01
RECOVERY	Pond 2	31.7513	40.16	0.01
RECOVERY	Pond 2	32.0009	40.16	0.01
RECOVERY	Pond 2	32.2502	40.16	0.01
RECOVERY	Pond 2	32.5024	40.16	0.01
RECOVERY	Pond 2	32.7543	40.16	0.01
RECOVERY	Pond 2	33.0020	40.16	0.01
RECOVERY	Pond 2	33.2562	40.15	0.01
RECOVERY	Pond 2	33.5007	40.15	0.01
RECOVERY	Pond 2	33.7505	40.15	0.01
RECOVERY	Pond 2	34.0057	40.15	0.01
RECOVERY	Pond 2	34.2533	40.15	0.01
RECOVERY	Pond 2	34.5098	40.15	0.01
RECOVERY	Pond 2	34.7527	40.14	0.01
RECOVERY	Pond 2	35.0001	40.14	0.01
RECOVERY	Pond 2	35.2570	40.14	0.01
RECOVERY	Pond 2	35.5107	40.14	0.01
RECOVERY	Pond 2	35.7598	40.14	0.01
RECOVERY	Pond 2	36.0040	40.14	0.01
RECOVERY	Pond 2	36.2528	40.14	0.01
RECOVERY	Pond 2	36.5027	40.13	0.01
RECOVERY	Pond 2	36.7544	40.13	0.01
RECOVERY	Pond 2	37.0082	40.13	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	37.2515	40.13	0.01
RECOVERY	Pond 2	37.5050	40.13	0.01
RECOVERY	Pond 2	37.7578	40.13	0.01
RECOVERY	Pond 2	38.0028	40.12	0.01
RECOVERY	Pond 2	38.2500	40.12	0.01
RECOVERY	Pond 2	38.5006	40.12	0.01
RECOVERY	Pond 2	38.7534	40.12	0.01
RECOVERY	Pond 2	39.0062	40.12	0.01
RECOVERY	Pond 2	39.2532	40.12	0.01
RECOVERY	Pond 2	39.5025	40.12	0.01
RECOVERY	Pond 2	39.7512	40.11	0.01
RECOVERY	Pond 2	40.0032	40.11	0.01
RECOVERY	Pond 2	40.2535	40.11	0.01
RECOVERY	Pond 2	40.5023	40.11	0.01
RECOVERY	Pond 2	40.7550	40.11	0.01
RECOVERY	Pond 2	41.0056	40.11	0.01
RECOVERY	Pond 2	41.2574	40.10	0.01
RECOVERY	Pond 2	41.5058	40.10	0.01
RECOVERY	Pond 2	41.7566	40.10	0.01
RECOVERY	Pond 2	42.0041	40.10	0.01
RECOVERY	Pond 2	42.2522	40.10	0.01
RECOVERY	Pond 2	42.5031	40.10	0.01
RECOVERY	Pond 2	42.7517	40.10	0.01
RECOVERY	Pond 2	43.0011	40.09	0.01
RECOVERY	Pond 2	43.2573	40.09	0.01
RECOVERY	Pond 2	43.5045	40.09	0.01
RECOVERY	Pond 2	43.7549	40.09	0.01
RECOVERY	Pond 2	44.0022	40.09	0.01
RECOVERY	Pond 2	44.2506	40.09	0.01
RECOVERY	Pond 2	44.5054	40.09	0.01
RECOVERY	Pond 2	44.7505	40.08	0.01
RECOVERY	Pond 2	45.0072	40.08	0.01
RECOVERY	Pond 2	45.2520	40.08	0.01
RECOVERY	Pond 2	45.5009	40.08	0.01
RECOVERY	Pond 2	45.7538	40.08	0.01
RECOVERY	Pond 2	46.0015	40.08	0.01
RECOVERY	Pond 2	46.2502	40.08	0.01
RECOVERY	Pond 2	46.5029	40.07	0.01
RECOVERY	Pond 2	46.7508	40.07	0.01
RECOVERY	Pond 2	47.0005	40.07	0.01
RECOVERY	Pond 2	47.2537	40.07	0.01
RECOVERY	Pond 2	47.5043	40.07	0.01

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	47.7561	40.07	0.01
RECOVERY	Pond 2	48.0094	40.07	0.01
RECOVERY	Pond 2	48.2507	40.07	0.01
RECOVERY	Pond 2	48.5043	40.06	0.01
RECOVERY	Pond 2	48.7500	40.06	0.01
RECOVERY	Pond 2	49.0008	40.06	0.01
RECOVERY	Pond 2	49.2513	40.06	0.01
RECOVERY	Pond 2	49.5033	40.06	0.01
RECOVERY	Pond 2	49.7518	40.06	0.01
RECOVERY	Pond 2	50.0039	40.06	0.01
RECOVERY	Pond 2	50.2533	40.05	0.01
RECOVERY	Pond 2	50.5023	40.05	0.01
RECOVERY	Pond 2	50.7528	40.05	0.01
RECOVERY	Pond 2	51.0020	40.05	0.01
RECOVERY	Pond 2	51.2547	40.05	0.01
RECOVERY	Pond 2	51.5020	40.05	0.01
RECOVERY	Pond 2	51.7504	40.05	0.01
RECOVERY	Pond 2	52.0024	40.04	0.01
RECOVERY	Pond 2	52.2537	40.04	0.01
RECOVERY	Pond 2	52.5045	40.04	0.01
RECOVERY	Pond 2	52.7526	40.04	0.01
RECOVERY	Pond 2	53.0059	40.04	0.01
RECOVERY	Pond 2	53.2521	40.04	0.01
RECOVERY	Pond 2	53.5037	40.04	0.01
RECOVERY	Pond 2	53.7560	40.03	0.01
RECOVERY	Pond 2	54.0015	40.03	0.01
RECOVERY	Pond 2	54.2523	40.03	0.01
RECOVERY	Pond 2	54.5007	40.03	0.01
RECOVERY	Pond 2	54.7511	40.03	0.01
RECOVERY	Pond 2	55.0066	40.03	0.01
RECOVERY	Pond 2	55.2511	40.03	0.01
RECOVERY	Pond 2	55.5018	40.02	0.01
RECOVERY	Pond 2	55.7546	40.02	0.01
RECOVERY	Pond 2	56.0049	40.02	0.01
RECOVERY	Pond 2	56.2505	40.02	0.01
RECOVERY	Pond 2	56.5047	40.02	0.01
RECOVERY	Pond 2	56.7556	40.02	0.01
RECOVERY	Pond 2	57.0017	40.02	0.01
RECOVERY	Pond 2	57.2509	40.01	0.01
RECOVERY	Pond 2	57.5000	40.01	0.01
RECOVERY	Pond 2	57.7510	40.01	0.01
RECOVERY	Pond 2	58.0043	40.01	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	58.2516	40.01	0.00
RECOVERY	Pond 2	58.5070	40.01	0.00
RECOVERY	Pond 2	58.7510	40.01	0.00
RECOVERY	Pond 2	59.0039	40.01	0.00
RECOVERY	Pond 2	59.2515	40.00	0.00
RECOVERY	Pond 2	59.5012	40.00	0.00
RECOVERY	Pond 2	59.7567	40.00	0.00
RECOVERY	Pond 2	60.0038	40.00	0.00
RECOVERY	Pond 2	60.2557	40.00	0.00
RECOVERY	Pond 2	60.5019	40.00	0.00
RECOVERY	Pond 2	60.7551	40.00	0.00
RECOVERY	Pond 2	61.0023	40.00	0.00
RECOVERY	Pond 2	61.2552	40.00	0.00
RECOVERY	Pond 2	61.5026	40.00	0.00
RECOVERY	Pond 2	61.7544	40.00	0.00
RECOVERY	Pond 2	62.0015	40.00	0.00
RECOVERY	Pond 2	62.2534	40.00	0.00
RECOVERY	Pond 2	62.5025	40.00	0.00
RECOVERY	Pond 2	62.7537	40.00	0.00
RECOVERY	Pond 2	63.0021	40.00	0.00
RECOVERY	Pond 2	63.2546	40.00	0.00
RECOVERY	Pond 2	63.5039	40.00	0.00
RECOVERY	Pond 2	63.7504	40.00	0.00
RECOVERY	Pond 2	64.0005	40.00	0.00
RECOVERY	Pond 2	64.2520	40.00	0.00
RECOVERY	Pond 2	64.5042	40.00	0.00
RECOVERY	Pond 2	64.7517	40.00	0.00
RECOVERY	Pond 2	65.0050	40.00	0.00
RECOVERY	Pond 2	65.2576	40.00	0.00
RECOVERY	Pond 2	65.5005	40.00	0.00
RECOVERY	Pond 2	65.7530	40.00	0.00
RECOVERY	Pond 2	66.0037	40.00	0.00
RECOVERY	Pond 2	66.2567	40.00	0.00
RECOVERY	Pond 2	66.5031	40.00	0.00
RECOVERY	Pond 2	66.7552	40.00	0.00
RECOVERY	Pond 2	67.0034	40.00	0.00
RECOVERY	Pond 2	67.2515	40.00	0.00
RECOVERY	Pond 2	67.5013	40.00	0.00
RECOVERY	Pond 2	67.7505	40.00	0.00
RECOVERY	Pond 2	68.0044	40.00	0.00
RECOVERY	Pond 2	68.2517	40.00	0.00
RECOVERY	Pond 2	68.5040	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	68.7553	40.00	0.00
RECOVERY	Pond 2	69.0061	40.00	0.00
RECOVERY	Pond 2	69.2535	40.00	0.00
RECOVERY	Pond 2	69.5009	40.00	0.00
RECOVERY	Pond 2	69.7577	40.00	0.00
RECOVERY	Pond 2	70.0009	40.00	0.00
RECOVERY	Pond 2	70.2528	40.00	0.00
RECOVERY	Pond 2	70.5051	40.00	0.00
RECOVERY	Pond 2	70.7525	40.00	0.00
RECOVERY	Pond 2	71.0003	40.00	0.00
RECOVERY	Pond 2	71.2550	40.00	0.00
RECOVERY	Pond 2	71.5005	40.00	0.00
RECOVERY	Pond 2	71.7556	40.00	0.00
RECOVERY	Pond 2	72.0006	40.00	0.00
RECOVERY	Pond 2	72.2524	40.00	0.00
RECOVERY	Pond 2	72.5040	40.00	0.00
RECOVERY	Pond 2	72.7569	40.00	0.00
RECOVERY	Pond 2	73.0019	40.00	0.00
RECOVERY	Pond 2	73.2550	40.00	0.00
RECOVERY	Pond 2	73.5028	40.00	0.00
RECOVERY	Pond 2	73.7513	40.00	0.00
RECOVERY	Pond 2	74.0023	40.00	0.00
RECOVERY	Pond 2	74.2544	40.00	0.00
RECOVERY	Pond 2	74.5030	40.00	0.00
RECOVERY	Pond 2	74.7535	40.00	0.00
RECOVERY	Pond 2	75.0004	40.00	0.00
RECOVERY	Pond 2	75.2524	40.00	0.00
RECOVERY	Pond 2	75.5008	40.00	0.00
RECOVERY	Pond 2	75.7504	40.00	0.00
RECOVERY	Pond 2	76.0014	40.00	0.00
RECOVERY	Pond 2	76.2518	40.00	0.00
RECOVERY	Pond 2	76.5020	40.00	0.00
RECOVERY	Pond 2	76.7537	40.00	0.00
RECOVERY	Pond 2	77.0008	40.00	0.00
RECOVERY	Pond 2	77.2541	40.00	0.00
RECOVERY	Pond 2	77.5012	40.00	0.00
RECOVERY	Pond 2	77.7542	40.00	0.00
RECOVERY	Pond 2	78.0023	40.00	0.00
RECOVERY	Pond 2	78.2543	40.00	0.00
RECOVERY	Pond 2	78.5023	40.00	0.00
RECOVERY	Pond 2	78.7542	40.00	0.00
RECOVERY	Pond 2	79.0074	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	79.2532	40.00	0.00
RECOVERY	Pond 2	79.5023	40.00	0.00
RECOVERY	Pond 2	79.7506	40.00	0.00
RECOVERY	Pond 2	80.0040	40.00	0.00
RECOVERY	Pond 2	80.2560	40.00	0.00
RECOVERY	Pond 2	80.5008	40.00	0.00
RECOVERY	Pond 2	80.7520	40.00	0.00
RECOVERY	Pond 2	81.0017	40.00	0.00
RECOVERY	Pond 2	81.2505	40.00	0.00
RECOVERY	Pond 2	81.5049	40.00	0.00
RECOVERY	Pond 2	81.7509	40.00	0.00
RECOVERY	Pond 2	82.0030	40.00	0.00
RECOVERY	Pond 2	82.2517	40.00	0.00
RECOVERY	Pond 2	82.5032	40.00	0.00
RECOVERY	Pond 2	82.7524	40.00	0.00
RECOVERY	Pond 2	83.0022	40.00	0.00
RECOVERY	Pond 2	83.2567	40.00	0.00
RECOVERY	Pond 2	83.5039	40.00	0.00
RECOVERY	Pond 2	83.7512	40.00	0.00
RECOVERY	Pond 2	84.0025	40.00	0.00
RECOVERY	Pond 2	84.2505	40.00	0.00
RECOVERY	Pond 2	84.5068	40.00	0.00
RECOVERY	Pond 2	84.7530	40.00	0.00
RECOVERY	Pond 2	85.0002	40.00	0.00
RECOVERY	Pond 2	85.2513	40.00	0.00
RECOVERY	Pond 2	85.5037	40.00	0.00
RECOVERY	Pond 2	85.7535	40.00	0.00
RECOVERY	Pond 2	86.0072	40.00	0.00
RECOVERY	Pond 2	86.2505	40.00	0.00
RECOVERY	Pond 2	86.5037	40.00	0.00
RECOVERY	Pond 2	86.7509	40.00	0.00
RECOVERY	Pond 2	87.0052	40.00	0.00
RECOVERY	Pond 2	87.2544	40.00	0.00
RECOVERY	Pond 2	87.5039	40.00	0.00
RECOVERY	Pond 2	87.7541	40.00	0.00
RECOVERY	Pond 2	88.0016	40.00	0.00
RECOVERY	Pond 2	88.2507	40.00	0.00
RECOVERY	Pond 2	88.5063	40.00	0.00
RECOVERY	Pond 2	88.7509	40.00	0.00
RECOVERY	Pond 2	89.0012	40.00	0.00
RECOVERY	Pond 2	89.2513	40.00	0.00
RECOVERY	Pond 2	89.5038	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	89.7513	40.00	0.00
RECOVERY	Pond 2	90.0035	40.00	0.00
RECOVERY	Pond 2	90.2503	40.00	0.00
RECOVERY	Pond 2	90.5014	40.00	0.00
RECOVERY	Pond 2	90.7530	40.00	0.00
RECOVERY	Pond 2	91.0033	40.00	0.00
RECOVERY	Pond 2	91.2538	40.00	0.00
RECOVERY	Pond 2	91.5048	40.00	0.00
RECOVERY	Pond 2	91.7518	40.00	0.00
RECOVERY	Pond 2	92.0053	40.00	0.00
RECOVERY	Pond 2	92.2524	40.00	0.00
RECOVERY	Pond 2	92.5013	40.00	0.00
RECOVERY	Pond 2	92.7537	40.00	0.00
RECOVERY	Pond 2	93.0072	40.00	0.00
RECOVERY	Pond 2	93.2535	40.00	0.00
RECOVERY	Pond 2	93.5063	40.00	0.00
RECOVERY	Pond 2	93.7509	40.00	0.00
RECOVERY	Pond 2	94.0010	40.00	0.00
RECOVERY	Pond 2	94.2560	40.00	0.00
RECOVERY	Pond 2	94.5104	40.00	0.00
RECOVERY	Pond 2	94.7507	40.00	0.00
RECOVERY	Pond 2	95.0011	40.00	0.00
RECOVERY	Pond 2	95.2523	40.00	0.00
RECOVERY	Pond 2	95.5059	40.00	0.00
RECOVERY	Pond 2	95.7536	40.00	0.00
RECOVERY	Pond 2	96.0022	40.00	0.00
RECOVERY	Pond 2	96.2528	40.00	0.00
RECOVERY	Pond 2	96.5046	40.00	0.00
RECOVERY	Pond 2	96.7522	40.00	0.00
RECOVERY	Pond 2	97.0013	40.00	0.00
RECOVERY	Pond 2	97.2554	40.00	0.00
RECOVERY	Pond 2	97.5027	40.00	0.00
RECOVERY	Pond 2	97.7534	40.00	0.00
RECOVERY	Pond 2	98.0035	40.00	0.00
RECOVERY	Pond 2	98.2517	40.00	0.00
RECOVERY	Pond 2	98.5008	40.00	0.00
RECOVERY	Pond 2	98.7501	40.00	0.00
RECOVERY	Pond 2	99.0024	40.00	0.00
RECOVERY	Pond 2	99.2526	40.00	0.00
RECOVERY	Pond 2	99.5063	40.00	0.00
RECOVERY	Pond 2	99.7535	40.00	0.00
RECOVERY	Pond 2	100.0025	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	100.2548	40.00	0.00
RECOVERY	Pond 2	100.5041	40.00	0.00
RECOVERY	Pond 2	100.7520	40.00	0.00
RECOVERY	Pond 2	101.0065	40.00	0.00
RECOVERY	Pond 2	101.2569	40.00	0.00
RECOVERY	Pond 2	101.5038	40.00	0.00
RECOVERY	Pond 2	101.7506	40.00	0.00
RECOVERY	Pond 2	102.0030	40.00	0.00
RECOVERY	Pond 2	102.2542	40.00	0.00
RECOVERY	Pond 2	102.5014	40.00	0.00
RECOVERY	Pond 2	102.7540	40.00	0.00
RECOVERY	Pond 2	103.0040	40.00	0.00
RECOVERY	Pond 2	103.2558	40.00	0.00
RECOVERY	Pond 2	103.5028	40.00	0.00
RECOVERY	Pond 2	103.7512	40.00	0.00
RECOVERY	Pond 2	104.0032	40.00	0.00
RECOVERY	Pond 2	104.2503	40.00	0.00
RECOVERY	Pond 2	104.5050	40.00	0.00
RECOVERY	Pond 2	104.7545	40.00	0.00
RECOVERY	Pond 2	105.0016	40.00	0.00
RECOVERY	Pond 2	105.2542	40.00	0.00
RECOVERY	Pond 2	105.5022	40.00	0.00
RECOVERY	Pond 2	105.7528	40.00	0.00
RECOVERY	Pond 2	106.0002	40.00	0.00
RECOVERY	Pond 2	106.2539	40.00	0.00
RECOVERY	Pond 2	106.5039	40.00	0.00
RECOVERY	Pond 2	106.7527	40.00	0.00
RECOVERY	Pond 2	107.0019	40.00	0.00
RECOVERY	Pond 2	107.2509	40.00	0.00
RECOVERY	Pond 2	107.5039	40.00	0.00
RECOVERY	Pond 2	107.7551	40.00	0.00
RECOVERY	Pond 2	108.0038	40.00	0.00
RECOVERY	Pond 2	108.2512	40.00	0.00
RECOVERY	Pond 2	108.5008	40.00	0.00
RECOVERY	Pond 2	108.7522	40.00	0.00
RECOVERY	Pond 2	109.0028	40.00	0.00
RECOVERY	Pond 2	109.2554	40.00	0.00
RECOVERY	Pond 2	109.5006	40.00	0.00
RECOVERY	Pond 2	109.7517	40.00	0.00
RECOVERY	Pond 2	110.0054	40.00	0.00
RECOVERY	Pond 2	110.2503	40.00	0.00
RECOVERY	Pond 2	110.5041	40.00	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	Pond 2	110.7525	40.00	0.00
RECOVERY	Pond 2	111.0005	40.00	0.00
RECOVERY	Pond 2	111.2532	40.00	0.00
RECOVERY	Pond 2	111.5013	40.00	0.00
RECOVERY	Pond 2	111.7517	40.00	0.00
RECOVERY	Pond 2	112.0020	40.00	0.00
RECOVERY	Pond 2	112.2582	40.00	0.00
RECOVERY	Pond 2	112.5021	40.00	0.00
RECOVERY	Pond 2	112.7529	40.00	0.00
RECOVERY	Pond 2	113.0010	40.00	0.00
RECOVERY	Pond 2	113.2528	40.00	0.00
RECOVERY	Pond 2	113.5022	40.00	0.00
RECOVERY	Pond 2	113.7533	40.00	0.00
RECOVERY	Pond 2	114.0009	40.00	0.00
RECOVERY	Pond 2	114.2504	40.00	0.00
RECOVERY	Pond 2	114.5017	40.00	0.00
RECOVERY	Pond 2	114.7507	40.00	0.00
RECOVERY	Pond 2	115.0046	40.00	0.00
RECOVERY	Pond 2	115.2512	40.00	0.00
RECOVERY	Pond 2	115.5036	40.00	0.00
RECOVERY	Pond 2	115.7533	40.00	0.00
RECOVERY	Pond 2	116.0057	40.00	0.00
RECOVERY	Pond 2	116.2516	40.00	0.00
RECOVERY	Pond 2	116.5025	40.00	0.00
RECOVERY	Pond 2	116.7520	40.00	0.00
RECOVERY	Pond 2	117.0059	40.00	0.00
RECOVERY	Pond 2	117.2547	40.00	0.00
RECOVERY	Pond 2	117.5003	40.00	0.00
RECOVERY	Pond 2	117.7521	40.00	0.00
RECOVERY	Pond 2	118.0021	40.00	0.00
RECOVERY	Pond 2	118.2516	40.00	0.00
RECOVERY	Pond 2	118.5029	40.00	0.00
RECOVERY	Pond 2	118.7567	40.00	0.00
RECOVERY	Pond 2	119.0054	40.00	0.00
RECOVERY	Pond 2	119.2505	40.00	0.00
RECOVERY	Pond 2	119.5013	40.00	0.00
RECOVERY	Pond 2	119.7546	40.00	0.00
RECOVERY	Pond 2	120.0011	40.00	0.00
RECOVERY	STORM CHAMBER	0.0000	41.10	0.00
RECOVERY	STORM CHAMBER	0.2506	40.75	1.29
RECOVERY	STORM CHAMBER	0.5003	40.68	1.12
RECOVERY	STORM CHAMBER	0.7506	40.62	0.60

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	1.0000	40.60	0.54
RECOVERY	STORM CHAMBER	1.2509	40.58	0.38
RECOVERY	STORM CHAMBER	1.5001	40.56	0.43
RECOVERY	STORM CHAMBER	1.7510	40.54	0.27
RECOVERY	STORM CHAMBER	2.0026	40.53	0.22
RECOVERY	STORM CHAMBER	2.2513	40.52	0.22
RECOVERY	STORM CHAMBER	2.5010	40.51	0.19
RECOVERY	STORM CHAMBER	2.7501	40.50	0.18
RECOVERY	STORM CHAMBER	3.0006	40.50	0.17
RECOVERY	STORM CHAMBER	3.2503	40.49	0.16
RECOVERY	STORM CHAMBER	3.5032	40.48	0.15
RECOVERY	STORM CHAMBER	3.7509	40.48	0.14
RECOVERY	STORM CHAMBER	4.0036	40.47	0.14
RECOVERY	STORM CHAMBER	4.2515	40.46	0.13
RECOVERY	STORM CHAMBER	4.5007	40.46	0.13
RECOVERY	STORM CHAMBER	4.7506	40.45	0.12
RECOVERY	STORM CHAMBER	5.0034	40.45	0.12
RECOVERY	STORM CHAMBER	5.2506	40.44	0.11
RECOVERY	STORM CHAMBER	5.5001	40.44	0.11
RECOVERY	STORM CHAMBER	5.7514	40.43	0.11
RECOVERY	STORM CHAMBER	6.0001	40.43	0.10
RECOVERY	STORM CHAMBER	6.2539	40.42	0.10
RECOVERY	STORM CHAMBER	6.5024	40.42	0.10
RECOVERY	STORM CHAMBER	6.7536	40.41	0.10
RECOVERY	STORM CHAMBER	7.0025	40.41	0.09
RECOVERY	STORM CHAMBER	7.2526	40.41	0.09
RECOVERY	STORM CHAMBER	7.5022	40.40	0.09
RECOVERY	STORM CHAMBER	7.7509	40.40	0.09
RECOVERY	STORM CHAMBER	8.0012	40.39	0.08
RECOVERY	STORM CHAMBER	8.2529	40.39	0.08
RECOVERY	STORM CHAMBER	8.5043	40.39	0.08
RECOVERY	STORM CHAMBER	8.7504	40.38	0.08
RECOVERY	STORM CHAMBER	9.0037	40.38	0.08
RECOVERY	STORM CHAMBER	9.2512	40.38	0.08
RECOVERY	STORM CHAMBER	9.5001	40.37	0.08
RECOVERY	STORM CHAMBER	9.7515	40.37	0.07
RECOVERY	STORM CHAMBER	10.0002	40.37	0.07
RECOVERY	STORM CHAMBER	10.2502	40.36	0.07
RECOVERY	STORM CHAMBER	10.5008	40.36	0.07
RECOVERY	STORM CHAMBER	10.7553	40.36	0.07
RECOVERY	STORM CHAMBER	11.0053	40.35	0.07
RECOVERY	STORM CHAMBER	11.2547	40.35	0.07

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	11.5039	40.35	0.07
RECOVERY	STORM CHAMBER	11.7501	40.34	0.07
RECOVERY	STORM CHAMBER	12.0022	40.34	0.07
RECOVERY	STORM CHAMBER	12.2518	40.34	0.06
RECOVERY	STORM CHAMBER	12.5036	40.33	0.06
RECOVERY	STORM CHAMBER	12.7510	40.33	0.06
RECOVERY	STORM CHAMBER	13.0000	40.33	0.06
RECOVERY	STORM CHAMBER	13.2531	40.33	0.06
RECOVERY	STORM CHAMBER	13.5018	40.32	0.06
RECOVERY	STORM CHAMBER	13.7507	40.32	0.06
RECOVERY	STORM CHAMBER	14.0037	40.32	0.06
RECOVERY	STORM CHAMBER	14.2539	40.31	0.06
RECOVERY	STORM CHAMBER	14.5037	40.31	0.06
RECOVERY	STORM CHAMBER	14.7505	40.31	0.06
RECOVERY	STORM CHAMBER	15.0045	40.31	0.06
RECOVERY	STORM CHAMBER	15.2535	40.30	0.06
RECOVERY	STORM CHAMBER	15.5033	40.30	0.06
RECOVERY	STORM CHAMBER	15.7518	40.30	0.05
RECOVERY	STORM CHAMBER	16.0009	40.30	0.05
RECOVERY	STORM CHAMBER	16.2534	40.29	0.05
RECOVERY	STORM CHAMBER	16.5040	40.29	0.05
RECOVERY	STORM CHAMBER	16.7519	40.29	0.05
RECOVERY	STORM CHAMBER	17.0036	40.29	0.05
RECOVERY	STORM CHAMBER	17.2514	40.28	0.05
RECOVERY	STORM CHAMBER	17.5006	40.28	0.05
RECOVERY	STORM CHAMBER	17.7580	40.28	0.05
RECOVERY	STORM CHAMBER	18.0023	40.28	0.05
RECOVERY	STORM CHAMBER	18.2545	40.27	0.05
RECOVERY	STORM CHAMBER	18.5003	40.27	0.05
RECOVERY	STORM CHAMBER	18.7519	40.27	0.05
RECOVERY	STORM CHAMBER	19.0023	40.27	0.05
RECOVERY	STORM CHAMBER	19.2501	40.26	0.05
RECOVERY	STORM CHAMBER	19.5012	40.26	0.05
RECOVERY	STORM CHAMBER	19.7524	40.26	0.05
RECOVERY	STORM CHAMBER	20.0035	40.26	0.05
RECOVERY	STORM CHAMBER	20.2536	40.25	0.05
RECOVERY	STORM CHAMBER	20.5044	40.25	0.04
RECOVERY	STORM CHAMBER	20.7500	40.25	0.05
RECOVERY	STORM CHAMBER	21.0043	40.25	0.04
RECOVERY	STORM CHAMBER	21.2515	40.25	0.04
RECOVERY	STORM CHAMBER	21.5010	40.24	0.04
RECOVERY	STORM CHAMBER	21.7511	40.24	0.04

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	22.0003	40.24	0.04
RECOVERYS	TORM CHAMBER	22.2548	40.24	0.04
RECOVERYS	TORM CHAMBER	22.5027	40.24	0.04
RECOVERYS	TORM CHAMBER	22.7568	40.23	0.04
RECOVERYS	TORM CHAMBER	23.0025	40.23	0.04
RECOVERYS	TORM CHAMBER	23.2534	40.23	0.04
RECOVERYS	TORM CHAMBER	23.5040	40.23	0.04
RECOVERYS	TORM CHAMBER	23.7501	40.22	0.04
RECOVERYS	TORM CHAMBER	24.0009	40.22	0.04
RECOVERYS	TORM CHAMBER	24.2516	40.22	0.04
RECOVERYS	TORM CHAMBER	24.5016	40.22	0.04
RECOVERYS	TORM CHAMBER	24.7532	40.22	0.04
RECOVERYS	TORM CHAMBER	25.0002	40.21	0.04
RECOVERYS	TORM CHAMBER	25.2506	40.21	0.04
RECOVERYS	TORM CHAMBER	25.5037	40.21	0.04
RECOVERYS	TORM CHAMBER	25.7531	40.21	0.04
RECOVERYS	TORM CHAMBER	26.0063	40.21	0.04
RECOVERYS	TORM CHAMBER	26.2590	40.20	0.04
RECOVERYS	TORM CHAMBER	26.5071	40.20	0.04
RECOVERYS	TORM CHAMBER	26.7543	40.20	0.04
RECOVERYS	TORM CHAMBER	27.0066	40.20	0.04
RECOVERYS	TORM CHAMBER	27.2529	40.20	0.04
RECOVERYS	TORM CHAMBER	27.5005	40.20	0.04
RECOVERYS	TORM CHAMBER	27.7509	40.19	0.04
RECOVERYS	TORM CHAMBER	28.0058	40.19	0.04
RECOVERYS	TORM CHAMBER	28.2501	40.19	0.04
RECOVERYS	TORM CHAMBER	28.5018	40.19	0.04
RECOVERYS	TORM CHAMBER	28.7551	40.19	0.04
RECOVERYS	TORM CHAMBER	29.0017	40.18	0.04
RECOVERYS	TORM CHAMBER	29.2553	40.18	0.03
RECOVERYS	TORM CHAMBER	29.5062	40.18	0.03
RECOVERYS	TORM CHAMBER	29.7509	40.18	0.04
RECOVERYS	TORM CHAMBER	30.0084	40.18	0.04
RECOVERYS	TORM CHAMBER	30.2504	40.18	0.03
RECOVERYS	TORM CHAMBER	30.5069	40.17	0.03
RECOVERYS	TORM CHAMBER	30.7572	40.17	0.03
RECOVERYS	TORM CHAMBER	31.0048	40.17	0.03
RECOVERYS	TORM CHAMBER	31.2509	40.17	0.03
RECOVERYS	TORM CHAMBER	31.5063	40.17	0.03
RECOVERYS	TORM CHAMBER	31.7513	40.17	0.03
RECOVERYS	TORM CHAMBER	32.0009	40.16	0.03
RECOVERYS	TORM CHAMBER	32.2502	40.16	0.03

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	32.5024	40.16	0.03
RECOVERY	STORM CHAMBER	32.7543	40.16	0.03
RECOVERY	STORM CHAMBER	33.0020	40.16	0.03
RECOVERY	STORM CHAMBER	33.2562	40.16	0.03
RECOVERY	STORM CHAMBER	33.5007	40.15	0.03
RECOVERY	STORM CHAMBER	33.7505	40.15	0.03
RECOVERY	STORM CHAMBER	34.0057	40.15	0.03
RECOVERY	STORM CHAMBER	34.2533	40.15	0.03
RECOVERY	STORM CHAMBER	34.5098	40.15	0.03
RECOVERY	STORM CHAMBER	34.7527	40.15	0.03
RECOVERY	STORM CHAMBER	35.0001	40.14	0.03
RECOVERY	STORM CHAMBER	35.2570	40.14	0.03
RECOVERY	STORM CHAMBER	35.5107	40.14	0.03
RECOVERY	STORM CHAMBER	35.7598	40.14	0.03
RECOVERY	STORM CHAMBER	36.0040	40.14	0.03
RECOVERY	STORM CHAMBER	36.2528	40.14	0.03
RECOVERY	STORM CHAMBER	36.5027	40.13	0.03
RECOVERY	STORM CHAMBER	36.7544	40.13	0.03
RECOVERY	STORM CHAMBER	37.0082	40.13	0.03
RECOVERY	STORM CHAMBER	37.2515	40.13	0.03
RECOVERY	STORM CHAMBER	37.5050	40.13	0.03
RECOVERY	STORM CHAMBER	37.7578	40.13	0.03
RECOVERY	STORM CHAMBER	38.0028	40.12	0.03
RECOVERY	STORM CHAMBER	38.2500	40.12	0.03
RECOVERY	STORM CHAMBER	38.5006	40.12	0.03
RECOVERY	STORM CHAMBER	38.7534	40.12	0.03
RECOVERY	STORM CHAMBER	39.0062	40.12	0.03
RECOVERY	STORM CHAMBER	39.2532	40.12	0.03
RECOVERY	STORM CHAMBER	39.5025	40.12	0.03
RECOVERY	STORM CHAMBER	39.7512	40.11	0.03
RECOVERY	STORM CHAMBER	40.0032	40.11	0.03
RECOVERY	STORM CHAMBER	40.2535	40.11	0.03
RECOVERY	STORM CHAMBER	40.5023	40.11	0.03
RECOVERY	STORM CHAMBER	40.7550	40.11	0.03
RECOVERY	STORM CHAMBER	41.0056	40.11	0.03
RECOVERY	STORM CHAMBER	41.2574	40.11	0.03
RECOVERY	STORM CHAMBER	41.5058	40.10	0.03
RECOVERY	STORM CHAMBER	41.7566	40.10	0.03
RECOVERY	STORM CHAMBER	42.0041	40.10	0.03
RECOVERY	STORM CHAMBER	42.2522	40.10	0.03
RECOVERY	STORM CHAMBER	42.5031	40.10	0.03
RECOVERY	STORM CHAMBER	42.7517	40.10	0.03

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	43.0011	40.10	0.03
RECOVERYS	TORM CHAMBER	43.2573	40.09	0.03
RECOVERYS	TORM CHAMBER	43.5045	40.09	0.03
RECOVERYS	TORM CHAMBER	43.7549	40.09	0.03
RECOVERYS	TORM CHAMBER	44.0022	40.09	0.03
RECOVERYS	TORM CHAMBER	44.2506	40.09	0.03
RECOVERYS	TORM CHAMBER	44.5054	40.09	0.03
RECOVERYS	TORM CHAMBER	44.7505	40.09	0.03
RECOVERYS	TORM CHAMBER	45.0072	40.08	0.03
RECOVERYS	TORM CHAMBER	45.2520	40.08	0.03
RECOVERYS	TORM CHAMBER	45.5009	40.08	0.03
RECOVERYS	TORM CHAMBER	45.7538	40.08	0.03
RECOVERYS	TORM CHAMBER	46.0015	40.08	0.02
RECOVERYS	TORM CHAMBER	46.2502	40.08	0.02
RECOVERYS	TORM CHAMBER	46.5029	40.08	0.02
RECOVERYS	TORM CHAMBER	46.7508	40.07	0.02
RECOVERYS	TORM CHAMBER	47.0005	40.07	0.02
RECOVERYS	TORM CHAMBER	47.2537	40.07	0.02
RECOVERYS	TORM CHAMBER	47.5043	40.07	0.02
RECOVERYS	TORM CHAMBER	47.7561	40.07	0.02
RECOVERYS	TORM CHAMBER	48.0094	40.07	0.02
RECOVERYS	TORM CHAMBER	48.2507	40.07	0.02
RECOVERYS	TORM CHAMBER	48.5043	40.06	0.02
RECOVERYS	TORM CHAMBER	48.7500	40.06	0.02
RECOVERYS	TORM CHAMBER	49.0008	40.06	0.02
RECOVERYS	TORM CHAMBER	49.2513	40.06	0.02
RECOVERYS	TORM CHAMBER	49.5033	40.06	0.02
RECOVERYS	TORM CHAMBER	49.7518	40.06	0.02
RECOVERYS	TORM CHAMBER	50.0039	40.06	0.02
RECOVERYS	TORM CHAMBER	50.2533	40.05	0.02
RECOVERYS	TORM CHAMBER	50.5023	40.05	0.02
RECOVERYS	TORM CHAMBER	50.7528	40.05	0.02
RECOVERYS	TORM CHAMBER	51.0020	40.05	0.02
RECOVERYS	TORM CHAMBER	51.2547	40.05	0.02
RECOVERYS	TORM CHAMBER	51.5020	40.05	0.02
RECOVERYS	TORM CHAMBER	51.7504	40.05	0.02
RECOVERYS	TORM CHAMBER	52.0024	40.04	0.02
RECOVERYS	TORM CHAMBER	52.2537	40.04	0.02
RECOVERYS	TORM CHAMBER	52.5045	40.04	0.02
RECOVERYS	TORM CHAMBER	52.7526	40.04	0.02
RECOVERYS	TORM CHAMBER	53.0059	40.04	0.02
RECOVERYS	TORM CHAMBER	53.2521	40.04	0.02

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	53.5037	40.04	0.02
RECOVERYS	TORM CHAMBER	53.7560	40.03	0.02
RECOVERYS	TORM CHAMBER	54.0015	40.03	0.02
RECOVERYS	TORM CHAMBER	54.2523	40.03	0.02
RECOVERYS	TORM CHAMBER	54.5007	40.03	0.02
RECOVERYS	TORM CHAMBER	54.7511	40.03	0.02
RECOVERYS	TORM CHAMBER	55.0066	40.03	0.02
RECOVERYS	TORM CHAMBER	55.2511	40.02	0.02
RECOVERYS	TORM CHAMBER	55.5018	40.02	0.02
RECOVERYS	TORM CHAMBER	55.7546	40.02	0.02
RECOVERYS	TORM CHAMBER	56.0049	40.02	0.02
RECOVERYS	TORM CHAMBER	56.2505	40.02	0.02
RECOVERYS	TORM CHAMBER	56.5047	40.02	0.02
RECOVERYS	TORM CHAMBER	56.7556	40.01	0.02
RECOVERYS	TORM CHAMBER	57.0017	40.01	0.02
RECOVERYS	TORM CHAMBER	57.2509	40.01	0.02
RECOVERYS	TORM CHAMBER	57.5000	40.01	0.02
RECOVERYS	TORM CHAMBER	57.7510	40.01	0.02
RECOVERYS	TORM CHAMBER	58.0043	40.01	0.02
RECOVERYS	TORM CHAMBER	58.2516	40.00	0.02
RECOVERYS	TORM CHAMBER	58.5070	40.00	0.02
RECOVERYS	TORM CHAMBER	58.7510	40.00	0.02
RECOVERYS	TORM CHAMBER	59.0039	40.00	0.02
RECOVERYS	TORM CHAMBER	59.2515	40.00	0.02
RECOVERYS	TORM CHAMBER	59.5012	40.00	0.02
RECOVERYS	TORM CHAMBER	59.7567	39.99	0.02
RECOVERYS	TORM CHAMBER	60.0038	39.99	0.02
RECOVERYS	TORM CHAMBER	60.2557	39.99	0.02
RECOVERYS	TORM CHAMBER	60.5019	39.99	0.02
RECOVERYS	TORM CHAMBER	60.7551	39.99	0.02
RECOVERYS	TORM CHAMBER	61.0023	39.99	0.02
RECOVERYS	TORM CHAMBER	61.2552	39.98	0.02
RECOVERYS	TORM CHAMBER	61.5026	39.98	0.02
RECOVERYS	TORM CHAMBER	61.7544	39.98	0.02
RECOVERYS	TORM CHAMBER	62.0015	39.98	0.02
RECOVERYS	TORM CHAMBER	62.2534	39.98	0.02
RECOVERYS	TORM CHAMBER	62.5025	39.97	0.02
RECOVERYS	TORM CHAMBER	62.7537	39.97	0.02
RECOVERYS	TORM CHAMBER	63.0021	39.97	0.02
RECOVERYS	TORM CHAMBER	63.2546	39.97	0.02
RECOVERYS	TORM CHAMBER	63.5039	39.97	0.02
RECOVERYS	TORM CHAMBER	63.7504	39.97	0.02

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	64.0005	39.96	0.02
RECOVERY	STORM CHAMBER	64.2520	39.96	0.02
RECOVERY	STORM CHAMBER	64.5042	39.96	0.02
RECOVERY	STORM CHAMBER	64.7517	39.96	0.02
RECOVERY	STORM CHAMBER	65.0050	39.96	0.02
RECOVERY	STORM CHAMBER	65.2576	39.95	0.02
RECOVERY	STORM CHAMBER	65.5005	39.95	0.02
RECOVERY	STORM CHAMBER	65.7530	39.95	0.02
RECOVERY	STORM CHAMBER	66.0037	39.95	0.02
RECOVERY	STORM CHAMBER	66.2567	39.95	0.02
RECOVERY	STORM CHAMBER	66.5031	39.95	0.02
RECOVERY	STORM CHAMBER	66.7552	39.94	0.02
RECOVERY	STORM CHAMBER	67.0034	39.94	0.02
RECOVERY	STORM CHAMBER	67.2515	39.94	0.02
RECOVERY	STORM CHAMBER	67.5013	39.94	0.02
RECOVERY	STORM CHAMBER	67.7505	39.94	0.02
RECOVERY	STORM CHAMBER	68.0044	39.93	0.02
RECOVERY	STORM CHAMBER	68.2517	39.93	0.01
RECOVERY	STORM CHAMBER	68.5040	39.93	0.01
RECOVERY	STORM CHAMBER	68.7553	39.93	0.01
RECOVERY	STORM CHAMBER	69.0061	39.93	0.01
RECOVERY	STORM CHAMBER	69.2535	39.93	0.01
RECOVERY	STORM CHAMBER	69.5009	39.92	0.01
RECOVERY	STORM CHAMBER	69.7577	39.92	0.02
RECOVERY	STORM CHAMBER	70.0009	39.92	0.01
RECOVERY	STORM CHAMBER	70.2528	39.92	0.01
RECOVERY	STORM CHAMBER	70.5051	39.92	0.01
RECOVERY	STORM CHAMBER	70.7525	39.92	0.01
RECOVERY	STORM CHAMBER	71.0003	39.91	0.01
RECOVERY	STORM CHAMBER	71.2550	39.91	0.01
RECOVERY	STORM CHAMBER	71.5005	39.91	0.01
RECOVERY	STORM CHAMBER	71.7556	39.91	0.01
RECOVERY	STORM CHAMBER	72.0006	39.91	0.02
RECOVERY	STORM CHAMBER	72.2524	39.91	0.01
RECOVERY	STORM CHAMBER	72.5040	39.90	0.01
RECOVERY	STORM CHAMBER	72.7569	39.90	0.01
RECOVERY	STORM CHAMBER	73.0019	39.90	0.01
RECOVERY	STORM CHAMBER	73.2550	39.90	0.00
RECOVERY	STORM CHAMBER	73.5028	39.90	0.00
RECOVERY	STORM CHAMBER	73.7513	39.90	0.00
RECOVERY	STORM CHAMBER	74.0023	39.90	0.00
RECOVERY	STORM CHAMBER	74.2544	39.90	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	74.5030	39.90	0.00
RECOVERY	STORM CHAMBER	74.7535	39.90	0.00
RECOVERY	STORM CHAMBER	75.0004	39.90	0.00
RECOVERY	STORM CHAMBER	75.2524	39.90	0.00
RECOVERY	STORM CHAMBER	75.5008	39.90	0.00
RECOVERY	STORM CHAMBER	75.7504	39.90	0.00
RECOVERY	STORM CHAMBER	76.0014	39.90	0.00
RECOVERY	STORM CHAMBER	76.2518	39.90	0.00
RECOVERY	STORM CHAMBER	76.5020	39.90	0.00
RECOVERY	STORM CHAMBER	76.7537	39.90	0.00
RECOVERY	STORM CHAMBER	77.0008	39.90	0.00
RECOVERY	STORM CHAMBER	77.2541	39.90	0.00
RECOVERY	STORM CHAMBER	77.5012	39.90	0.00
RECOVERY	STORM CHAMBER	77.7542	39.90	0.00
RECOVERY	STORM CHAMBER	78.0023	39.90	0.00
RECOVERY	STORM CHAMBER	78.2543	39.90	0.00
RECOVERY	STORM CHAMBER	78.5023	39.90	0.00
RECOVERY	STORM CHAMBER	78.7542	39.90	0.00
RECOVERY	STORM CHAMBER	79.0074	39.90	0.00
RECOVERY	STORM CHAMBER	79.2532	39.90	0.00
RECOVERY	STORM CHAMBER	79.5023	39.90	0.00
RECOVERY	STORM CHAMBER	79.7506	39.90	0.00
RECOVERY	STORM CHAMBER	80.0040	39.90	0.00
RECOVERY	STORM CHAMBER	80.2560	39.90	0.00
RECOVERY	STORM CHAMBER	80.5008	39.90	0.00
RECOVERY	STORM CHAMBER	80.7520	39.90	0.00
RECOVERY	STORM CHAMBER	81.0017	39.90	0.00
RECOVERY	STORM CHAMBER	81.2505	39.90	0.00
RECOVERY	STORM CHAMBER	81.5049	39.90	0.00
RECOVERY	STORM CHAMBER	81.7509	39.90	0.00
RECOVERY	STORM CHAMBER	82.0030	39.90	0.00
RECOVERY	STORM CHAMBER	82.2517	39.90	0.00
RECOVERY	STORM CHAMBER	82.5032	39.90	0.00
RECOVERY	STORM CHAMBER	82.7524	39.90	0.00
RECOVERY	STORM CHAMBER	83.0022	39.90	0.00
RECOVERY	STORM CHAMBER	83.2567	39.90	0.00
RECOVERY	STORM CHAMBER	83.5039	39.90	0.00
RECOVERY	STORM CHAMBER	83.7512	39.90	0.00
RECOVERY	STORM CHAMBER	84.0025	39.90	0.00
RECOVERY	STORM CHAMBER	84.2505	39.90	0.00
RECOVERY	STORM CHAMBER	84.5068	39.90	0.00
RECOVERY	STORM CHAMBER	84.7530	39.90	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERYS	TORM CHAMBER	85.0002	39.90	0.00
RECOVERYS	TORM CHAMBER	85.2513	39.90	0.00
RECOVERYS	TORM CHAMBER	85.5037	39.90	0.00
RECOVERYS	TORM CHAMBER	85.7535	39.90	0.00
RECOVERYS	TORM CHAMBER	86.0072	39.90	0.00
RECOVERYS	TORM CHAMBER	86.2505	39.90	0.00
RECOVERYS	TORM CHAMBER	86.5037	39.90	0.00
RECOVERYS	TORM CHAMBER	86.7509	39.90	0.00
RECOVERYS	TORM CHAMBER	87.0052	39.90	0.00
RECOVERYS	TORM CHAMBER	87.2544	39.90	0.00
RECOVERYS	TORM CHAMBER	87.5039	39.90	0.00
RECOVERYS	TORM CHAMBER	87.7541	39.90	0.00
RECOVERYS	TORM CHAMBER	88.0016	39.90	0.00
RECOVERYS	TORM CHAMBER	88.2507	39.90	0.00
RECOVERYS	TORM CHAMBER	88.5063	39.90	0.00
RECOVERYS	TORM CHAMBER	88.7509	39.90	0.00
RECOVERYS	TORM CHAMBER	89.0012	39.90	0.00
RECOVERYS	TORM CHAMBER	89.2513	39.90	0.00
RECOVERYS	TORM CHAMBER	89.5038	39.90	0.00
RECOVERYS	TORM CHAMBER	89.7513	39.90	0.00
RECOVERYS	TORM CHAMBER	90.0035	39.90	0.00
RECOVERYS	TORM CHAMBER	90.2503	39.90	0.00
RECOVERYS	TORM CHAMBER	90.5014	39.90	0.00
RECOVERYS	TORM CHAMBER	90.7530	39.90	0.00
RECOVERYS	TORM CHAMBER	91.0033	39.90	0.00
RECOVERYS	TORM CHAMBER	91.2538	39.90	0.00
RECOVERYS	TORM CHAMBER	91.5048	39.90	0.00
RECOVERYS	TORM CHAMBER	91.7518	39.90	0.00
RECOVERYS	TORM CHAMBER	92.0053	39.90	0.00
RECOVERYS	TORM CHAMBER	92.2524	39.90	0.00
RECOVERYS	TORM CHAMBER	92.5013	39.90	0.00
RECOVERYS	TORM CHAMBER	92.7537	39.90	0.00
RECOVERYS	TORM CHAMBER	93.0072	39.90	0.00
RECOVERYS	TORM CHAMBER	93.2535	39.90	0.00
RECOVERYS	TORM CHAMBER	93.5063	39.90	0.00
RECOVERYS	TORM CHAMBER	93.7509	39.90	0.00
RECOVERYS	TORM CHAMBER	94.0010	39.90	0.00
RECOVERYS	TORM CHAMBER	94.2560	39.90	0.00
RECOVERYS	TORM CHAMBER	94.5104	39.90	0.00
RECOVERYS	TORM CHAMBER	94.7507	39.90	0.00
RECOVERYS	TORM CHAMBER	95.0011	39.90	0.00
RECOVERYS	TORM CHAMBER	95.2523	39.90	0.00

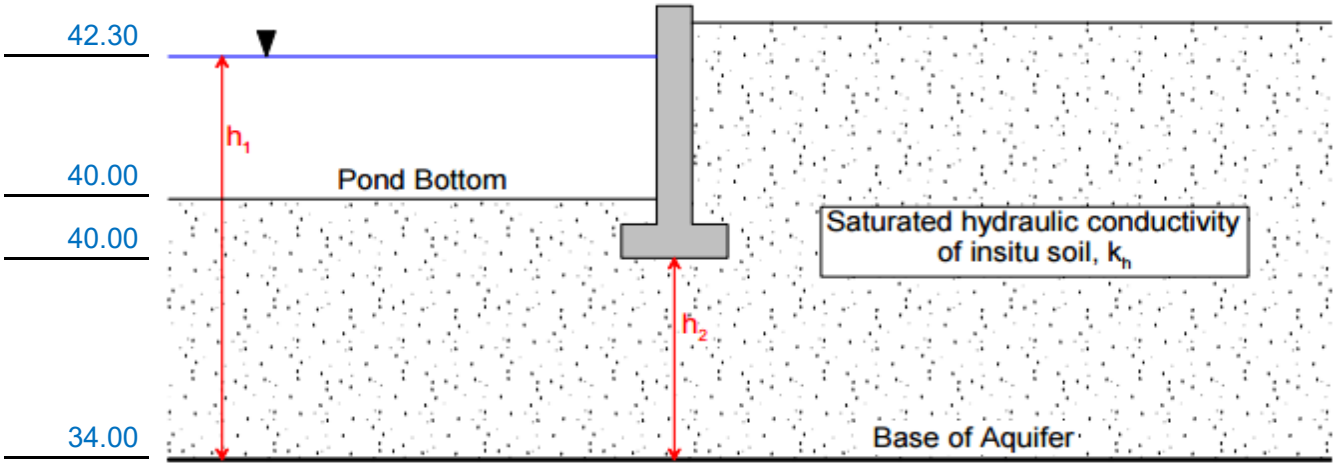
Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	95.5059	39.90	0.00
RECOVERY	STORM CHAMBER	95.7536	39.90	0.00
RECOVERY	STORM CHAMBER	96.0022	39.90	0.00
RECOVERY	STORM CHAMBER	96.2528	39.90	0.00
RECOVERY	STORM CHAMBER	96.5046	39.90	0.00
RECOVERY	STORM CHAMBER	96.7522	39.90	0.00
RECOVERY	STORM CHAMBER	97.0013	39.90	0.00
RECOVERY	STORM CHAMBER	97.2554	39.90	0.00
RECOVERY	STORM CHAMBER	97.5027	39.90	0.00
RECOVERY	STORM CHAMBER	97.7534	39.90	0.00
RECOVERY	STORM CHAMBER	98.0035	39.90	0.00
RECOVERY	STORM CHAMBER	98.2517	39.90	0.00
RECOVERY	STORM CHAMBER	98.5008	39.90	0.00
RECOVERY	STORM CHAMBER	98.7501	39.90	0.00
RECOVERY	STORM CHAMBER	99.0024	39.90	0.00
RECOVERY	STORM CHAMBER	99.2526	39.90	0.00
RECOVERY	STORM CHAMBER	99.5063	39.90	0.00
RECOVERY	STORM CHAMBER	99.7535	39.90	0.00
RECOVERY	STORM CHAMBER	100.0025	39.90	0.00
RECOVERY	STORM CHAMBER	100.2548	39.90	0.00
RECOVERY	STORM CHAMBER	100.5041	39.90	0.00
RECOVERY	STORM CHAMBER	100.7520	39.90	0.00
RECOVERY	STORM CHAMBER	101.0065	39.90	0.00
RECOVERY	STORM CHAMBER	101.2569	39.90	0.00
RECOVERY	STORM CHAMBER	101.5038	39.90	0.00
RECOVERY	STORM CHAMBER	101.7506	39.90	0.00
RECOVERY	STORM CHAMBER	102.0030	39.90	0.00
RECOVERY	STORM CHAMBER	102.2542	39.90	0.00
RECOVERY	STORM CHAMBER	102.5014	39.90	0.00
RECOVERY	STORM CHAMBER	102.7540	39.90	0.00
RECOVERY	STORM CHAMBER	103.0040	39.90	0.00
RECOVERY	STORM CHAMBER	103.2558	39.90	0.00
RECOVERY	STORM CHAMBER	103.5028	39.90	0.00
RECOVERY	STORM CHAMBER	103.7512	39.90	0.00
RECOVERY	STORM CHAMBER	104.0032	39.90	0.00
RECOVERY	STORM CHAMBER	104.2503	39.90	0.00
RECOVERY	STORM CHAMBER	104.5050	39.90	0.00
RECOVERY	STORM CHAMBER	104.7545	39.90	0.00
RECOVERY	STORM CHAMBER	105.0016	39.90	0.00
RECOVERY	STORM CHAMBER	105.2542	39.90	0.00
RECOVERY	STORM CHAMBER	105.5022	39.90	0.00
RECOVERY	STORM CHAMBER	105.7528	39.90	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	106.0002	39.90	0.00
RECOVERY	STORM CHAMBER	106.2539	39.90	0.00
RECOVERY	STORM CHAMBER	106.5039	39.90	0.00
RECOVERY	STORM CHAMBER	106.7527	39.90	0.00
RECOVERY	STORM CHAMBER	107.0019	39.90	0.00
RECOVERY	STORM CHAMBER	107.2509	39.90	0.00
RECOVERY	STORM CHAMBER	107.5039	39.90	0.00
RECOVERY	STORM CHAMBER	107.7551	39.90	0.00
RECOVERY	STORM CHAMBER	108.0038	39.90	0.00
RECOVERY	STORM CHAMBER	108.2512	39.90	0.00
RECOVERY	STORM CHAMBER	108.5008	39.90	0.00
RECOVERY	STORM CHAMBER	108.7522	39.90	0.00
RECOVERY	STORM CHAMBER	109.0028	39.90	0.00
RECOVERY	STORM CHAMBER	109.2554	39.90	0.00
RECOVERY	STORM CHAMBER	109.5006	39.90	0.00
RECOVERY	STORM CHAMBER	109.7517	39.90	0.00
RECOVERY	STORM CHAMBER	110.0054	39.90	0.00
RECOVERY	STORM CHAMBER	110.2503	39.90	0.00
RECOVERY	STORM CHAMBER	110.5041	39.90	0.00
RECOVERY	STORM CHAMBER	110.7525	39.90	0.00
RECOVERY	STORM CHAMBER	111.0005	39.90	0.00
RECOVERY	STORM CHAMBER	111.2532	39.90	0.00
RECOVERY	STORM CHAMBER	111.5013	39.90	0.00
RECOVERY	STORM CHAMBER	111.7517	39.90	0.00
RECOVERY	STORM CHAMBER	112.0020	39.90	0.00
RECOVERY	STORM CHAMBER	112.2582	39.90	0.00
RECOVERY	STORM CHAMBER	112.5021	39.90	0.00
RECOVERY	STORM CHAMBER	112.7529	39.90	0.00
RECOVERY	STORM CHAMBER	113.0010	39.90	0.00
RECOVERY	STORM CHAMBER	113.2528	39.90	0.00
RECOVERY	STORM CHAMBER	113.5022	39.90	0.00
RECOVERY	STORM CHAMBER	113.7533	39.90	0.00
RECOVERY	STORM CHAMBER	114.0009	39.90	0.00
RECOVERY	STORM CHAMBER	114.2504	39.90	0.00
RECOVERY	STORM CHAMBER	114.5017	39.90	0.00
RECOVERY	STORM CHAMBER	114.7507	39.90	0.00
RECOVERY	STORM CHAMBER	115.0046	39.90	0.00
RECOVERY	STORM CHAMBER	115.2512	39.90	0.00
RECOVERY	STORM CHAMBER	115.5036	39.90	0.00
RECOVERY	STORM CHAMBER	115.7533	39.90	0.00
RECOVERY	STORM CHAMBER	116.0057	39.90	0.00
RECOVERY	STORM CHAMBER	116.2516	39.90	0.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
RECOVERY	STORM CHAMBER	116.5025	39.90	0.00
RECOVERY	STORM CHAMBER	116.7520	39.90	0.00
RECOVERY	STORM CHAMBER	117.0059	39.90	0.00
RECOVERY	STORM CHAMBER	117.2547	39.90	0.00
RECOVERY	STORM CHAMBER	117.5003	39.90	0.00
RECOVERY	STORM CHAMBER	117.7521	39.90	0.00
RECOVERY	STORM CHAMBER	118.0021	39.90	0.00
RECOVERY	STORM CHAMBER	118.2516	39.90	0.00
RECOVERY	STORM CHAMBER	118.5029	39.90	0.00
RECOVERY	STORM CHAMBER	118.7567	39.90	0.00
RECOVERY	STORM CHAMBER	119.0054	39.90	0.00
RECOVERY	STORM CHAMBER	119.2505	39.90	0.00
RECOVERY	STORM CHAMBER	119.5013	39.90	0.00
RECOVERY	STORM CHAMBER	119.7546	39.90	0.00
RECOVERY	STORM CHAMBER	120.0011	39.90	0.00

PROJECT: **Sutton Crossings**
PROJECT #: **FLA240162.00**

K Value Calculations Pond 1



$$k_{avg} = \left(\frac{L_{Unwalled}}{L_{Total}} X\ k_h\right) + \left(\frac{L_{Walled}}{L_{Total}} X\ \frac{h_2}{h_1} X\ k_h\right)$$

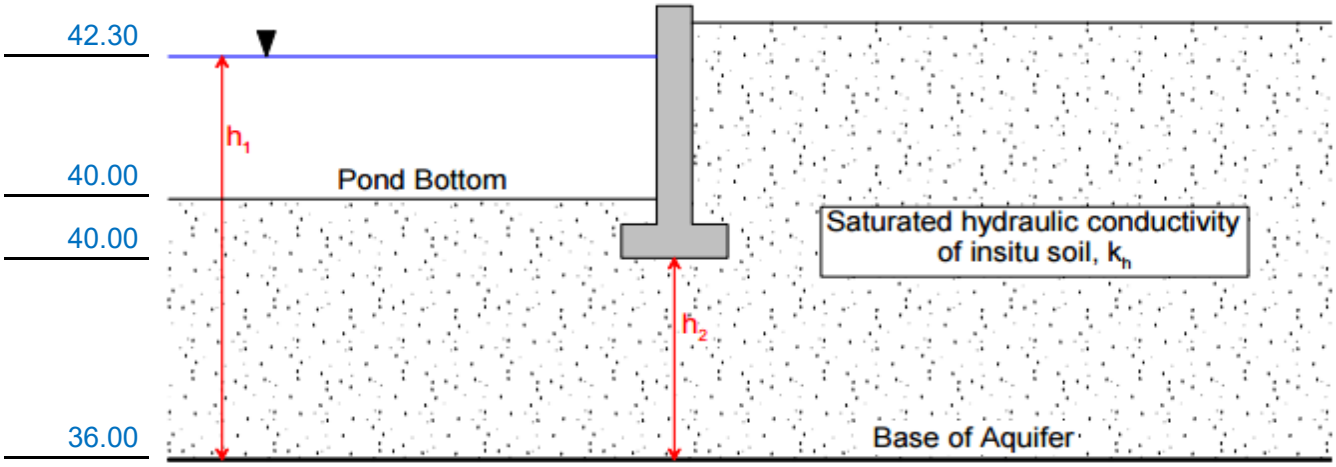
L_{Total} is the total perimeter
L_{Walled} is the total perimeter
$L_{Unwalled}$ is the total perimeter

L_{Total} (Ft)	480
$L_{Unwalled}$ (Ft)	0
L_{Walled} (Ft)	480
h_1 (Ft)	8.30
h_2 (Ft)	6
k_h (Ft/day)	22.5
k_{avg} (Ft/day)	**16.27**

L_{Total} (Ft)	480
$L_{Unwalled}$ (Ft)	0
L_{Walled} (Ft)	480
h_1 (Ft)	8.3
h_2 (Ft)	6
k_v (Ft/day)	14
k_{avg} (Ft/day)	**10.12**

PROJECT: **Sutton Crossings**
PROJECT #: **FLA240162.00**

K Value Calculations Basin 1



$$k_{avg} = \left(\frac{L_{Unwalled}}{L_{Total}} X\ k_h\right) + \left(\frac{L_{Walled}}{L_{Total}} X\ \frac{h_2}{h_1} X\ k_h\right)$$

L_{Total} is the total perimeter
L_{Walled} is the total perimeter
$L_{Unwalled}$ is the total perimeter

L_{Total} (Ft)	277
$L_{Unwalled}$ (Ft)	0
L_{Walled} (Ft)	277
h_1 (Ft)	6.30
h_2 (Ft)	4
k_h (Ft/day)	22.5
k_{avg} (Ft/day)	**14.29**

L_{Total} (Ft)	277
$L_{Unwalled}$ (Ft)	0
L_{Walled} (Ft)	277
h_1 (Ft)	6.3
h_2 (Ft)	4
k_v (Ft/day)	14
k_{avg} (Ft/day)	**8.89**

201 Basque Road
St. Augustine, FL 32080
Tel. (904) 347-9133
Fax (904) 512-0459
www.atlanticeco.com

October 19, 2022

EQX-HRP Winter Springs, LLC
Attn: Ryan P. Stahl
630 S. Maitland Avenue, Suite 100
Maitland, FL 32751

RE: Tuskawilla/434 Development
Seminole County, FL
AES #22-056

Dear Mr. Stahl,

Atlantic Ecological Services, LLC (AES) visited the Tuscawilla/434 Development Property for the purposes of conducting a review for the presence of protected species based on direct and indirect observations, as well as to determine potential for occurrence of protected species based on suitable habitat. The site assessment was conducted on April 5, 2022. The property is located on State Road 434 in Winter Springs, Florida and is approximately 5.88 acres in total size. The Seminole County Parcel ID #'s are 26-20-30-5AR-0A00-008D, 01-21-30-501-0000-0010, and 26-20-30-5AR-0A00-00. The subject property is located in Section 6, Township 21 South, Range 31 East in Seminole County, Florida. Please see the attached Location and Aerial Maps. During the field review of the subject property AES also assessed the Right-of-Way (ROW) areas found traversing between the parcels which are included as a part of this report and findings. Please note those areas found on the Aerial Map.

This general area is known to be occupied by the protected gopher tortoise (*Gopherus polyphemus*) and bald eagle (*Haliaeetus l. leucocephalus*). The proposed project is to construct commercial buildings. Prior to construction a gopher tortoise survey is required by Seminole County and the Florida Fish & Wildlife Conservation Commission (FWC). The results are documented within this letter report.

Mr. Jacob Doyle of AES performed the protected species review on the subject property. Mr. Doyle currently holds certification from the FWC as an Authorized Gopher Tortoise Agent under permit #GTA-21-00052.

METHODS

Habitat Mapping

Each community and land use area was categorized according to the Florida Department of Transportation's (FDOT) 1999 *Florida Land Use, Cover and Forms Classification System* (FLUCCS). The boundaries of each FLUCCS code were delineated based on vegetative composition, soil characteristics, topography, and aerial interpretation. See the Results Section below for a description of the habitats found. Please also see the attached Habitat Map depicting the findings.

Protected Species Review

Prior to visiting the site, a background literature search was conducted to compile a list of state and federally protected animal and plant species that could occur on-site. The three primary sources of literature reviewed include the Florida Fish and Wildlife Conservation Commission's (FWC) *Florida's Endangered Species, Threatened Species, And Species of Special Concern*, the United States Fish and Wildlife Service's (USFWS) Threatened and Endangered Species System (TESS) database, and the Florida Department of Agriculture and Consumer Services (FDACS), Division of Plant Industry's (DPI) *Notes on Florida's Endangered and Threatened Plants*. Additional information was gathered from the Florida Natural Areas Inventory (FNAI) *Field Guides to the Rare Animals/Plants of Florida*, and the Florida Committee on Rare and Endangered Plants and Animals (FCREPA) *Rare and Endangered Biota of Florida*: Volumes 1-5, and the FWC's Eagle Nest Locator web site were also reviewed to obtain location data recorded by others for those species.

RESULTS

Habitats

Uplands

Pine-Mesic Oak (FLUCCS 414) – The majority of the property exists as pine-mesic oak (hammock) habitat. The predominate canopy consists of sweetgum (*Liquidambar styraciflua*), slash pine (*Pinus elliotii*), longleaf pine (*Pinus palustris*), laurel oak (*Quercus laurifolia*), and live oak (*Quercus virginiana*), with scattered southern magnolia (*Magnolia grandiflora*) and sabal palm (*Sabal palmetto*). The predominate understory exists as grapevine (*Vitis rotundifolia*), saw palmetto (*Serenoa repens*), bracken fern (*Pteridium* sp.), Caesar weed (*Urena lobata*), with scattered beggartick (*Bidens alba*) and American beautyberry (*Callicarpa americana*).

Open Land (FLUCCS 190) – There is a strip of open land bisecting the eastern parcel. The predominate vegetation of the open land is bahia grass (*Paspalum notatum*), grape vine, and broom sedge (*Andropogon* sp.).

Wildlife Observations

Wildlife observations, both direct and indirect, were made throughout the course of the site investigation. A list of species observed is provided in the following table:

Table 1: Wildlife species observed on the project site in Seminole County, Florida.

Taxon	Common Name	Scientific Name	Protected*
Birds			
	Ground dove	*Columbina passerine*	No
	Great horned owl	*Bubo virginianus*	No
	Black vulture	*Coragyps atratus*	No
Reptiles			
	Southern black racer	*Coluber constrictor priapus*	No
	Brown anole	*Anolis sagrei*	No
Mammals			
	Eastern grey squirrel	*Sciurus carolinensis*	No

Protected Species

A 100% gopher tortoise (*Gopherus polyphemus*) survey was conducted on April 5, 2022, in accordance with the techniques outlined in the publication, *Ecology and Habitat Protection Needs of Gopher Tortoise (*Gopherus polyphemus*) Populations Found on Lands Slated for Development in Florida*. No gopher tortoise burrows were identified. Gopher tortoise surveys are valid for a period of 90 days. An updated 100% gopher tortoise burrow survey will be required.

The FWC's Eagle Nest Locator website and Audubon Florida EagleWatch Public Nest App were both queried for data regarding documented southern bald eagle nests in the project vicinity. The southern bald eagle (*Haliaeetus leucocephalus*) is protected under the Bald and Golden Eagle Protection Act. Development guidelines are required for any proposed project with 330 feet for urban areas and 660 feet for non-urban areas. A southern bald eagle nest (SE 096) is located in the northeast portion of the property. At time of field visit the nest had been occupied/overtaken by a breeding pair of great horned owls. Please see the attached photos of the nest and the breeding pair of great horned owls next to the abandoned eagle nest. Data from the Audubon Florida EagleWatch Public Nest App document this nest as active for the 2021 nesting season. No data for the 2022 nesting season has been posted to date, therefore AES was unable to determine if this nest was active for the 2022 nesting season and the juveniles had already fledged prior to our April 5, 2022 site visit. The nesting pair also has a documented alternate nest (SE 096a) located approximately 1,350 feet to the north. AES scoped this nest and did not identify any juveniles in the nest, and did not see adult bald eagles on or near the nest tree.

Southern Bald Eagle nests require an Incidental Take Permitting (ITP) through the U.S. Fish and Wildlife Service (FWS) for any impacts within the 330' and/or 660' protection zones for any nest that has been documented as active within 5 years. Since this nest was documented as active in the 2021 nesting season any construction within the 330' foot protection zone would require an ITP for disturbance. The nest tree could also be permitted for removal through a Take Permit for nest removal through FWS. Generally, if you apply for a 5-year or less disturbance permit, and leave a buffer consistent with the closest existing development activities found near the nest, then mitigation will not be required. If you apply of a take permit of the nest then mitigation will be required. Due to the close proximity of existing urban development to the nest, it is anticipated FWS would issue a disturbance ITP for this nest as long as construction and monitoring guidelines are adhered to. If a nest take permit is required, then mitigation could be coordinated with the Eagle In-lieu Fee Program.

Multiple other documented southern bald eagle nests are located in the vicinity (all utilizing Lake Jesup for foraging) but are greater than 660 feet away from the subject property.

No other protected flora or fauna species are expected to inhabit the subject property.

CONCLUSION

Atlantic Ecological Services, LLC conducted a site review on the Tuscawilla/434 Development Property for the purposes of determining the presence of and/or potential presence of state and federally protected wildlife and plant species.

The subject property consisted of uplands. A 100% gopher tortoise survey was completed within the project area on April 5, 2022. No potentially occupied gopher tortoise burrows were identified during the survey. An updated 100% gopher tortoise burrow survey will be required prior to construction of the property.

A documented southern bald eagle nest (SE 096) is located on the property. The nest was documented as active in the 2021 nesting season. AES did not document nesting activity for the 2022 season. A pair of great horned owls were documented on the nest tree. Due to the urban nature of this nest, and active use within 5 years, a 330' protection zone will be required. If the protection zone cannot be adhered to then permitting through the U.S. Fish and Wildlife Service will be required before any construction activities could occur.

No other protected flora or fauna species are anticipated to be impacted by development of the subject property.

Should you have any questions or concerns please feel free to contact me at (904) 347-9133 or jody@atlanticeco.com.

Sincerely,

Jody N. Sisk
Senior Ecologist

Enclosures

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Image Source: ESRI 2020
Date: 4-6-22

0 1,500 3,000 Feet

N

Location Map
Tuskawilla/434 Development Property
Seminole County, Florida

ATLANTIC ECOLOGICAL SERVICES
WWW.ATLANTICECO.COM
904-347-9133 | jody@atlantic
201 Basque Rd | St. Augustine, F

1048

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\aerial.mxd



Image Source: ESRI 2021
Date: 3-28-22

0 100 200 Feet

N

Aerial Map
Tuskawilla/434 Development Property
Seminole County, Florida

ATLANTIC ECOLOGICAL SERVICES
WWW.ATLANTICECO.COM
904-347-9133 | jody@atlantic
201 Basque Rd | St. Augustine, F

1049

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\topo.mxd



Image Source: ESRI 2021
Date: 3-28-22

0 250 500 Feet

N

Topographic Map
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlantic
201 Basque Rd | St. Augustine, F

1050

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\soil.mxd



Image Source: ESRI 2021
Date: 3-28-22

0 100 200 Feet

N

Soil Map
Tuskawilla/434 Development Property
Seminole County, Florida

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904-347-9133 | jody@atlantic
201 Basque Rd | St. Augustine, F

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Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\habitat.mxd

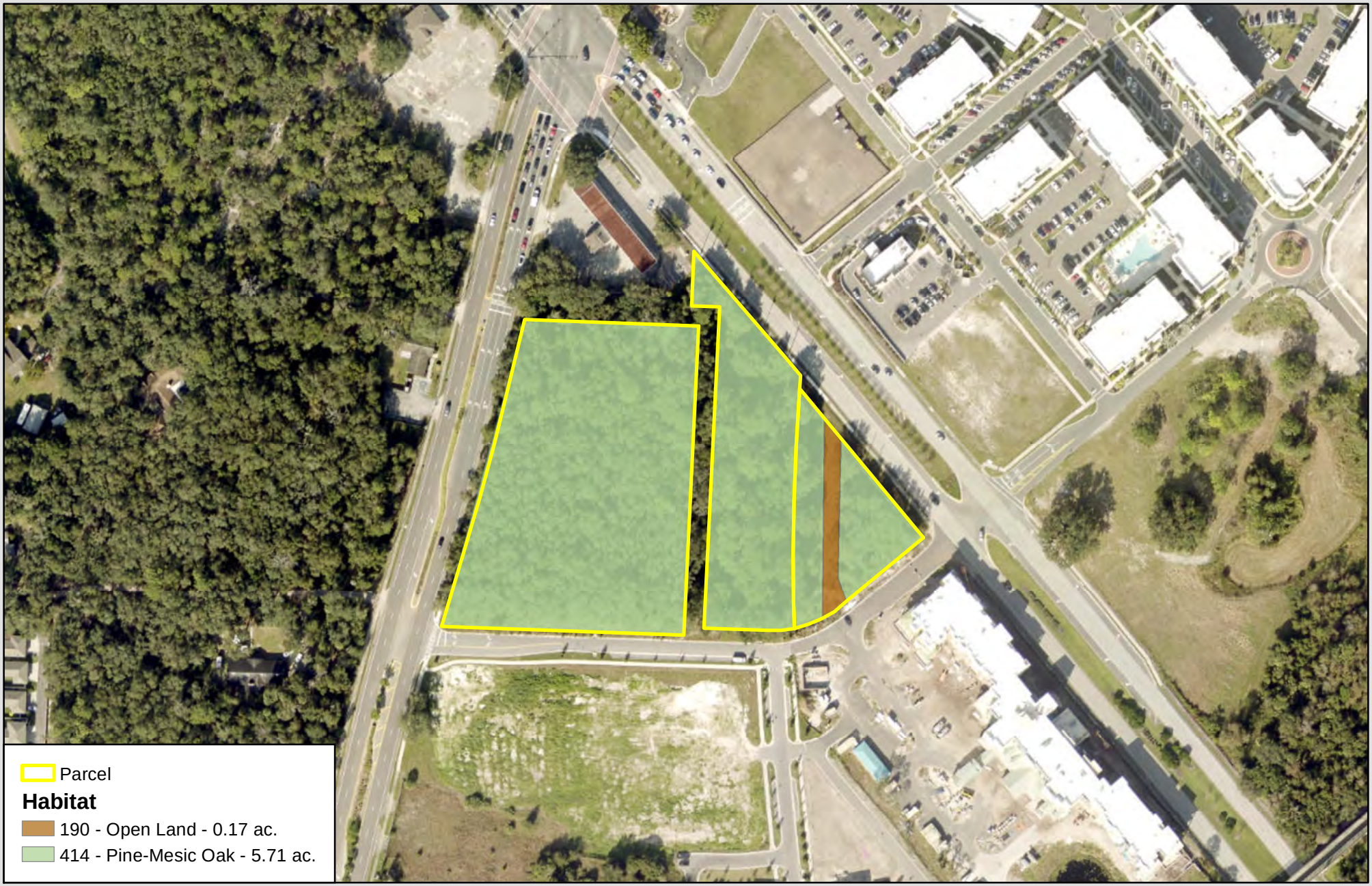


Image Source: ESRI 2021
Date: 3-28-22

0 100 200 Feet

N

Habitat Map
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlantic
201 Basque Rd | St. Augustine, F

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Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\aerial eagle nest.mxd



Image Source: ESRI 2021
Date: 4-6-22

0 100 200 Feet

N

Former Bald Eagle Nest
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlantic
201 Basque Rd | St. Augustine, F

1053

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\aerial eagle nest 2.mxd

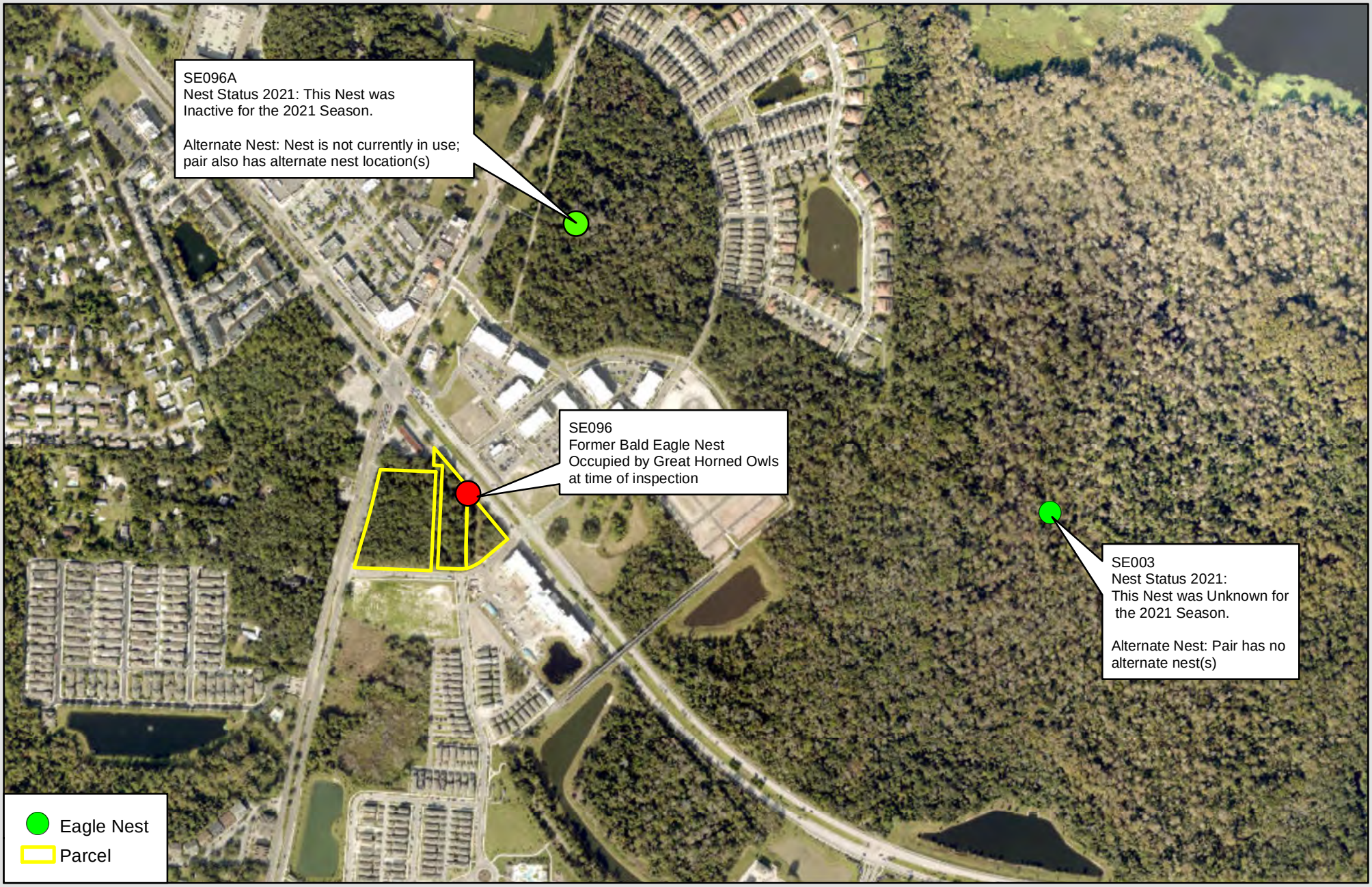


Image Source: ESRI 2021
Date: 4-6-22

0 300 600 Feet

N

Eagle Nest Map
Tuskawilla/434 Development Property
Seminole County, Florida

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WWW.ATLANTICECO.COM
904-347-9133 | jody@atlantic
201 Basque Rd | St. Augustine, F

1054

Document Path: C:\Users\jorav\Desktop\GIS\Boss Commercial Winter Springs\mxd\nest buffers.mxd

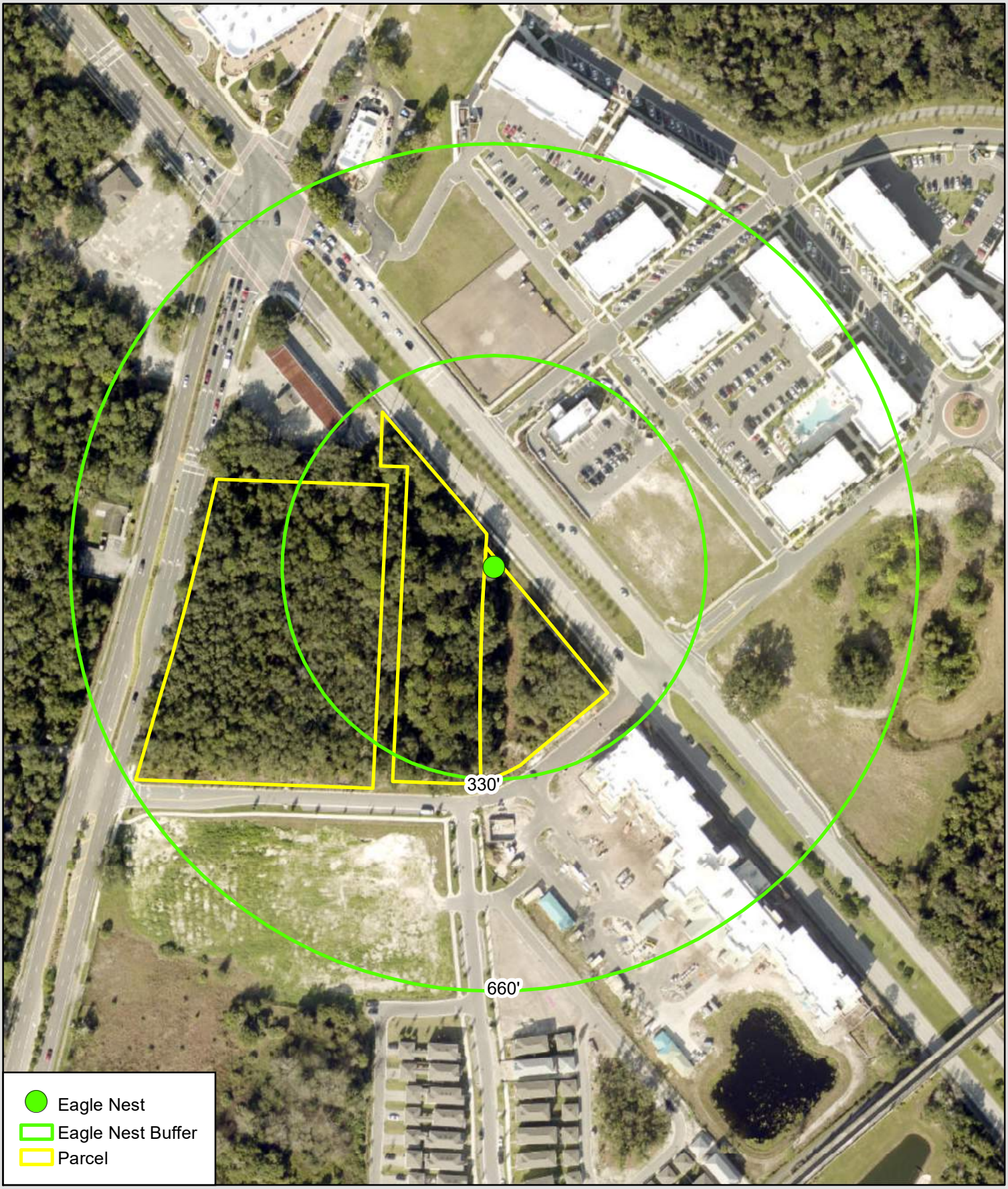


Image Source: ESRI 2021
Date: 4-6-22

0 100 200 Feet

N

Eagle Nest Buffer Map
Tuskawilla/434 Development Property
Seminole County, Florida

ATLANTIC ECOLOGICAL SERVICES
WWW.ATLANTICECO
904-347-9133 | jody@atlanticec
201 Basque Rd | St. Augustine, FL

Photo Documentation
Tuskawilla/434 Development Property





Location: Eagle Nest and Great Horned Owls

Date: April 5, 2022



Location: Eagle Nest

Date: April 5, 2022



Location: Eagle Nest

Date: April 5, 2022

RED DOT

UNITED CONSULTING

REPORT

FOR Chick-Fil-A, Inc.

Geotechnical Exploration
Chick-fil-A #05814 – Winter Springs FSU
E SR 434 & Michael Blake Boulevard
Winter Springs, Seminole County, Florida

Project No. CKFLA-24-FL-08321-02

625 Holcomb Bridge Road, Norcross, GA 30071 • 770-209-0029 • unitedconsulting.com

1058

UNITED CONSULTING

April 19, 2024

Mr. Clint Mattson
Mr. Davis Husk
Chick-fil-A, Inc.
5200 Buffington Road
Atlanta, GA 30349-2998

Via Email: davis.husk@cfacorp.com; Clint.mattson@cfacorp.com

RE: Report of Geotechnical Exploration
Chick-fil-A #05814 – Winter Springs FSU
E SR 434 & Michael Blake Boulevard
Winter Springs, Seminole County, Florida
Project No. CKFLA-24-FL-08321-02

Dear Clint & Davis,

United Consulting is pleased to submit this report of our Geotechnical Exploration for the above-referenced project. We appreciate the opportunity to assist you with this project. Please contact us if you have any questions or if we can be of further assistance.

Sincerely,

UNITED CONSULTING

Sriranjan Thirumalai, E.I.T
Geotechnical Staff Engineer

Alexi Neill, P.E.
Senior Geotechnical Engineer

Scott D. Smelter
Principal

SRT/AJN/SDS/rg

SP: Geotechnical Documents/CKFLA-24-FL-08321-02 - Geo.docx

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APPENDIX

General Notes /Narrative of Drilling Operations
Figure 1 – Boring Location Plan
Boring Logs (8)
Exploration Procedures

1.0 EXECUTIVE SUMMARY

United Consulting has completed a Geotechnical Exploration for the new Chick-fil-A #05814 development to be located west of the intersection of E SR 434 & Michael Blake Boulevard in Winter Springs, Seminole County, Florida. The results from this assessment are briefly summarized below. The text of the report should be reviewed for a discussion of these items.

1. Borings B-1, B-2, B-4, P-1, P-2, and P-3 encountered about 2 feet of undocumented fill soils. The fill encountered contained trace organics or trace rock fragments. The Standard Penetration Test resistance (N-values) within the fill ranged from 3 blows per foot (bpf) to 12 bpf with low consistency (N < 5 bpf) surficial fill soils encountered in borings B-1, B-2, P-1, P-2, and P-3. Where encountered at the time of construction, low consistency fill soils will require densification or remediation at the direction of the Geotechnical Engineer. As is the case with any previously graded site, undocumented fill can contain soft soils, or buried trash, topsoil, boulders, or other unsuitable materials. United Consulting recommends that the project budget include contingency funds in the event that very loose soils, buried trash, or other unsuitable materials requiring removal are encountered within the fill.

2. Low consistency (N < 5 bpf) native soils were encountered up to depths of about 4 to 8 feet in borings B-1, B-2, P-1, P-2, and P-4. Additional site preparation will be required in order to facilitate construction at this site. Stabilization/Densification of very loose surficial areas of the proposed building and parking areas should be anticipated. A Preliminary Grading plan was not available to assess where these soils will be relative to foundation elevations.

3. Auger refusal was not encountered in the borings for this study. Difficult excavation conditions due to rock are not expected to be encountered during construction.

4. Groundwater was encountered in each of the borings at depths ranging from about 5 to 8 feet at the time of drilling. Groundwater perched or surface water levels should be anticipated to fluctuate with the change of seasons, during periods of very low or high precipitation, or due to changes in the floodplain or watershed upstream from the area. Based on the borings and soil survey data provided by the USDA, we estimate the seasonal high-water table (SHWT) at this site will be at a depth of 2 to 6 feet below the existing ground surface. Depending on groundwater levels at the time of construction, temporary control of groundwater will likely be required. Permanent control of groundwater should be expected where proposed finished grades are within 5 feet of the measured groundwater levels.

5. Provided that the site is prepared as recommended, it is our opinion that the proposed building can be supported on conventional shallow foundations such as spread footings and/or continuous strip footings. An allowable soil bearing pressure of up to 2,500 pounds per square foot (psf) can be used for the design of conventional shallow foundations. Due to the presence of zones of very loose soils, the ground surface will require densification with a vibratory drum roller. Some localized excavation and replacement of very loose, or otherwise unsuitable soils from below the foundation bearing locations may be required in order for shallow foundations to be feasible.

6. Infiltration rates of 1.1 inches/hour (2.2 feet/day) and 6.0 inches/hour (12.0 feet/day) were measured at the two infiltration test locations.

2.0 PROJECT INFORMATION

The project site is located adjoining west of the intersection of E SR 434 and Michael Blake Boulevard in Winter Springs, Seminole County, Florida. The site was an approximate 1.92-acre tract and was mostly wooded with a few cleared areas.

The client provided a preliminary conceptual site plan, which showed the locations of the proposed building and associated parking and driving areas. This site plan was used as a guide to locate the boundaries of the project site. The location of the project site is shown on the attached Boring Location Plan (Figure 1).

At the time of our fieldwork, the project site was accessed via Michael Blake Boulevard to the south of the project site. The project site was bound to the south by Michael Blake Boulevard, to the east by East SR 434, and to north and west by wooded areas. The areas surrounding the project site generally consisted of commercial properties and wooded areas.

Based on the site topographic survey provided, the site was mostly level and gently sloping towards the south-central portion of the site. Elevations on site ranged from 39 feet in the southcentral portion of the site to 42 feet at the western-northwestern portion. Neither the proposed Finished Floor Elevation (FFE) or a site-specific topographic survey were provided at the time of this geotechnical exploration. Based on visual observations of the site and surrounding areas, the site is relatively flat, and we anticipate that the planned cuts and fills will be minimal (2 feet or less) within the area of the building and the parking and driving areas.

We understand that Chick-fil-A is proposing to build an approximate 6,101-square-foot building in the eastern portion of the site with 70 associated parking spaces and driveways to the south, west, and north of the proposed building. Structural loads were not provided, but based on our experience with similar structures, we expect that maximum column and wall loads will be less than about 40 kips and 3 kips per lineal foot, respectively.

If the actual loads and site grading information vary significantly from the above anticipated values, United Consulting must be contacted to determine if revisions to our recommendations should be reevaluated and/or revised.

3.0 PURPOSE

The purpose of this geotechnical exploration was to assess the general type and condition of the subsurface materials present at the project site and to provide recommendations to guide in site development, foundation design and quality assurance.

4.0 SCOPE

The scope of our geotechnical exploration included the following items:

1. Drilling eight Standard Penetration Test (SPT) borings to determine the nature and condition of the subsurface soils;

2. Visual evaluation of the soil samples obtained during our field testing for further identification and classification;

3. Performing two (2) infiltration tests;

4. Analyzing the field data in order to provide recommended soil parameters; and

5. Preparing this report to document the results of the fieldwork and recommendations.

5.0 SUBSURFACE CONDITIONS

Initially, the borings encountered a surficial layer of topsoil. Borings B-1, B-2, B-4, P-1, P-2, and P-3 encountered about 2 feet of undocumented fill soils. The fill encountered contained trace organics or trace rock fragments. The Standard Penetration Test resistance (N-values) within the fill ranged from 3 blows per foot (bpf) to 12 bpf with low consistency (N < 5 bpf) surficial fill soils encountered in borings B-1, B-2, P-1, P-2, and P-3.

Below the surficial materials or fill, typical native soils of the Coastal Plain Physiographic Province of Florida were encountered in the borings. The native soils encountered generally consisted of very loose to medium dense sand with varying amounts of clay and silt. N-values in the native soils ranged from 2 blows per foot (bpf) to 21 bpf. Low consistency (N < 5 bpf) native soils were encountered up to depths of about 4 to 8 feet in borings B-1, B-2, and P-1, P-2, and P-4.

Auger refusal was not encountered in the borings. Auger refusal is the depth below which borings cannot be advanced using a soil-drilling auger.

Groundwater was encountered in each of the borings at depths ranging from 5 to 8 feet at the time of drilling. Groundwater elevations will vary with yearly and seasonal rainfall variations and may rise in the future. Based on the borings completed at this site and soil survey data provided by the USDA, we estimate the SHWT at this site will be at a depth of about 2 to 6 feet below the existing ground surface.

For a more detailed description of the conditions encountered within the borings, please refer to the Boring Logs provided in The Appendix.

6.0 DISCUSSION AND RECOMMENDATIONS

The following recommendations are based on our understanding of the proposed construction, data obtained in our soil test borings, a site reconnaissance and our experience with soils and subsurface conditions similar to those encountered at this site.

United Consulting also requests the opportunity for a general review of final design documents and specifications in order to verify that earthwork and foundation recommendations have been properly interpreted and implemented in the design and specifications. We recommend that United Consulting, as the Geotechnical Engineer of Record, be consulted during construction to conduct Geotechnical Controls as the Owner's Representative.

6.1 Fill Soil Considerations

Borings B-1, B-2, B-4, P-1, P-2, and P-3 encountered about 2 feet of undocumented fill soils. The fill encountered contained trace organics or trace rock fragments. Low consistency (N < 5 bpf) surficial fill soils were encountered in borings B-1, B-2, P-1, P-2, and P-3. Where encountered at the time of construction, low consistency fill soils will require densification or remediation at the direction of the Geotechnical Engineer.

It is not uncommon to find soft soils, pits of buried trash, topsoil, boulders, or other unsuitable materials within undocumented fill or previously disturbed soils. SPT borings alone are not well suited to evaluate the existing fill. United Consulting recommends that test pits be excavated prior to construction to better evaluate the composition of the existing fill, and that the project budget include contingency funds in the event that soft soils, buried trash, or other unsuitable materials requiring remediation are encountered within the fill.

6.2 Solution Hazards for Limestone Geology

Much of the State of Florida is known to be underlain by limestone geology. For construction on areas underlain by limestone or dolomite, there is a risk of damage to the proposed site development due to the formation of sinkholes caused by solutioning. Therefore, once the sinkhole hazard is known, the owner must assume some risk for potential damage due to the formation of sinkholes, whether present now or developing in the future.

The USGS has prepared a map which identifies areas of sinkhole occurrence in Florida. The Sinkhole Type, Development, and Distribution in Florida map (1985), divides Florida into four areas based on the type and thickness of cover overlying soluble rock. Areas I through IV have varying potentials for sinkhole development as follows:

Area I – Sinkholes are few.
Area II – Sinkholes are few.
Area III – Sinkholes are numerous.
Area IV – Sinkholes are very few.

According to the map listed above, the site is located in Area II. Area II consists mainly noncohesive and permeable sand. Sinkholes are few, shallow, of small diameter and develop gradually. Cover-subsidence sinkholes dominate and tend to develop gradually where the covering sediments are permeable and contain sand.

We note a sinkhole evaluation was not within the authorized scope of services for this project. However, no obvious visual evidence of sinkholes was observed on the Project Site, and the borings at the site did not encounter significant voids, very loose soils or other obvious indications of possible sinkholes. Although sinkholes were not encountered or apparent at the time of the field exploration, and special foundation design considerations associated with sinkholes are not recommended at this time, the potential does exist for sinkholes to develop during construction or in the future.

If sinkholes are identified during construction, United Consulting should be consulted to evaluate and prescribe appropriate remedial measures. The use of low mobility (pressure) grouting is a common form of sinkhole remediation, and typically is the preferred method of sinkhole repair in the state of Florida. Briefly, this method consists of inserting several injection pipes to the desired treatment depth within and around the perimeter of the desired treatment area. Grout is then injected as the pipe is slowly removed in lifts, creating a “grout column”. The expansion of the low mobility grout columns displaces the surrounding soils. Compaction grouting increases the density of the surrounding soils.

6.3 Site Preparation/Densification

The existing topsoil, vegetation and trees including their root mat should also be removed from the area of the proposed construction. Removal of trees should include removal of their root ball, which may extend to several feet below grade. Any existing underground utilities should be relocated to at least 10 feet outside the perimeter of the proposed building footprint. Abandoned utility lines should be excavated and removed. If abandoned utility lines are left in place within non-structural areas of the site, they should be fill-in under pressure with cement grout having a 28-day compressive strength of at least 500 psi.

After site clearing and prior to placement of new fill, or commencement of the construction at the Project Site, it is recommended that the existing very loose soils within the proposed construction areas be densified with a vibratory drum roller. This should be accomplished with a vibratory roller with a minimum static weight of 20,000 pounds. The vibratory roller should make a minimum of 6 passes across the new construction area, 3 in each perpendicular direction. We recommend that the densification be performed over a relatively large area (long roller passes) to reduce the potential for pumping of shallow groundwater and/or the development of a “quick” condition, which could result from repeated passes over a short period of time. This densification should be performed under the observation of the Geotechnical Engineer or his representative.

The final in-place density of the densified soil should be at least 95% of the soil’s maximum dry density (per ASTM D-1557) to a depth of at least 24 inches. Adequate densification is important to reduce the potential for excessive settlement of the structure or long-term distress of the pavement section at this site. During densification, the upper one foot of soil tends to become loose as a result of the densification process and will not be suitable for support. Therefore, additional roller passes with the vibratory mechanism turned off should be performed to compact the upper one foot of soil.

Areas that exhibit “pumping” (wave type displacement) during proofrolling, should be treated by a method recommended by the Geotechnical Engineer. This method may consist of undercutting and backfilling with suitable compacted fill, replacing with surge stone and a layer of crusher run, or some other method that is deemed suitable by the Geotechnical Engineer.

6.4 Difficult Excavation

Auger refusal was not encountered in the borings conducted for this study. Difficult excavation conditions due to rock are not generally expected to occur at the project site.

6.5 Groundwater Considerations

Groundwater was encountered in each of the borings at depths ranging from about 5 to 8 feet at the time of drilling. Stabilized groundwater levels are typically several feet shallower than those at the time of drilling. Groundwater levels should also be anticipated to fluctuate with the change of seasons, during periods of very low or high precipitation, or due to changes in the onsite creek, floodplain or watershed upstream from the area. Based on the borings completed at this site and soil survey data provided by the USDA, we estimate the SHWT at this site will be at a depth of 2 to 6 feet below the existing ground surface.

Depending on groundwater levels at the time of construction, temporary dewatering will likely be required. If temporary dewatering is required during construction, groundwater levels would need to be lowered at least 3 feet below excavation bottoms until construction is complete. The contractor should be prepared to manage groundwater and perched water as needed during construction. Permanent control of groundwater should be expected where proposed finished grades are within 5 feet of the measured groundwater levels.

6.6 Foundation Design and Construction

Following site preparation and densification of very loose soils as previously recommended, the proposed lightly loaded building can be supported on a conventional shallow foundation system. A net allowable soil bearing pressure of up to 2,500 pounds per square foot (psf) is recommended for foundation design. Due to the presence of low-consistency fill soils, some localized excavation and replacement of low-consistency or otherwise unsuitable soils from below the foundation bearing locations may be required in order for shallow foundations to be feasible. We evaluated potential differential settlement of the very loose soils below 4 feet; differential settlement is not expected to exceed approximately ½ inch. However, a Grading Plan is needed to better evaluate expected differential settlement.

We recommend minimum widths of at least 20 inches for strip footings and 24 inches for square footings. Footings should be constructed to bear at least 12 inches below the lowest adjacent finished grade.

The Geotechnical Engineer must evaluate each footing excavation prior to steel reinforcement or concrete placement. Conditions that are observed should be compared to the test boring data and design requirements. If unsuitable bearing material is encountered, it should be excavated and replaced, densified in-place, or otherwise treated as recommended by the Geotechnical Engineer.

Surface water control should be maintained to prevent accumulation of water in footing excavations. Standing water in footing excavations should be removed promptly. Soil softened by the water should be removed, and the Geotechnical Engineer or his representative should reexamine the area.

6.7 Ground Floor Slab

If the building area is prepared as recommended for the use of shallow foundations, a slab-on-grade could be utilized for the single-story structure. We recommend a subgrade modulus of 120 pounds per cubic inch (pci) be used for slab design. It has been our experience that the floor slab subgrade is often disturbed by weather, foundation and utility line installation, and other construction activities between completion of grading and slab construction. For this reason, our geotechnical engineer should evaluate the subgrade immediately prior to placing the concrete. Areas judged by the geotechnical engineer to be unstable should be densified or undercut and replaced with engineered soil fill compacted to at least 98 percent of its Modified Proctor maximum (ASTM D-1557) dry density.

6.8 Pavement Design

The standard Chick-fil-A asphalt pavement design of 8 inches of Florida Department of Transportation (FDOT) graded aggregate base (GAB), topped by 2 inch of asphalt surface course (Type SP), underlain by 12 inches of stabilized subgrade with a minimum LBR of 40 and compacted to 98% of the Modified Proctor (ASTM D-1557) is considered adequate for normal parking and driveway areas where only an occasional truck would traverse, following the recommendations in the Site Preparation section of this report.

We recommend that a rigid (concrete) slab at least 6-inches thick using 4,000 psi concrete over 12 inches of stabilized subgrade with a minimum LBR of 40 and compacted to 98% of the Modified Proctor (ASTM D-1557) be used for dumpster pad areas. These pads should be large enough to accommodate the front wheels of the dumpster truck when the dumpster is being emptied. Concrete pavement is also recommended in any loading areas where heavy trucks will maneuver, or trailer jacks will be supported. At least 18 inches of free-draining material should be included directly beneath rigid concrete pavements. Soils with a USCS classification of SP, SP-SM, SP-SC or GP or GP-GM (fines content less than 12 percent, maximum particle size less than 2 inches, organic content less than 5 percent) are considered free-draining for this purpose. The sandy surficial soils encountered at the project site are considered free-draining soils and can be utilized as free-draining subgrade material.

United Consulting recommends that the graded aggregate base (GAB) course for pavement construction be compacted to 100% of the materials Modified Proctor (ASTM D-1557) maximum dry density. The pavement should be constructed using the materials and construction procedures of the applicable Florida Department of Transportation specifications.

6.9 Caving Considerations

All excavations should be conducted in accordance with the Occupational Safety and Health Administration (OSHA) guidelines. Flattening of the excavation sidewalls and/or the use of bracing may be needed to maintain stability during construction, particularly for foundation and tank pit excavations.

6.10 Earthwork

The onsite soils, if free of organics or other deleterious materials, should generally be suitable for reuse as engineered fill with proper moisture control. Typical restrictions on suitable fill are no organics, plasticity index less than 25, and maximum particle size of four inches, with no more than 30 percent greater than 3/4-inch. These restrictions should also be applied to imported borrow soils if needed.

Positive drainage should be maintained at all times to prevent saturation of exposed soils in case of sudden rains. Rolling the surface of disturbed soils will also improve runoff and reduce the soil moisture and construction delays. The degree of soil stability problems will also be dependent upon the precautions taken by the contractor to help protect the soils from saturation during construction.

6.11 Engineered Fill Placement

Moisture-density determinations should be performed for each soil type used to provide data necessary for quality assurance testing. The natural moisture content at the time of compaction should be within moisture content limits that will allow the required compaction to be obtained. This is generally within three percentage points of the optimum moisture. The contractor should be prepared to increase or decrease soil water content.

The fill should be placed in thin lifts (not to exceed 8-inch loose thickness) and compacted. We recommend the fill be compacted to at least 98 percent of the Modified Proctor (ASTM D-1557) maximum dry density in the top two feet and at least 95 percent of the Modified Proctor maximum dry density elsewhere on the site.

A Geotechnical Engineer on a full-time basis should observe grading operations. In-place density tests taken by that individual will assess the degree of compaction being obtained. The frequency of the testing should be determined by the Geotechnical Engineer.

6.12 Field Infiltration Tests

Two field infiltration tests, IF-1 and IF-2 were performed at depths of 5 feet below the ground surface. Their approximate locations are shown on the Boring Location Plan.

The hole was filled with water that was maintained at a constant level to allow the soil to saturate. After the saturation period, the water level was measured at prescribed time intervals to determine the volume of water infiltrated. The volume of water infiltrated during the timed intervals was converted to an incremental infiltration velocity:

Table – Summary of Infiltration Rates

Boring Number	Depth (ft.)	Saturated Hydraulic Conductivity/Infiltration Rate	
		in/hr.	ft./day
IF-1	5	1.1	2.2
IF-2	5	6.0	12.0

We recommend that a factor of safety be applied to these values when designing the stormwater management system for this project.

The measured values are within the typical range for the soil types observed in the borings (sand with varying amounts of clay, silt and rock fragments) based on visual classification and review of the soil survey.

The infiltration rates indicated by the test results are considered to be representative of the soils at the time of the test and location tested, but actual values could vary considerably over time, between, and away from, or at depths above and below the areas tested. Future earthwork, excavation, or fill placement in the areas tested could significantly alter the permeability of the soils.

7.0 LIMITATIONS

This report is for the exclusive use of **Chick-fil-A, Inc.** and the designers of the project described herein, and may only be applied to this specific project. Our conclusions and recommendations have been prepared using generally accepted standards of Geotechnical Engineering practice in the State of Florida. No other warranty is expressed or implied. Our firm is not responsible for conclusions, opinions or recommendations of others.

The right to rely upon this report and the data within may not be assigned without UNITED CONSULTING'S written permission.

The scope of this evaluation was limited to an evaluation of the load-carrying capabilities and stability of the subsoils. Oil, hazardous waste, radioactivity, irritants, pollutants, molds, or other dangerous substance and conditions were not the subject of this study. Their presence and/or absence are not implied or suggested by this report and should not be inferred.

Our conclusions and recommendations are based upon design information furnished us, data obtained from the previously described exploration and testing program and our past experience. They do not reflect variations in subsurface conditions that may exist intermediate of our borings and in unexplored areas of the site. Should such variations become apparent during construction, it will be necessary to re-evaluate our conclusions and recommendations based upon "on-site" observations of the conditions.

If the design or location of the project is changed, the recommendations contained herein must be considered invalid, unless the changes are reviewed by our firm, and our recommendations are either verified or modified in writing. When design is complete, we should be given the opportunity to review the foundation plan, grading plan, and applicable portions of the specifications to see if they are consistent with the intent of our recommendations.

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APPENDIX

General Notes/Narrative of Drilling Operations
Boring Location Plan
Boring Logs (8)
Exploration Procedures

GENERAL NOTES

The soil classifications noted on the Boring Logs are visual classifications unless otherwise noted. Minor constituents of a soil sample are termed as follows:

Descriptive Term(s) of Minor Constituents	Percent of Dry Weigh
Trace	0 to 10 %
Some	11 to 35 %
Suffix Passive	36 to 49 %

LEGEND



Split spoon sample obtained during Standard Penetration Testing



Relatively Undisturbed Shelby Tube sample



Grab sample



Water level while drilling



Water level at the time of boring completion



Water level at 24 hours (or as noted) after boring completion

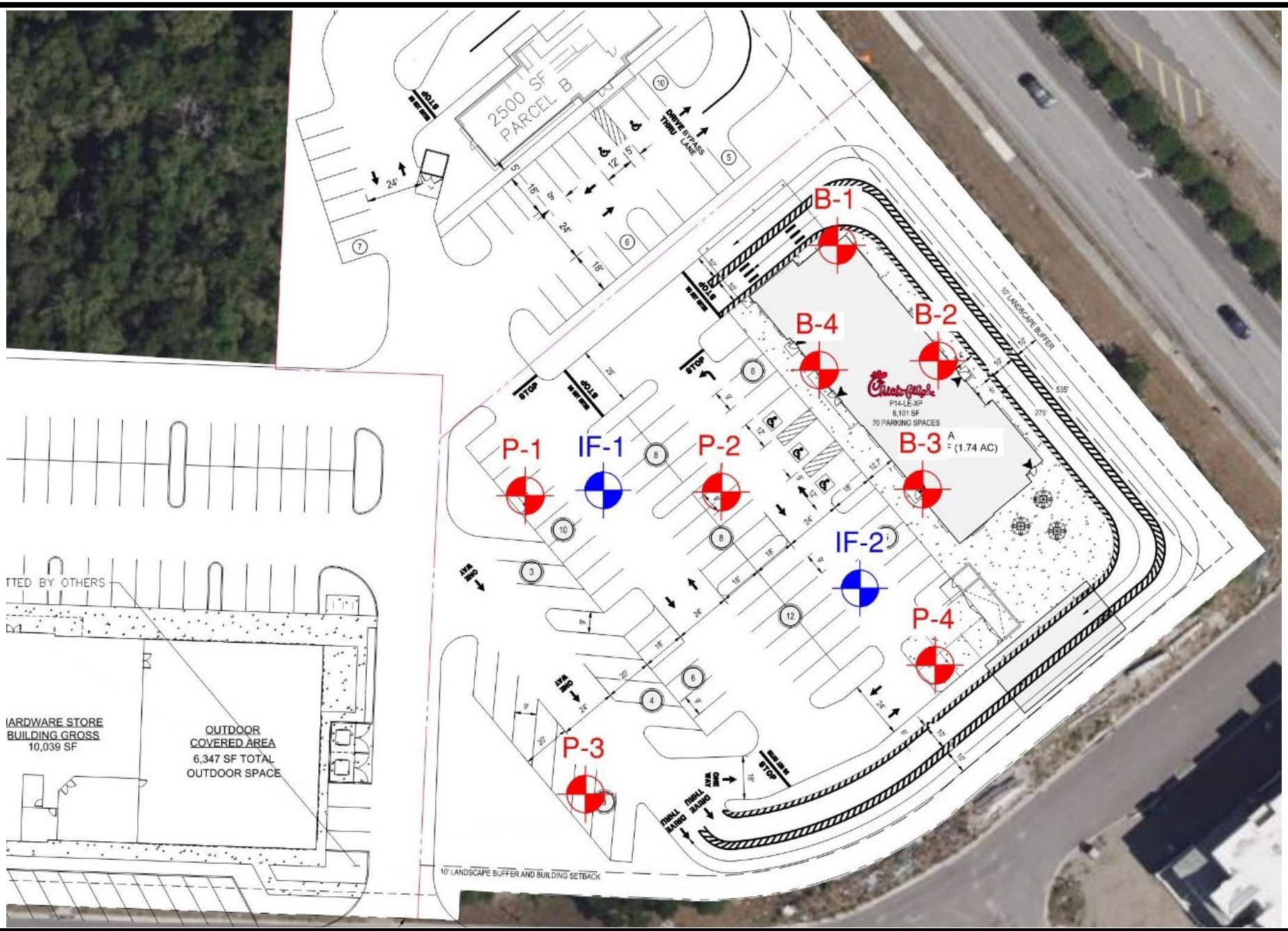
GENERAL NOTES

The test borings were advanced by mechanically rotating a drill bit to cut/grind soil and rock while using compressed air to remove cuttings from the open borehole. Samples were covered at regular intervals in each of the borings following established procedures for performing the Standard Penetration Test in accordance with ASTM Specification D-1586. Soil samples were obtained with a standard 1.4" I.D. x 2.0" O.D. split barrel sampler. The sampler is first seated 6" to penetrate any loose cuttings and then driven an additional foot with the blows of a 140 pound hammer freely falling a distance of 30". The number of blows required to drive the sampler each six inches is recorded on the Boring Logs. The total number of blows required to drive the sampler the final foot is designated the "standard penetration resistance." This driving resistance, known as the "N" value, is a measure of the relative density of granular soils and is an indication of the consistency of cohesive deposits.

The tables below describe soil consistencies and relative densities based on standard-penetration resistance values (N) determined by the Standard Penetration Test.

Soil Type	"N" Value	Consistency
Clays and Silts	0 to 2	Very Soft
	3 to 4	Soft
	5 to 8	Firm
	9 to 15	Stiff
	16 to 30	Very Stiff
	> 30	Hard

Soil Type	"N" Value	Relative Density
Sands and Gravels	0 to 4	Very Loose
	5 to 10	Loose
	11 to 29	Medium Dense
	30 to 50	Dense
	> 50	Very Dense



UNITED CONSULTING	Scale:	NTS	Notes	Client:	Chick-Fil-A, Inc
	Prepared:	GH		Site:	Chick-Fil-A #05814 – Winter Springs FSU E SR 434 & Michael Blake Boulevard Winter Springs, Seminole County, Florida
	Checked:	SRT			
	Project No.:	CKFLA-24-FL-08321-02		Title:	Boring Location Plan

FIG. 1

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E SR 434 & Michael Blake Boulevard, Winter Springs, Florida

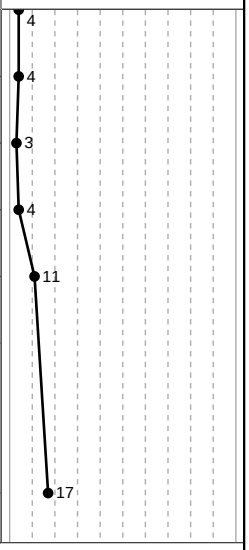
B-1

Client Name:	Chick-Fil-A, Inc.	Project No.:	CKFLA-24-FL-08321-02	Remarks: Hammer Efficiency=86%	
Drilling Firm:	AMDrill	Date Drilled:	04/02/2024		
Logged By:	Steven Edsall	Boring Size:	6.25"		
Equipment:	CME-45	Boring Elevation:	~41'		
Hammer Type:	Auto	Depth:	16'		
Drilling Method:	Mud Rotary	Water Level At Time Of Drilling:	6'	Delayed Water Level:	Not...
		Cave-in At Time Of Drilling:	N/A	Delayed Water Observation Date:	N/A

Depth (ft)	Graphic Log	Soil Description and Remarks		Sample Graphic	Sample Number	Recovery Length	Blow Counts (N-Value)
		Topsoil	0.3		1	16	1-2-2-2 (4)
		Sand - trace silt and clay, trace organics, very loose, tanish brown (fill)	2.0		2	16	2-2-2-2 (4)
		Sand - trace silt and clay, very loose, moist, gray (native)					
5		Wet, brown			3	15	1-1-2-2 (3)
					4	16	1-2-2-3 (4)
		Some clay and silt, firm, wet, white tan			5	17	4-4-7-9 (11)
10							
		Trace clay and silt, wet					
15					6	15	5-9-8 (17)
			16.0				
		Boring Terminated at 16 feet					

Samples

Moisture Content 0 50 100
Plastic Limit 0 50 100
Liquid Limit 0 50 100
Percent Fines 0 50 100
Uncorrected N-Value 0 50 100



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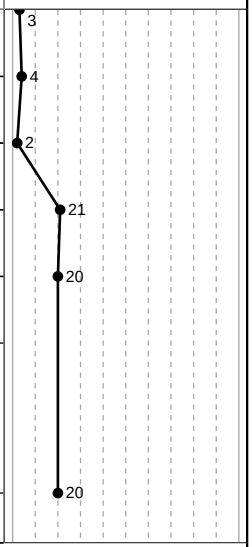
E SR 434 & Michael Blake Boulevard, Winter Springs, Florida

B-2

Client Name:	Chick-Fil-A, Inc.	Project No.:	CKFLA-24-FL-08321-02	Remarks: Hammer Efficiency=86%
Drilling Firm:	AMDrill	Date Drilled:	04/02/2024	
Logged By:	Steven Edsall	Boring Size:	6.25"	
Equipment:	CME-45	Boring Elevation:	~40'	
Hammer Type:	Auto	Depth:	16'	
Drilling Method:	Mud Rotary	Water Level At Time Of Drilling:	5'	Delayed Water Level: Not...
		Cave-in At Time Of Drilling:	N/A	Delayed Water Observation Date: N/A

Depth (ft)	Graphic Log	Soil Description and Remarks		Sample Graphic	Sample Number	Recovery Length	Blow Counts (N-Value)
		Topsoil	0.3		1	16	1-1-2-1 (3)
		Sand - trace silt and clay, trace organics, trace rock fragments, very loose, grey brown (fill)	2.0		2	16	1-2-2-2 (4)
		Sand - trace silt and clay, very loose, moist, grey (native)					
5		Wet			3	18	1-1-1-1 (2)
		Some clay and silt, medium dense, moist, grey			4	15	5-6-15-16 (21)
		Trace clay and silt, wet, grey			5	17	3-8-12-10 (20)
10							
15					6	14	8-10-10 (20)
			16.0				

Boring Terminated at 16 feet



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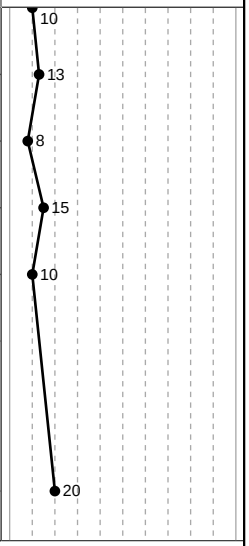
E SR 434 & Michael Blake Boulevard, Winter Springs, Florida

B-3

Client Name:	Chick-Fil-A, Inc.	Project No.:	CKFLA-24-FL-08321-02	Remarks: Hammer Efficiency=86%
Drilling Firm:	AMDrill	Date Drilled:	04/02/2024	
Logged By:	Steven Edsall	Boring Size:	6.25"	
Equipment:	CME-45	Boring Elevation:	~41'	
Hammer Type:	Auto	Depth:	16'	
Drilling Method:	Mud Rotary	Water Level At Time Of Drilling:	8'	Delayed Water Level: Not...
		Cave-in At Time Of Drilling:	N/A	Delayed Water Observation Date: N/A

Depth (ft)	Graphic Log	Soil Description and Remarks	Sample Graphic	Sample Number	Recovery Length	Blow Counts (N-Value)
		Topsoil 0.3		1	14	3-5-5-6 (10)
		Sand - trace silt and clay, loose, grey (native) Firm		2	4	5-6-7-8 (13)
5		Loose, moist, brown		3	15	7-4-4-4 (8)
		Some clay and silt, firm, moist, grey		4	18	6-7-8-9 (15)
▽		Trace clay and silt, loose, wet, tan		5	24	3-4-6-8 (10)
10		Medium dense, wet				
15		16.0		6	12	11-10-10 (20)
		Boring Terminated at 16 feet				

Moisture Content 0 50 100
Plastic Limit 0 50 100
Liquid Limit 0 50 100
Percent Fines 0 50 100
Uncorrected N-Value 0 50 100



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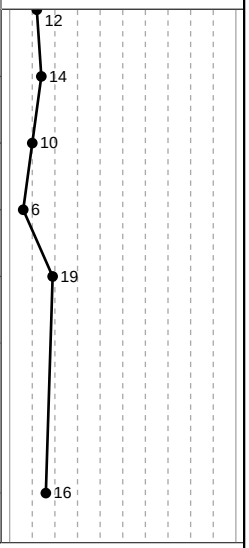
Chick-Fil-A #05814 - Winter Springs FSU

E SR 434 & Michael Blake Boulevard, Winter Springs, Florida

B-4

Client Name:	Chick-Fil-A, Inc.	Project No.:	CKFLA-24-FL-08321-02	Remarks: Hammer Efficiency=86%
Drilling Firm:	AMDrill	Date Drilled:	04/02/2024	
Logged By:	Steven Edsall	Boring Size:	6.25"	
Equipment:	CME-45	Boring Elevation:	~41'	
Hammer Type:	Auto	Depth:	16'	
Drilling Method:	Mud Rotary	Water Level At Time Of Drilling:	7'	Delayed Water Level: Not...
		Cave-in At Time Of Drilling:	N/A	Delayed Water Observation Date: N/A

Depth (ft)	Graphic Log	Soil Description and Remarks		Samples: Sample Graphic	Sample Number	Recovery Length	Blow Counts (N-Value)
		Topsoil	0.3		1	15	3-6-6-5 (12)
		Sand - trace silt and clay, trace organics, firm, grey (fill)	2.0				
	NR	No Recovery			2	0	6-5-9-7 (14)
			4.0				
5		Sand - trace silt and clay, loose, moist, brown (native)			3	17	6-5-5-4 (10)
▽		Wet			4	18	4-3-3-10 (6)
		Firm, wet, grey and brown			5	22	7-9-10-10 (19)
10							
		Some clay and silt, wet, grey tan					
15					6	18	7-7-9 (16)
			16.0				
		Boring Terminated at 16 feet					



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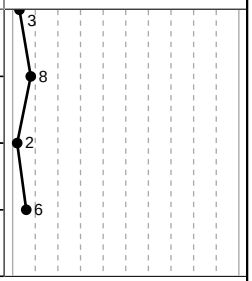
Chick-Fil-A #05814 - Winter Springs FSU

E SR 434 & Michael Blake Boulevard, Winter Springs, Florida

P-1

Client Name:	Chick-Fil-A, Inc.	Project No.:	CKFLA-24-FL-08321-02	Remarks: Hammer Efficiency=86%
Drilling Firm:	AMDrill	Date Drilled:	04/02/2024	
Logged By:	Steven Edsall	Boring Size:	6.25"	
Equipment:	CME-45	Boring Elevation:	~41'	
Hammer Type:	Auto	Depth:	8'	
Drilling Method:	Mud Rotary	Water Level At Time Of Drilling:	5'	Delayed Water Level: Not...
		Cave-in At Time Of Drilling:	N/A	Delayed Water Observation Date: N/A

Depth (ft)	Graphic Log	Soil Description and Remarks		Samples: Sample Graphic	Sample Number	Recovery Length	Blow Counts (N-Value)
		Topsoil	0.3		1	15	1-2-1-2 (3)
		Sand - trace silt and clay, trace organics, very loose, grey and brown (fill)	2.0		2	15	4-4-4-3 (8)
5		Sand - trace silt and clay, loose, wet, grey (native) Very loose, wet			3	16	1-1-1-1 (2)
		Some clay and silt, loose, wet	8.0		4	20	1-3-3-4 (6)
		Boring Terminated at 8 feet					



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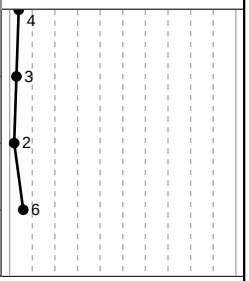
P-2

Client Name:	Chick-Fil-A, Inc.	Project No.:	CKFLA-24-FL-08321-02	Remarks: Hammer Efficiency=86%
Drilling Firm:	AMDrill	Date Drilled:	04/02/2024	
Logged By:	Steven Edsall	Boring Size:	6.25"	
Equipment:	CME-45	Boring Elevation:	~40'	
Hammer Type:	Auto	Depth:	8'	
Drilling Method:	Mud Rotary	Water Level At Time Of Drilling:	5'	Delayed Water Level: Not...
		Cave-in At Time Of Drilling:	N/A	Delayed Water Observation Date: N/A

Depth (ft)	Graphic Log	Soil Description and Remarks		Samples: Sample Graphic	Sample Number	Recovery Length	Blow Counts (N-Value)
		Topsoil	0.3		1	6	1-2-2-2 (4)
		Sand - trace silt and clay, trace organics, very loose, grey and brown (fill)	2.0		2	18	2-2-1-3 (3)
		Sand - trace silt and clay, very loose, wet, gray brown (native)					
5		Wet			3	17	1-1-1-1 (2)
		Loose, wet			4	18	2-3-3-2 (6)
			8.0				

Boring Terminated at 8 feet

Moisture Content 0 50 100
Plastic Limit 0 50 100
Liquid Limit 0 50 100
Percent Fines 0 50 100
Uncorrected N-Value 0 50 100



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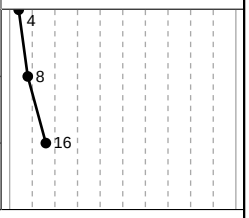
Chick-Fil-A #05814 - Winter Springs FSU

E SR 434 & Michael Blake Boulevard, Winter Springs, Florida

P-3

Client Name:	Chick-Fil-A, Inc.	Project No.:	CKFLA-24-FL-08321-02	Remarks: Hammer Efficiency=86%
Drilling Firm:	AMDrill	Date Drilled:	04/02/2024	
Logged By:	Steven Edsall	Boring Size:	6.25"	
Equipment:	CME-45	Boring Elevation:	~41'	
Hammer Type:	Auto	Depth:	6'	
Drilling Method:	Mud Rotary	Water Level At Time Of Drilling:	6'	Delayed Water Level: Not...
		Cave-in At Time Of Drilling:	N/A	Delayed Water Observation Date: N/A

Depth (ft)	Graphic Log	Soil Description and Remarks		Samples: Sample Graphic	Sample Number	Recovery Length	Blow Counts (N-Value)
		Topsoil	0.3		1	12	2-2-2-3 (4)
		Sand - trace silt and clay, trace organics, very loose, grey and brown (fill)	2.0		2	18	2-3-5-6 (8)
		Sand - trace silt and clay, loose, wet, grey brown (native)					
5		Firm, wet			3	20	4-8-8-5 (16)
			6.0				
		Boring Terminated at 6 feet					



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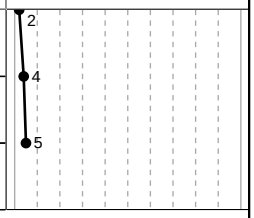
P-4

Client Name:	Chick-Fil-A, Inc.	Project No.:	CKFLA-24-FL-08321-02	Remarks: Hammer Efficiency=86%
Drilling Firm:	AMDrill	Date Drilled:	04/02/2024	
Logged By:	Steven Edsall	Boring Size:	6.25"	
Equipment:	CME-45	Boring Elevation:	~40'	
Hammer Type:	Auto	Depth:	6'	
Drilling Method:	Mud Rotary	Water Level At Time Of Drilling:	6'	Delayed Water Level: Not...
		Cave-in At Time Of Drilling:	N/A	Delayed Water Observation Date: N/A

Depth (ft)	Graphic Log	Soil Description and Remarks	Sample Graphic	Sample Number	Recovery Length	Blow Counts (N-Value)
		Topsoil 0.3		1	15	1-1-1-4 (2)
		Sand - trace silt and clay, trace organics, very loose, brown (native)				
		Wet		2	16	2-2-2-3 (4)
5		Loose, wet, grey		3	14	3-3-2-3 (5)
		6.0				
		Boring Terminated at 6 feet				

Samples

Moisture Content 0 50 100
Plastic Limit 0 50 100
Liquid Limit 0 50 100
Percent Fines 0 50 100
Uncorrected N-Value 0 50 100



EXPLORATION PROCEDURES

Eight (8) Standard Penetration Test (SPT) borings (numbered B-1 through B-4 and P-1 through P-4) were drilled at the approximate locations shown on the attached Boring Location Plan (Figure 1). The Borings were drilled to depths ranging from 6 to 16 feet.

Soil samples obtained using the split spoon sampler were examined by the geotechnical engineer and classified according to the visual-manual procedure described in ASTM D 2488-00. Soil test borings were performed in general accordance with ASTM D 1586. A narrative of field operations is included in The Appendix.

The borings were located in the field by the staff engineer based on a site plan prepared by client. The boring locations were established by measuring distances from existing curb lines and other features adjacent to the project site. The boring locations are shown on the attached Boring Location Plan and should be considered approximate. Elevations indicated on the boring logs were obtained from the provided survey overlaid onto Google Earth and should be considered as approximate. The topographic and elevation data shown were provided by others and is not certified as correct by this engineer. Users of this data do so at their own risk. If more exact elevations or locations are desired, we recommend that a professional surveyor be engaged to locate the borings. The borings were backfilled after completion of drilling.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical- engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply this report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by*: the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time* to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold- prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical- engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.

GEOTECHNICAL BUSINESS COUNCIL
of the Geoprofessional Business Association

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

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CORPORATE OVERVIEW

United Consulting is an engineering consulting firm headquartered in Georgia, specializing in environmental services, geotechnical engineering, geophysical services, automated instrumentation, special inspections, and construction materials testing since 1990. With over 180 employees, including 30 professionally registered engineers and geologists the firm has undertaken some of the most challenging projects in the country.

GEOTECHNICAL SERVICES

- Subsurface Soil Investigations
- Geologic Investigations
- Foundation Investigations
- Rock Stability Analysis
- Rock Anchor/Bolt Design
- Dam Investigations/ Design
- Dam Breach Analysis
- Pile/Caisson/ Foundation Load
- Slope Stability Analysis
- Tunnel Design
- Soil Nailing Design
- Value Engineering
- Failure Investigations
- Pavement Evaluation/ Design
- Bridge Foundation Investigations
- Retaining Wall Foundation Investigations

ENVIRONMENTAL SERVICES

- Phase I Site Assessments
- Phase II Contamination Assessments
- Brownfield Assessment & Remediation Services
- Corrective Action Plans
- Asbestos, Lead-Based Paint, & Mold Consulting Services
- Indoor/Outdoor Air Quality Assessment & Analysis
- Groundwater/Surface Water Modeling & Analysis
- Landfill Services
- Health & Safety Services
- Soil and Groundwater Remedial Design & Implementation
- Hazardous Waste Site Assessment & Remediation Services
- Regulatory Liaison Services

SUBSURFACE UTILITY ENGINEERING

- Quality Levels A, B, C, D
- Ground Penetrating Radar
- SUE Surveying/Surface Geophysics

AUTOMATED INSTRUMENTATION

- Vibration Monitoring
- Robotic Total Stations
- Inclinometers and SAAs
- Tiltmeters
- Piezometers
- Real-Time Website Monitoring & Alarming
- Pre-Post Construction Photographic Survey

GEOPHYSICAL SERVICES

- Geologic Mapping
- Earth Resistivity
- Geophysical Instrumentation
- Review of Blasting Programs
- Earthquake Risk Assessment
- Shear Wave Analysis

INSPECTION SERVICES

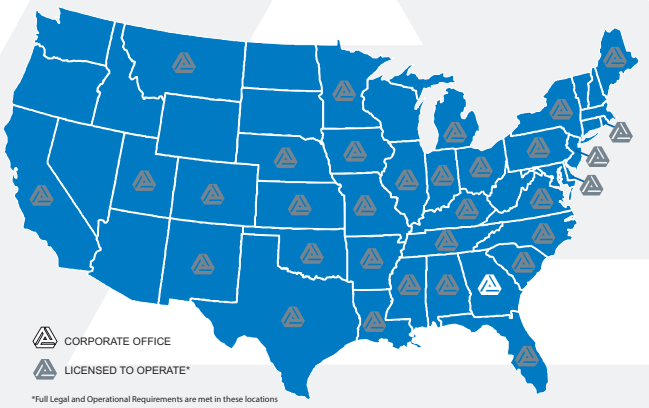
- Property Condition Survey
- Replacement & Reserve Analysis
- Repair Cost Estimates
- Visual Documentation
- Plan & Spec Review
- Construction Draw Inspections
- Contract Administration
- Pre-acquisition Survey
- Construction Monitoring

MATERIALS TESTING

- Complete Mortar & Masonry Testing
- In-place Density Testing
- Foundation Testing
- Asphalt/Concrete Testing & Batch Plant Inspections
- Magnetic Particle & Radiographic Testing
- Special Inspections
- Failure Investigations
- Monitoring Post-Tension Operations
- Floor Flatness & Levelness Determinations
- Moisture Testing
- Fire Proofing Testing
  - Portland Based Cement
  - Gypsum Based Cementitous Spray
  - Cellulose Insulation

ECOLOGICAL SERVICES

- Aquatic Resource Delineation
- Wetland/Stream Permitting Services
- Wildlife & Protected Species Surveys
- Mitigation Design, Implementation/ Monitoring
- NEPA Assessments



UNITED CONSULTING LABORATORY

United Consulting's Geotechnical and Materials Testing Laboratory occupies approximately 10,000 SF of space in our 60,000 SF, Norcross, Georgia headquarters. Our laboratory's work and facilities meet or exceed the requirements set forth in ASTM E 329, C 1077, and D 3740. Additionally, our laboratory has been a validated U.S. Army Corp of Engineers laboratory, since 2010.

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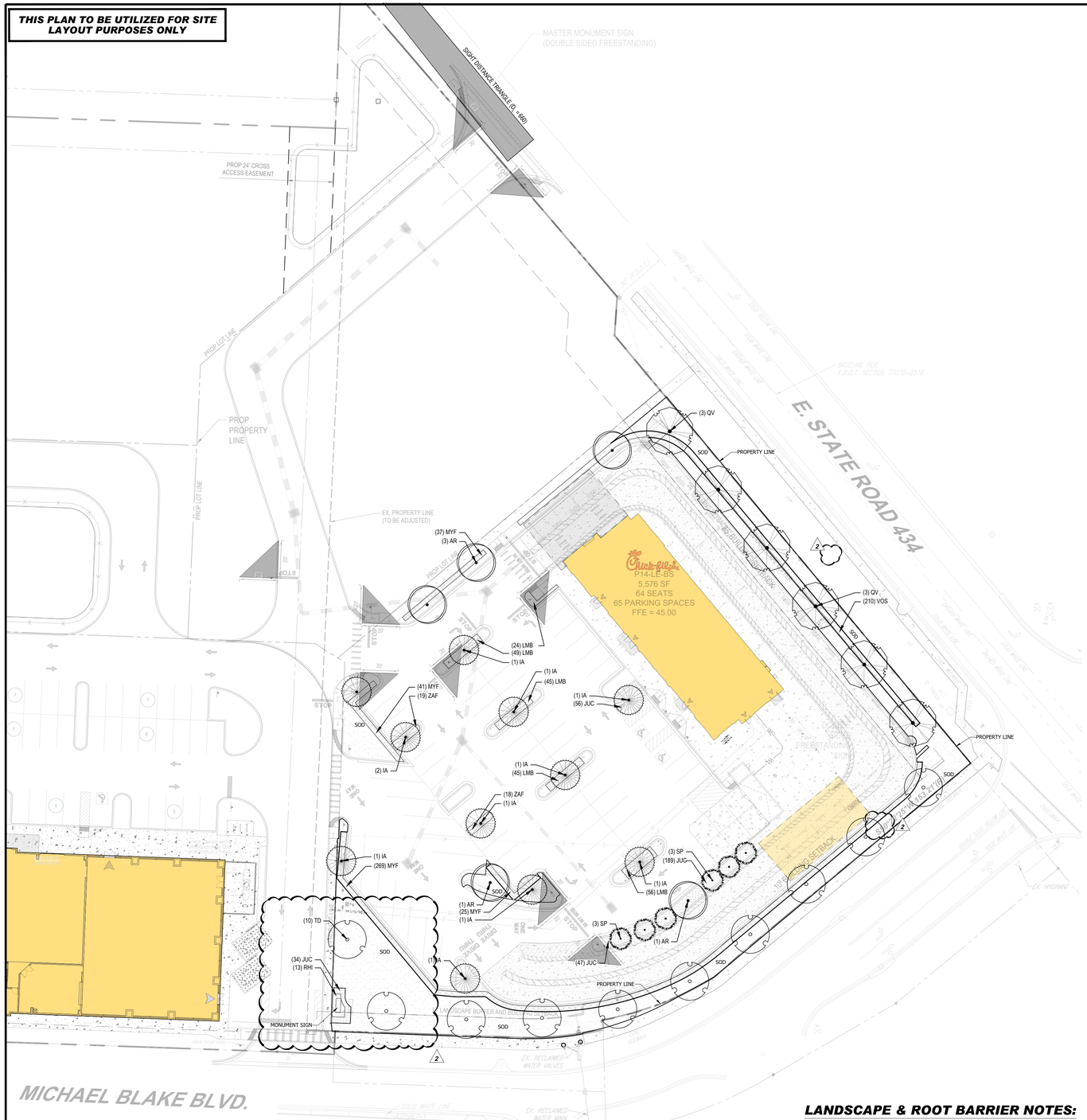
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THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY





LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. DRIVE-THRU CONCRETE	
PROP. HEAVY DUTY CONCRETE	

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	NATIVE	DROUGHT
BUFFER TREES								
	AR	5	ACER RUBRUM	RED MAPLE	3" CAL. 10'-12' OA. HT. X 5'-6' SPRD.	CONT./B&B	YES	YES
	QV	6	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL. 12' OA. MIN. HT. X 6-8' SPRD.	CONT./B&B	YES	YES
	TD	10	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL. 12' OA. HT. X 6' SPRD.	B&B	YES	YES
PALMS								
	SP	6	SABAL PALMETTO	CABBAGE PALMETTO	12' GW	FG	NATIVE	TOLERANT
PARKING LOT TREES								
	IA	11	ILEX X ATTENUATA 'EAST PALATKA'	EAST PALATKA HOLLY	2.5" CAL. 10-12' OA HT. X 6' SPRD	B&B	NATIVE	TOLERANT
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	NATIVE	DROUGHT TOLERANT
SHRUB AREAS								
	LMB	219	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	18" HT. X 18" SPRD.	CONTAINER	NO	YES
	MYF	372	MYRCIANTHES GRAGRENS	SIMPSON'S STOPPER	24" HT. X 24" SPRD.	CONTAINER	YES	YES
	RHI	13	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	24" HT X 24" SPRD	CONTAINER	NO	YES
	VOS	210	VIBURNUM ODORATISSIMUM	SWEET VIBURNUM	24" HT. X 24" SPRD.	CONTAINER	NO	YES
	ZAF	37	ZAMIA FLORIDANA	FLORIDA COONTIE	18" HT. X 18" SPRD.	CONTAINER	YES	YES
GROUND COVERS								
	JUC	326	JUNIPERUS CONFERTA	SHORE JUNIPER	18" HT. X 18" SPRD.	CONTAINER	NO	YES
SOD								
	SOD	11,092 SF	STENOTAPHRUM SECUNDATUM 'PALMETTO'	PALMETTO ST. AUGUSTINE GRASS	12" HT X 18" SPRD	PALLET		

NATIVE SPECIES:

* NATIVE SPECIES - HIGH DROUGHT TOLERANCE (OTHERS MEDIUM DROUGHT TOLERANCE)
** CONTRACTOR TO VERIFY SQUARE FOOTAGE

CONTRACTOR SHALL VERIFY PLANT QUANTITIES IN THE TABLE WITH THE PLAN. WHERE THERE IS A DISCREPANCY IN PLANT QUANTITIES, THE PLAN OVER RIDES THE PLANT LIST

LANDSCAPE & ROOT BARRIER NOTES:

TREES SHOWN ON THIS PLAN ARE FOR GRAPHIC REPRESENTATION ONLY. TREE SPACING IS BASED ON DESIGN REQUIREMENTS AND THE TREES SHOWN ON THESE PLANS ATTEMPT TO ACCOMPLISH THAT SPACING WHILE MAINTAINING THE REQUIRED SETBACKS FROM UTILITIES. TREES MAY BE FIELD ADJUSTED TO AVOID CONFLICTS WITH DRIVEWAYS AND UNDERGROUND UTILITIES. IN ANY CASE THE TREES SHALL BE LOCATED IN THE FIELD IN ACCORDANCE WITH THE PLANTING DETAILS SHOWN.

ADDITIONALLY, TREES ARE TO BE INSTALLED WITH TEN FOOT (10') SEPARATION FROM ANY WATER OR SEWER MAIN AND/OR SERVICE, HYDRANTS AND LIFT STATIONS. IF A TEN FOOT (10') SEPARATION CANNOT BE ACHIEVED, THE TREE CAN BE INSTALLED WITH A ROOT BARRIER SYSTEM. REFER TO THE "ROOT BARRIER" DETAIL FOR INSTALLATION REQUIREMENTS. HOWEVER, IN NO CASE SHALL A TREE ENCROACH INTO A PBCUE WITHOUT PRIOR BCWUD APPROVAL AND ONLY SOD CAN BE INSTALLED WITHIN 7.5' OF A FIRE HYDRANT UNLESS OTHERWISE APPROVED BY THE FIRE MARSHAL AND PBCWUD

SEE DETAIL 8, SHEET C-705 FOR ROOT BARRIER DETAILS.

NOTE: ROOT BARRIER SHALL BE PROVIDED FOR ALL LANDSCAPING PROPOSED WITHIN 10 FEET OR DRAINAGE PIPES, STRUCTURES AND CHAMBERS.

GENERAL LANDSCAPE NOTES:

1. ALL PLANTING BEDS TO BE MULCHED WITH 3" FLORIMULCH MELALEUCA (COCOA BROWN) MULCH.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION
3. DIGGING IN UTILITY EASEMENTS SHALL BE BY HAND ONLY
4. THIS PLAN IS TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY.
5. ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH LANDSCAPE SPECIFICATION #2.C., UNLESS OTHERWISE STATED ON THIS PLAN.
6. SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
7. IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCT'S MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF A RUST-FREE IRRIGATION SYSTEM.
8. PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER ENGINEERING AND THE MUNICIPAL ENGINEER AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ANY PLANT MATERIAL THAT ARE TO BE INSTALLED WITHIN STORMWATER BMP FEATURES MUST BE NATIVE SPECIES.
9. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY BMP FACILITY. BMP FACILITIES INCLUDE RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.
10. ANY TREE INSTALLED WITHIN 10 FT. OF NEW CONCRETE SIDEWALKS AND/OR NEARBY UNDERGROUND UTILITY OR PIPE SHOULD BE INSTALLED WITH BIOBARRIER ROOT BARRIER FABRIC AS SHOWN. SEE DETAIL DETAIL 8, C-704.
11. THERE IS TO BE NO PLANTING OF TREES OR SHRUBS EITHER DIRECTLY OVER OR WITHIN 10 HORIZONTAL FEET OF THE SANITARY SEWER GRAVITY SEWERS AND FORCE MAIN.

LANDSCAPE DATA TABLE

JURISDICTION	CITY OF WINTER SPRINGS
CURRENT ZONING /PROPOSED ZONING	(T-C) TOWN CENTER & T5 (URBAN CENTER ZONE)
TOTAL SITE AREA	1.67 ACRES

LANDSCAPE BUFFER REQUIREMENTS

	REQUIRED	PROVIDED
NORTHEAST (SR 434) REQUIRED:10' BUFFER 255.76 LF	6 TREES	6 TREES
EAST PROPERTY LINE REQUIRED: 40' BUFFER 410.66 LF	10 TREES	10 TREES

OFF-STREET PARKING SEC. 20-467

	REQUIRED	PROVIDED
TERMINAL ISLANDS	7 TREES	7 TREES
PARKING ISLANDS	4 TREES	4 TREES

MINIMUM TREE REQUIREMENTS SEC 5-13.C

	REQUIRED	PROVIDED
6 TREES PER ACRE 1.36 AC	6 TREES	6 TREES
TOTAL TREES	33 TREES	33 TREES
TOTAL PALMS		6 PALMS
TOTAL SHRUBS		1169 SHRUBS

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK

STATE OF FLORIDA LICENSED LANDSCAPE ARCHITECT LA 6667549 BRETT MICHAEL WALDMAN

Digitally signed by Brett Waldman
DN: c=US, o=BOHLER ENGINEERING, ou=Corporate Headquarters, cn=Brett Waldman, 1.2.840.113549.1.9.1=bwaldman@bohlerengineering.com
Reason: I am the author of this document
Location: Orlando, FL, US
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STORE
P14-LE-XP - #05814
WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

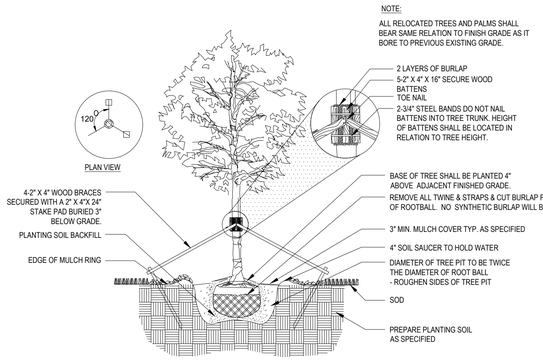
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LANDSCAPE PLAN

DWG EDITION 02.4

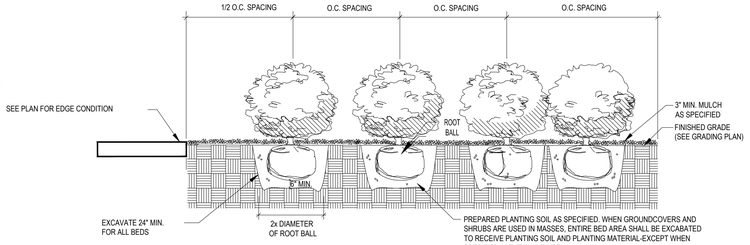
☒ PRELIMINARY
☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

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STORE	#05814
DATE	05/21/2024
DRAWN BY	GD
CHECKED BY	BW
CAD ID	LAND

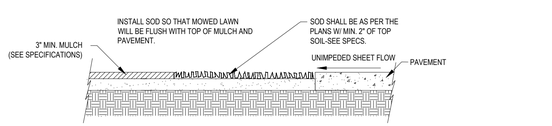
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C-701



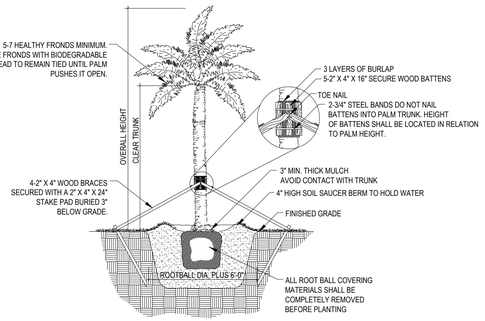
1 TREE INSTALLATION
SECTION NTS



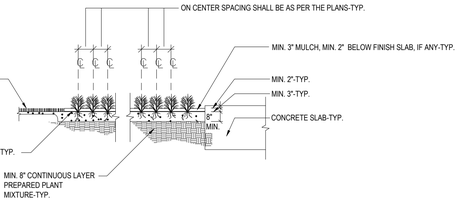
4 SHRUB PLANTING
SECTION NTS



7 SOD INSTALLATION
SECTION NTS



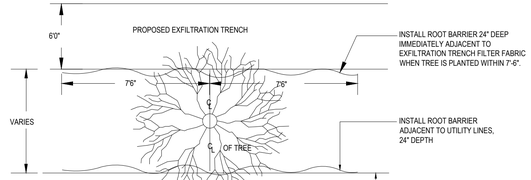
2 PALM INSTALLATION
SECTION NTS



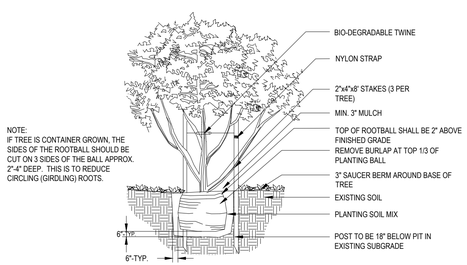
5 GROUNDCOVER PLANTING
SECTION NTS

NOTES:
1) ROOT BARRIER TO BE INSTALLED WHERE LARGE SHADE TREES ARE TO BE PLANTED WITHIN 10' OF NEW OR PROPOSED UTILITY LINES OR UTILITY STRUCTURES.
2)ROOT BARRIERS TO BE INSTALLED WHERE TREES OR PALMS ARE TO BE PLANTED WITHIN 10' OF PAVED AREAS (I.E. PLANTING ISLANDS, MEDIANS, SIDEWALKS, ETC) .

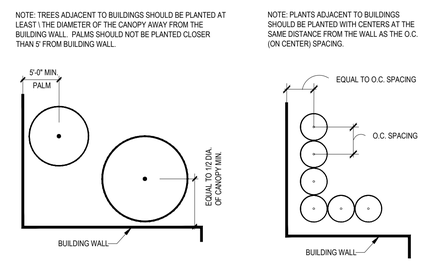
ROOT BARRIER SPECIFICATIONS:
PANEL: .085 THICK POLYPROPYLENE
ROUNDED EDGES
ANTI-LIFT PADS
ZIPPER JOINT SYSTEM
24" DEPTH



8 ROOT BARRIER
SECTION NTS



3 SMALL TREE
SECTION NTS



6 PLANTING ADJACENT TO BUILDING
SECTION NTS

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Digitally signed by Brett Waldman, LA 6667349, Landscape Architect, PA
DN: cn=Brett Waldman, o="BOHLER ENGINEERING FL, LLC", l=Winter Park, st=FL, email=bwaldman@bohlerengineering.com, c=US
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Fax: (813) 812-4101
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STORE
P14-LE-XP - #05814
WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
LANDSCAPE DETAILS

DWG EDITION 02.4

☒ PRELIMINARY
☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

JOB NO.	FLA230280.00
STORE	#05814
DATE	05/21/2024
DRAWN BY	GD
CHECKED BY	BW
CAD ID	LAND

SHEET
C-702

LANDSCAPE NOTES:

1. A PRE-INSTALLATION MEETING WITH THE CITY ARBORIST IS REQUIRED PRIOR TO LANDSCAPING ACTIVITIES INCLUDING REMOVAL OF TREES AND/OR INSTALLATION OF PLANT MATERIAL.

2. ALL EXISTING TREES PROPOSED TO REMAIN ARE TO BE SEPARATED FROM THE LIMITS OF DISTURBANCE OF THE CONSTRUCTION AREA BY TREE PROTECTION FENCING AND SIGNAGE. THE TREE PROTECTION FENCING SHALL BE LOCATED AT THE EDGE OF THE TREE PROTECTION ZONE AS DEPICTED ON THE PLAN OR AT THE EDGE OF THE DRIPLINE(S) IF A TREE PROTECTION ZONE IS NOT DESIGNATED. NO MATERIAL STORAGE OR CONSTRUCTION ACCESS IS PERMITTED WITHIN THE TREE PROTECTION ZONE.

3. ALL EXISTING TREES SHALL BE PRUNED TO ANSI A-300 STANDARDS TO CORRECT POTENTIAL HAZARDS.

4. A TREE REMOVAL PERMIT IS REQUIRED PRIOR TO REMOVAL OR RELOCATION OF ANY TREE OR PALM. CONTACT THE CITY TO OBTAIN PERMIT INFORMATION.

5. CONTRACTOR SHALL NOTIFY SUNSHINE ONE CALL OF FLORIDA, INC. AT 1-800-432-4770 A MINIMUM OF 2 FULL BUSINESS DAYS PRIOR TO DIGGING. CONTRACTOR IS RESPONSIBLE FOR AVOIDING DAMAGE TO UTILITIES FROM PLANT INSTALLATION.

6. TREE RELOCATIONS:
   A. EXISTING TREES TO BE RELOCATED SHALL BE ROOT PRUNED A MINIMUM OF 120 DAYS PRIOR TO RELOCATION
   B MINIMUM ROOT BALL SIZES SHALL BE IN ACCORDANCE WITH ANSI STANDARDS AS FOLLOWS:

CALIPER	MINIMUM ROOT BALL DIAMETER
1	16
2	24
3	32
4	42
5	54
6	60
7	70
8	80
>8	12 INCHES PER INCH OF TRUNK DIAMETER

   TRANSPLANTED TREES WITH UNDERSIZED ROOT BALLS MAY BE REJECTED BY THE CITY ARBORIST AND REPLACEMENT TREES MAY BE REQUIRED.
   C. A TEMPORARY IRRIGATION SYSTEM SHALL BE PROVIDED DURING AND FOR THE FIRST 40 DAYS AFTER ROOT PRUNING.

7. ALL PLANTING MUST FOLLOW PLANTING SPECIFICATIONS AND DETAILS SHOWN ON THE PLAN.

8. SUBSTITUTIONS OF PLANT SPECIES OR SPECIFICATIONS MUST BE APPROVED IN WRITING BY THE CITY AND COUNTY PRIOR TO USE.

9. ALL INVASIVE EXOTIC VEGETATION SHALL BE DISPOSED OF OR TREATED AS PER THE LOCAL OR REGIONAL GOVERNING AUTHORITIES REQUIREMENTS OR RECOMMENDATIONS.

10. ALL PLANT MATERIAL PLANTED PER THIS LANDSCAPE PLAN SHALL BE FLORIDA GRADE #1 OR BETTER, AS SPECIFIED IN THE CURRENT EDITION OF THE FLORIDA DEPARTMENT OF AGRICULTURE'S GRADES AND STANDARDS FOR NURSERY PLANTS. DAMAGED PLANT MATERIAL SHALL BE REJECTED AND REPLACED PRIOR TO INSTALLATION.

11. ALL SIZES SHOWN FOR PLANT MATERIAL ARE TO BE CONSIDERED MINIMUMS.

12. WHERE QUANTITIES AND/OR SPECIES DIFFER BETWEEN THE PLANTING PLANS AND PLANT LISTS, THE PLANS SHALL TAKE PRECEDENCE.

13. ALL NEW PLANT MATERIAL SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM PERIOD OF ONE YEAR. THE WARRANTY PERIOD SHALL BEGIN AFTER ACCEPTANCE OF THE PLANTS BY THE CITY AND COUNTY.

14. PLANT BEDS TO BE TREATED WITH PRE-EMERGENT HERBICIDE PRIOR TO PLANTING.

15. ALL TREE AND PALM STAKING AND SUPPORT SHALL BE REMOVED ONE YEAR AFTER INSTALLATION.

16. ALL LANDSCAPE MATERIAL SHALL BE THOROUGHLY WATERED AT THE TIME OF PLANTING, NO DRY PLANTING PERMITTED.

17. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY WATER PROVISIONS UNTIL SUCH TIME AS THE IRRIGATION SYSTEM IS OPERATIONAL.

18. ALL WIRE GUYS AND/OR FABRIC STRAPS SHALL BE FLAGGED WITH FLORESCENT COLORED TAPE.

19. MULCHING:
   ALL LANDSCAPE AREAS NOT COVERED BY SOD SHALL BE COVERED BY A MINIMUM 3-INCH LAYER OF MULCH.
   D. A MULCH RING WITH A MINIMUM RADIUS OF 24 INCHES (48 INCH DIAMETER), IS REQUIRED AROUND ALL NEWLY INSTALLED TREES AND PALMS.
   E. CYPRESS OR COLORED MULCH SHALL NOT BE USED.
   F. NO MULCH SHALL BE PLACED TOUCHING OR WITHIN SIX INCHES OF THE TRUNK OF A TREE OR PALM.

19. ALL NEWLY LANDSCAPED AREAS SHALL BE EXCAVATED DOWN TO A DEPTH OF 24 INCHES BELOW FINAL GRADE AND BACK FILLED WITH CLEAN DEBRIS-FREE SOIL. EXISTING SOIL MAY BE RE-USED FOR BACKFILLING IF DEBRIS IS REMOVED AND ORGANIC CONTENT IS SUFFICIENT OR SOIL IS AUGMENTED WITH TOPSOIL. CONSTRUCTION ACCESS SHALL BE RESTRICTED FROM THE LANDSCAPE AREA AFTER EXCAVATION AND BACKFILL IS COMPLETE.

20. ALL LANDSCAPE AREAS SHALL BE FINISH GRADED SUCH THAT THEY ARE A MINIMUM OF 3.5 INCHES BELOW SURROUNDING PAVED SURFACES SO AS NOT TO IMPEDE THE FLOW OF DRAINAGE INTO LANDSCAPED AREAS AND TO ALLOW FOR A 3-INCH MULCH LAYER.

21. THE LOCATION OF PLANT MATERIAL AS SHOWN ON THESE PLANS IS FINAL. THE FINAL LOCATIONS CAN BE ADJUSTED ON SITE TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS. THESE CHANGES MUST COMPLY WITH ALL SAFETY SETBACK CRITERIA AND BE DIRECTED OR APPROVED BY THE CONSULTANT AND THE COUNTY CODES.

22. REPORT ANY AND ALL DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE CONSULTANT AND COUNTY IMMEDIATELY.

23. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT COUNTS AND REPORT ANY DISCREPANCIES TO THE CONSULTANT AND COUNTY PRIOR TO CONSTRUCTION.

24. BEFORE CONSTRUCTION BEGINS THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING CONSTRUCTION. IF SUCH DAMAGE OCCURS THE CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY REPAIRS AND THEY SHOULD BE MADE IMMEDIATELY AT THE CONTRACTORS EXPENSE.

25. ALL WORK MUST COMPLY WITH THE FLORIDA STATE STATUTE 553.81- "PROTECTION OF UNDERGROUND PIPELINES."

26. THE CONTRACTOR MUST COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.

27. THE LOCATION OF ALL THE UTILITIES SHOWN ON THE PLAN IS APPROXIMATE. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR ON SITE. ALL PLANTING MAY BE ADJUSTED TO AVOID CONFLICTS WITH UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ANY ADJUSTMENTS GREATER THAN 10 FEET SHALL BE DONE ONLY WITH THE APPROVAL OF THE CONSULTANT AND THE COUNTY.

28. CAUTION SHOULD BE EXERCISED WHEN WORKING NEAR EXISTING PLANTING AND ANY FURNISHING THAT IS TO REMAIN ON SITE TO PREVENT ANY DAMAGE. ANY SIGNS, STRUCTURES, OR PLANTING SHALL BE REPLACED AT THE CONTRACTORS EXPENSE IF DAMAGED BEYOND USE. DAMAGED BEYOND USE WILL BE DETERMINED BY THE CONSULTANT AND THE COUNTY.

29. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE DISTRICT LOCATION SURVEYOR IMMEDIATELY.

30. MAINTENANCE OF TRAFFIC FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (U.S. DEPARTMENT OF TRANSPORTATION, F.H.W.A.). ATTENTION IS DIRECTED TO STANDARD INDEX NUMBER 623 OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS.

31. THE CONTRACTOR SHALL INSURE THAT INSTALLATION OF ALL PLANTING IN MEDIANS AND RIGHT OF WAYS CONFORMS TO CRITERIA SET FORTH IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS AND IN F.D.O.T. MAINTENANCE RATING PROGRAM.

32. ANY MAINTENANCE THAT INVOLVES TRAFFIC ACTIVITY SHALL BE COORDINATED WITH THE COUNTY BEFORE AND DURING CONSTRUCTION ACTIVITIES.

33. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL WORK AREAS AT THE END OF EACH WORKING DAY. ANY DEBRIS SHALL BE COLLECTED AND DEPOSITED APPROPRIATELY OFF SITE DAILY. ALL MATERIALS, PRODUCTS, AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION.

34. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS THAT ARE REQUIRED BY THE CITY FOR TREE REMOVAL, RELOCATION, TREE PROTECTION OR INSTALLATION BEFORE BEGINNING WORK.

35. ALL EXISTING TREES TO REMAIN SHALL BE PROTECTED BY INSTALLING PROTECTIVE BARRIERS AROUND THE DRIP LINE OF TREES. THESE PROTECTIVE BARRIERS SHALL BE SEEN EASILY BY OPERATORS OF TRUCKS AND OTHER EQUIPMENT. THEY SHALL BE CONSTRUCTED OF STURDY MATERIALS (NOT FLAGGING OR RIBBON) AND SHALL BE INSTALLED PRIOR TO AND DURING CONSTRUCTION.

36. DO NOT STORE OR USE ANY MATERIALS OR EQUIPMENT WITHIN THE DRIP LINE OF ANY TREE THAT IS TO BE RELOCATED OR PROTECTED IN PLACE UNLESS THE ACTIVITY IS BEING DONE TO PROTECT THE TREES.

37. DO NOT DISCHARGE OR CONTAMINATE THE SOIL WITHIN THE DRIP LINE OF ANY OF THE TREES TO BE RELOCATED OR PROTECTED IN PLACE. THIS INCLUDES SUBSTANCES SUCH AS PAINT, OIL, SOLVENTS, PETROLEUM PRODUCTS, ASPHALT, CONCRETE, MORTAR, OR ANY OTHER MATERIAL THAT MAY CAUSE DAMAGE TO THE TREE'S ROOT SYSTEM.

38. CLEARING OF VEGETATION WITHIN THE DRIP LINE OF THE TREES DESIGNATED TO BE PROTECTED IN PLACE OR RELOCATED SHALL BE PERFORMED CAUTIOUSLY WITH HAND TOOLS TO MINIMIZE ANY DAMAGE TO THE TREE'S ROOT SYSTEM.

39. DO NOT ATTACH ANYTHING TO TREES THAT ARE TO REMAIN ON THE SITE UNLESS IT IS SOMETHING THAT WILL PROTECT AND NOT DAMAGE THE TREE.

40. KEEP A NATURAL GRADE ABOVE THE DRIP LINE ON ANY TREE THAT IS TO BE PROTECTED IN PLACE. ANY PRESERVED TREES DISTURBED DURING CONSTRUCTION MUST BE RETURNED TO ITS ORIGINAL GRADE AFTER CONSTRUCTION.

41. ALL LANDSCAPE AND PLANTING SHALL COMPLY WITH COUNTY LAND USE POLICY AND WITH CHAPTER 62B-55 OF THE FLORIDA ADMINISTRATIVE CODE.

42. ALL PLANT MATERIAL FURNISHED BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED SHALL BE FLORIDA NO. 1 GRADE OR BETTER, AND SHALL BE INSTALLED AS SPECIFIED IN "GRADES AND STANDARDS FOR NURSERY PLANTS," PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANT MATERIAL MUST BE HEALTHY, VIGOROUS MATERIALS, FREE OF PESTS AND DISEASES.

43. ALL SIZES SHOWN FOR PLANT MATERIAL ON THE PLAN ARE TO BE CONSIDERED AS MINIMUMS. ALL PLANT MATERIAL MUST MEET OR EXCEED THESE MINIMUM REQUIREMENTS FOR BOTH HEIGHT AND SPREAD. ANY OTHER REQUIREMENTS FOR SPECIFIC SHAPE OR EFFECT AS NOTED ON THE PLAN OR SPECIFICATIONS WILL ALSO BE REQUIRED FOR ACCEPTANCE. ANY SUBSTITUTIONS MUST BE APPROVED BY THE CONSULTANT AND THE COUNTY.

44. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTING MEETING SPECIFICATIONS AS NOTED BEFORE INSTALLATION. CONTRACTOR SHALL IMMEDIATELY REMOVE ALL PLANTING THAT DOES NOT MEET SPECIFICATIONS AND BE HELD RESPONSIBLE TO REPLACE IT WITH APPROPRIATE PLANTING.

45. IN THE EVENT OF A VARIATION BETWEEN THE PLANT LISTS AND THE ACTUAL QUANTITY OF PLANTS SHOWN, THE PLANS HOLD TRUE.

46. ALL ROOT BALLS SHALL CONFORM TO THE SIZE STANDARDS SET FORTH

47. ALL PLANT MATERIALS MUST BE PROTECTED DURING TRANSPORT AND DELIVERY TO THE JOB SITE WITH SHADE CLOTH OR OTHER ACCEPTABLE MEANS OF WINDBURN PREVENTION.

48. CONTRACTORS SHALL FIELD VERIFY ALL INFORMATION PRIOR TO INITIATING PLANTING INSTALLATION. ALL EXISTING PLANTING SHALL REMAIN INTACT AND UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS.

49. CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION FOR THE REVIEW AND APPROVAL OF THE CONSULTANT.

50. ALL TREES MUST BE FLORIDA #1, STRAIGHT TRUNKED, FULL HEADED, AND MEET ALL REQUIREMENTS SPECIFIED.

51. CONTRACTOR TO REPLACE REJECTED PLANT MATERIAL WITHIN ONE WEEK OF NOTICE.

52. INSTALLATION- ALL PLANT MATERIAL SHALL BE INSTALLED IN A SOUND HIGH QUALITY MANNER AND ACCORDING TO GOOD PLANTING PROCEDURES WITH THE QUALITY OF PLANT MATERIALS AS HEREINAFTER DESCRIBED. ALL ELEMENTS OF LANDSCAPING SHALL BE INSTALLED SO AS TO MEET ALL APPLICABLE ORDINANCES AND CODE REQUIREMENTS.

53. CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTAINING ALL TREES AND LANDSCAPE PER DIVISION 32. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE AND PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION OF PLANT MATERIAL. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF PLANTS IF DEAD OR DYING PRIOR TO FINAL ACCEPTANCE.

54. TYPICALLY, SHRUB AND GROUNDCOVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHOULD BE PLACED ON A TRIANGULAR SPACING SHOWN IN THE PLANTING DETAILS. PLANT CENTER TO CENTER DIMENSIONS (O.C.) ARE LISTED ON THE PLANT LIST.

55. TREES GROWN IN GROW BAGS OR GROW BAG TYPE MATERIAL MUST HAVE THE GROW BAG REMOVED ENTIRELY BEFORE PLANTING.

56. BALLED AND BURLAPPED MATERIAL SHALL HAVE THE TOP ONE HALF (½) OF THE BURLAP AROUND THE BASE OF THE TRUNK CUT AND PULLED BACK. DO NOT REMOVE THE BURLAP BUT WIRE CAGES, STRAPS, ETC. MUST BE CUT AND REMOVED COMPLETELY BEFORE INSTALLATION.

57. CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES, AND ANY OTHER MATERIALS FROM THE LANDSCAPE ARCHITECT FOR COMPLETE LANDSCAPE PLANTING INSTRUCTIONS.

58. THE FOLLOWING GUIDELINES SHALL BE FOLLOWED TO ENSURE SUCCESSFUL TRANSPLANTING OF TREES:
   a. ANY TREE BEING RELOCATED SHALL NOT BE UNNECESSARILY DAMAGED DURING REMOVAL, TRANSPORT, OR REPLANTING OF THAT TREE.
   b. TREES MUST BE ROOT PRUNED APPROPRIATELY PRIOR TO REMOVAL .
   c. DURING AND FOLLOWING TRANSPLANTING THE ROOT BALL MUST BE KEPT MOIST AT ALL TIMES.
   d. TRANSPLANTED TREES SHALL BE BRACED AT LEAST ONE FULL YEAR.
   e. TRANSPLANTED TREES SHALL NOT BE FERTILIZED AT PLANTING TIME BUT SHALL BE WATERED SUFFICIENTLY UNTIL THE TREE GROWTH IS REESTABLISHED.
   f. RELOCATED TREES/PALMS WILL BE MOVED IN ACCORDANCE WITH MINIMUM STANDARDS SET FORTH IN ANSI A-300
   g. ALL CROWN PRUNING SHALL BE DONE IN ACCORDANCE WITH NATIONAL ARBORIST ASSOCIATION STANDARDS OR PALM PRUNING IN ACCORDANCE WITH CITY STANDARDS.

59. CONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK. CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION OR INSTALLATION.

60. CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PORTIONS OF EXISTING LAWN AREAS DAMAGED WHILE COMPLETING PLANTING INSTALLATION WITH SAME GRASS SPECIES TO THE SATISFACTION OF THE CONSULTANT AND THE COUNTY.

61. GENERAL GRADING TO APPROXIMATELY 1 INCH SHALL BE PROVIDED BY THE CONTRACTOR. ALL FINISHED SITE GRADING AND FINAL DECORATIVE BERM SHAPING SHALL BE PROVIDED BY THE CONTRACTOR.

62. ALL LANDSCAPE MATERIALS SHALL BE MAINTAINED TO PROVIDE CONTINUOUS CLEAR ZONES FOR SIGHT VISIBILITY FOR PEDESTRIANS AND VEHICULAR TRAFFIC AND LANDSCAPE MAINTENANCE SHALL CONFORM TO STANDARD INDEX 546 CRITERIA SET FORTH IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS.

63. APPLICATION/ SCHEDULE: WATER NEW TREES, PALMS, AND SHRUBS EVERY DAY FOR THE FIRST TWO WEEKS, THREE TIMES A WEEK FOR THE SECOND TWO WEEKS, AND THEN TWICE A WEEK FOR THE NEXT EIGHT WEEKS FOR A TOTAL OF A 90 DAY WATERING PERIOD. NO FURTHER WATERING WILL BE REQUIRED. HAND WATERING SCHEDULE TO START AT FINAL ACCEPTANCE OF PROJECT.

64. EARTH BERM 4" HIGH OUTSIDE THE PROPOSED ROOT BALL PRIOR TO WATERING. APPLY A MINIMUM OF 4" OF WATER WITHIN THE SAUCER, OR 1-3 GALLONS PER INCH OF TRUNK DIAMETER, WHICH EVER IS MORE AT EACH WATERING. WATER APPLICATION SHOULD SATURATE THE ROOT BALL TO ITS ENTIRE DEPTH. DO NOT WATER IF ROOT BALL IS ALREADY SATURATED.

65. HANDWATERING IS IN ADDITION TO THE UNDERGROUND IRRIGATION SYSTEM.

SOIL PREPARATION, SOIL MIX, FERTILIZER, & MULCH NOTES:

1. ENSURE THAT ALL PLANTING SOIL IS FERTILE, FRIABLE, NATURAL LOAM SURFACE SOIL, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, WEEDS AND OTHER LITTER, AND FREE OF ROOTS,STUMPS AND STONES LARGER THAN ONE INCH IN ANY DIMENSION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. SHOULD ANY SOIL AMENDMENT BE NECESSARY, THE CONTRACTOR SHALL BRING THIS TO THE ATTENTION OF THE CONSULTANT AND THE COUNTY.

2. APPLY APPROVED HERBICIDE- ACCORDING TO MANUFACTURERS RATE AND SPECS WITHIN LIMITS OF ALL AREAS TO BE PLANTED. PROTECT EXISTING PLANTS TO REMAIN FROM OVERSPRAY OR SPRAY WITHIN ROOT ZONE. CONTRACTOR AND COUNTY TO ENSURE TOTAL WEED ERADICATION.

3. SCARIFY SUBSOIL TO A DEPTH OF 3 INCHES.

4. PLANTING MIX FOR TREES, SHRUBS, AND GROUNDCOVERS SHALL CONSIST OF A THOROUGHLY BLENDED MIXTURE OF:
   A. 20% TOPSOIL
   B. 10% PEAT OR COMPOST
   C. 70% SAND

5. PLANTING MIX FOR BACKFILL AROUND ROOT BALLS OF PALMS:
   A. 90% NATIVE SAND FROM ON SITE OR APPROVED SUBSTITUTE
   B. 10% TOPSOIL

6. FERTILIZE ALL TREES, SHRUBS AND GROUNDCOVER WITH PLANTING TABLETS 20-20-5 FORMULA, 21 GRAM.

7. ALL SHRUB BEDS SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 24" AND BACK FILLED WITH THE SPECIFIED MIXTURE.

8. SMOOTH ALL PREPARED TOPSOIL TO 3" EXCEPT WITHIN DRIP LINES OF EXISTING TREES AND 4" BELOW TOP OF SURROUNDING PAVING EDGES. REMOVE ALL ROCKS AND OTHER OBJECTS OVER 1" IN DIAMETER.

9. FINISH GRADE ALL PREPARED TOPSOIL AREAS TO A SMOOTH, EVEN SURFACE ASSURING POSITIVE DRAINAGE AWAY FROM THE STRUCTURES AND ELIMINATE ANY LOW AREAS WHICH MAY COLLECT WATER.

10. TOPSOIL SHALL NOT BE EXTREMELY ACIDIC OR ALKALINE, NOR CONTAIN ANY TOXIC SUBSTANCE WHICH MAY BE HARMFUL TO PLANT GROWTH. THE PH SHALL BE IN THE RANGE OF 5.5-6.5.

11. CONTRACTOR SHALL MULCH ALL PLANTING MATERIAL THROUGHOUT AND COMPLETELY TO A 3 INCH DEPTH WITH CLEAN, WEED FREE FLORAMULCH

12. MINIMUM OF 2" TOPSOIL MUST BE ADDED UNDER ALL SODDED AREAS.

IRRIGATION NOTES:

1. XERISCAPE PRINCIPLES HAVE BEEN APPLIED TO THIS LANDSCAPE PLAN AS SPECIFIED IN SFWMD's XERISCAPE PLANT GUIDE II AND SHALL BE APPLIED ALL THROUGHOUT LANDSCAPE INSTALLATION AND MAINTENANCE.

2. THE CONTRACTOR SHALL MAINTAIN TEMPORARY IRRIGATION OR PROVIDE HAND WATERING FOR ALL RELOCATED TREES AND PALMS FROM NOTICE TO PROCEED UNTIL PERMANENT IRRIGATION SYSTEM IS OPERABLE.

3. THE IRRIGATION SYSTEM SHALL BE CONFIGURED TO ACCOMMODATE EXISTING TREES AND PALMS PER PLANS.

4. ALL LANDSCAPED AREAS MUST BE IRRIGATED IN ACCORDANCE WITH ALL LOCAL/ COUNTY REQUIREMENTS.

5. REMOVE EXISTING IRRIGATION EQUIPMENT WHICH INTERFERES WITH ANY CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROLLERS, SPRINKLER HEADS, PIPE, QUICK COUPLERS, BACKFLOW PREVENTERS, CONTROL WIRE AND CONDUITS. ADDITIONALLY THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING SYSTEM THROUGHOUT THE CONSTRUCTION PROCESS.

6. CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. INSPECT IRRIGATION SYSTEM AND INSURE THAT ADEQUATE WATER IS AVAILABLE BEFORE BEGINNING PLANTING OPERATIONS. IRRIGATION SYSTEMS WILL NOT PROVIDE SUFFICIENT QUANTITIES OF WATER FOR NEWLY PLANTED MATERIALS. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DEEP ROOT HAND WATERING.

7. IF PROVIDED, REFER TO IRRIGATION PLANS FOR ADDITIONAL NOTES AND DETAILS.

5200 Buffington Rd
Atlanta, Georgia 30349-2998

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK

STATE OF FLORIDA — LA 0667349 — REGISTERED LANDSCAPE ARCHITECT
Digitally signed by Brett Waldman
DN: c=US, o=BOHLER ENGINEERING FL LLC, cn=Brett Waldman, 1D:76-FA-E5-A2-EC-E8-11-EE-A1-E1-00-22-48-0A-2E-B2
Reason: I am the author of this document
Location: your signing location here(33609)(813)405-5...
Date: 2025.02.17 13:56:46-05'00'
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY BRETT MICHAEL WALDMAN, PLA, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BOHLER
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LAND SURVEYING
PROJECT MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES
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BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

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E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
LANDSCAPE NOTES

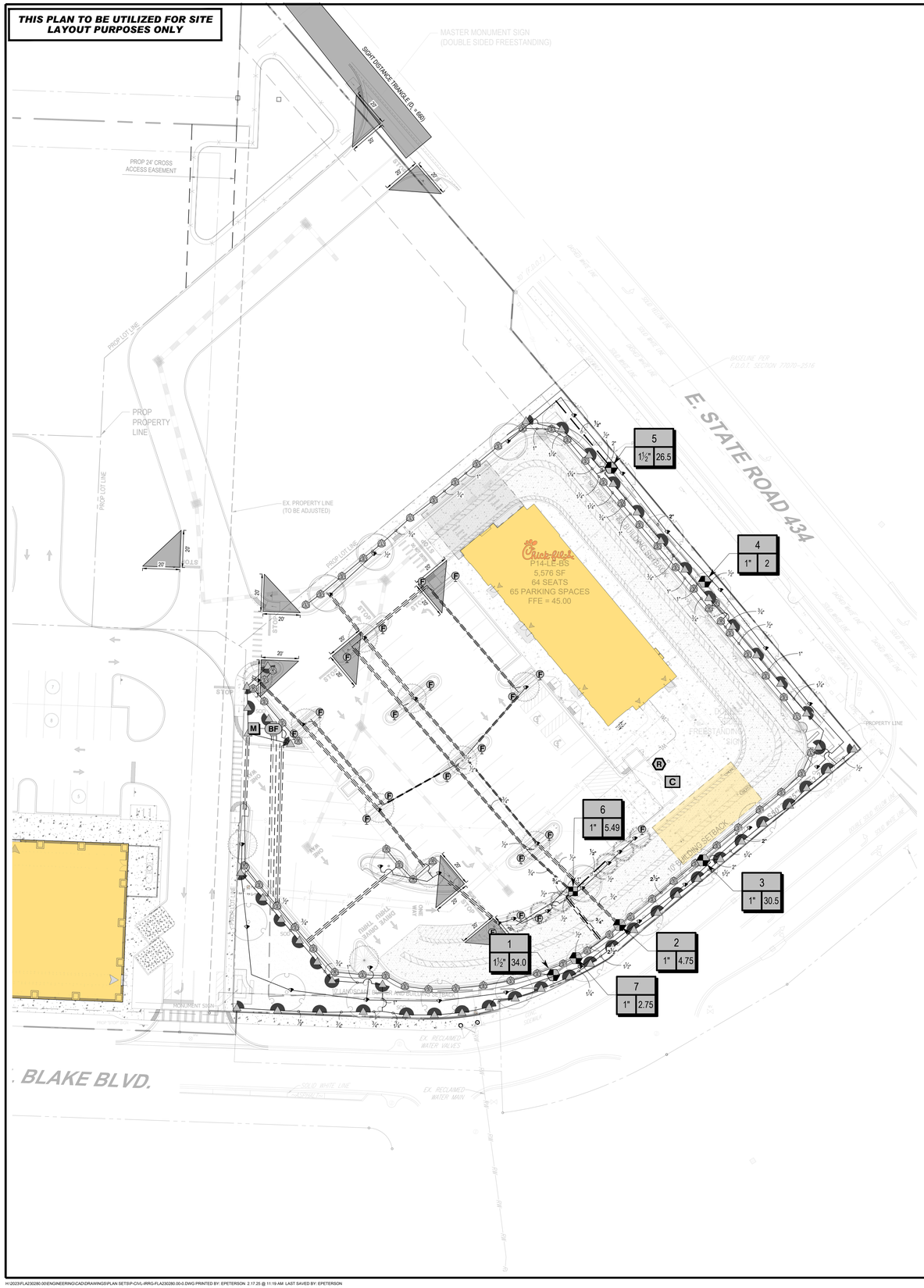
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SHEET
C-703

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY





LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. DRIVE-THRU CONCRETE	
PROP. HEAVY DUTY CONCRETE	

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	RAIN BIRD PEB	SHRUB SPRAY	1.41 in/h	1	43	1,463	
2	RAIN BIRD PEB	BUBBLER	0.85 in/h	1	71	337	
3	RAIN BIRD PEB	TURF ROTOR	0.57 in/h	1	106	3,228	
4	RAIN BIRD PEB	BUBBLER	0.85 in/h	1	71	142	
5	RAIN BIRD PEB	SHRUB SPRAY	1.46 in/h	1	41	1,085	
6	RAIN BIRD XCZ-100-LC	AREA FOR DRIPLINE	0.43 in/h	1.5	210	1,153	
7	RAIN BIRD PEB	BUBBLER	0.85 in/h	1	71	195	
		TOTALS:			613	7,603	

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	DETAIL
EST LCS RCS CST SST	RAIN BIRD RD-06-S 1S STRIP SERIES 6IN. POP-UP W/ CHECK VALVE.	64	25	
1401 1402 1404 1408	RAIN BIRD 1806-1400 FLOOD FLOOD BUBBLER 6.0IN. POPUP	38	20	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS	DETAIL
	RAIN BIRD 3504-PC 0.75 TURF ROTOR, 4IN. POP-UP. ADJUSTABLE AND FULL CIRCLE.	30	25	0.54	15'	
	RAIN BIRD 3504-PC 1.0 TURF ROTOR, 4IN. POP-UP. ADJUSTABLE AND FULL CIRCLE.	13	25	0.77	20'	
	RAIN BIRD 3504-PC 1.5 TURF ROTOR, 4IN. POP-UP. ADJUSTABLE AND FULL CIRCLE.	4	25	1.06	23'	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	RAIN BIRD XCZ-100-LC 1" WIDE FLOW DRIP CONTROL KIT, FOR LIGHT COMMERCIAL USES. 1IN. PEB VALVE, WITH 1IN. PRESSURE REGULATING 40PSI BASKET FILTER. 0.3-20 GPM.	1	
F	RAIN BIRD MDCFCAP DRIPLINE FLUSH VALVE CAP IN COMPRESSION FITTING COUPLER.	20	
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFDE-06-18 XFDE ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.6 GPH EMITTERS AT 18IN. O.C. DRIPLINE LATERALS SPACED AT RR APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV & KINK RESISTANT. USE XF INSERT FITTINGS.	820.9 L.F.	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	RAIN BIRD PEB 1-1/2" 1IN., 1-1/2IN., 2IN., 3IN. PLASTIC INDUSTRIAL REMOTE CONTROL VALVE. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	2	
	RAIN BIRD PEB 1" 1IN., 1-1/2IN., 2IN., 3IN. PLASTIC INDUSTRIAL REMOTE CONTROL VALVE. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	4	
BF	FEBCO 765 1-1/2" PRESSURE VACUUM BREAKER, BRASS WITH BALL VALVE SOV. INSTALL 12IN. ABOVE HIGHEST DOWNSTREAM OUTLET AND THE HIGHEST POINT IN THE DOWNSTREAM PIPING.	1	
C	RAIN BIRD ESP4ME3 WITH (3) ESP-SM3 13 STATION, HYBRID MODULAR OUTDOOR CONTROLLER. FOR RESIDENTIAL OR LIGHT COMMERCIAL USE. LNK WIFI MODULE AND FLOW SENSOR READY.	1	
R	RAIN BIRD RSD-BEX RAIN SENSOR, WITH METAL LATCHING BRACKET, EXTENSION WIRE.	1	
M	WATER METER 2" NEW 2" WATER METER W/ 1 1/2" SERVICE LINE	1	
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 1/2"	2,304 L.F.	
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 3/4"	498.6 L.F.	
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 1"	307.2 L.F.	
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 1 1/4"	477.4 L.F.	
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 1 1/2"	120.1 L.F.	
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 2"	27.8 L.F.	
	IRRIGATION MAINLINE: PVC SCHEDULE 40	70.4 L.F.	
	IRRIGATION MAINLINE: PVC SCHEDULE 40 3/4"	34.3 L.F.	
	IRRIGATION MAINLINE: PVC SCHEDULE 40 2"	292.7 L.F.	
	IRRIGATION MAINLINE: PVC SCHEDULE 40 2 1/2"	419.9 L.F.	
	PIPE SLEEVE: PVC CLASS 200 SDR 21	1,083 L.F.	

Valve Callout



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP
1	RAIN BIRD PEB	1-1/2"	SHRUB SPRAY	34.02	188.4	33.1	39.5	1.41 in/h
2	RAIN BIRD PEB	1"	BUBBLER	4.75	143.9	23.9	30.7	0.85 in/h
3	RAIN BIRD PEB	1"	TURF ROTOR	30.45	87.2	35.7	42.9	0.57 in/h
4	RAIN BIRD PEB	1"	BUBBLER	2	257.7	21.9	30.5	0.85 in/h
5	RAIN BIRD PEB	1-1/2"	SHRUB SPRAY	26.46	336.8	33.5	42.6	1.46 in/h
6	RAIN BIRD XCZ-100-LC	1"	AREA FOR DRIPLINE	5.49	191.1	24.6	32.3	0.43 in/h
7	RAIN BIRD PEB	1"	BUBBLER	2.75	173.2	23.2	29.8	0.85 in/h
	Common Wire				817.3			

CRITICAL ANALYSIS

Generated:	2024-06-24 16:4
P.O.C. NUMBER: 01	
Water Source Information:	NEW 2" WATER METER W/ 1 1/2" SERVICE LINE
FLOW AVAILABLE	
Water Meter Size:	2"
Flow Available	43.65 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	50 PSI
Elevation Change:	5 ft
Service Line Size:	1 1/2"
Length of Service Line:	20 ft
Pressure Available:	47 PSI
DESIGN ANALYSIS	
Maximum Multi-valve Flow:	43.65 GPM
Flow Available at POC:	43.65 GPM
Residual Flow Available:	0 GPM
Critical Station:	3
Design Pressure:	25 PSI
Friction Loss:	4.48 PSI
Fittings Loss:	0.45 PSI
Elevation Loss:	0 PSI
Loss through Valve:	5.8 PSI
Pressure Req. at Critical Station:	35.7 PSI
Loss for Fittings:	0.25 PSI
Loss for Main Line:	2.51 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	2.84 PSI
Loss for Water Meter:	1.52 PSI
Critical Station Pressure at POC:	42.8 PSI
Pressure Available:	47 PSI
Residual Pressure Available:	4.15 PSI

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK

BRETT MICHAEL WALDMAN LA 6667549 STATE OF FLORIDA
Digitally signed by Brett Waldman
DN: c=US, o=BOHLER ENGINEERING FL, LLC, cn=Brett Waldman, 0.9.2342.19200300.100.1.1=LA6667549
Date: 2025.02.07 13:06:35-05'00'

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Phone: (813) 812-4100
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WINTER SPRINGS
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WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

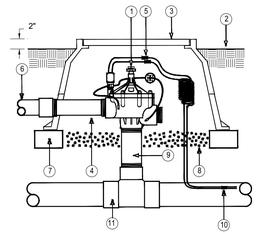
SHEET TITLE
LANDSCAPE PLAN

DWG EDITION 02.4

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☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

JOB NO.	FLA230280.00
STORE	#05814
DATE	05/21/2024
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CAD ID	IRRG

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C-704

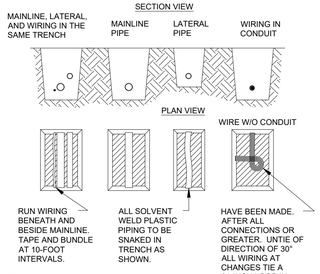


1. Hardie 100 series electric RCV (size per plans)
2. Finish Grade
3. Carson 1419-18 Valve Box w/1419-4B bolt down lid
4. 6" PVC SCH 80 nipple
5. 3M Waterproof wire connectors
6. PVC lateral line (size and type as per legend)
7. Common red brick (4 required)
8. Pea Gravel-12" deep
9. PVC Schedule 80 nipple (length as required)
10. Common and control wires to controller location
11. Pressure main line piping with main line fitting (depth , size and type as required)

NOTE: Refer to product literature for additional installation and adjustment information.

1 REMOTE CONTROL VALVE

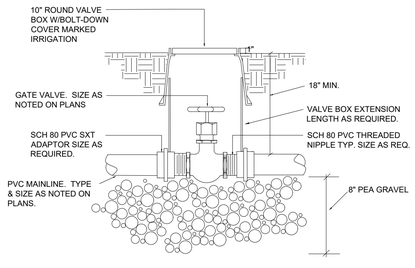
SECTION — NTS



NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH SCH 40 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS SEE SPECIFICATIONS.

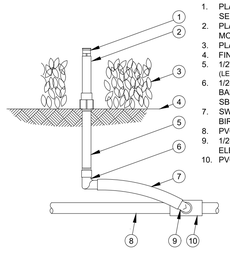
2 PIPE & WIRE TRENCHING

SECTION — NTS



3 GATE VALVE

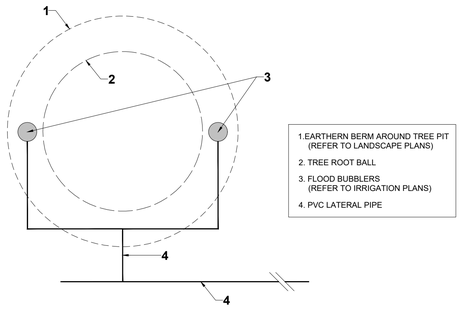
SECTION — NTS



1. PLASTIC NOZZLE:RAINBIRD 1800 SERIES
2. PLASTIC SHRUB ADAPTER:RAIN BIRD MODEL PA-8S-PRS
3. PLANT MATERIAL
4. FINISH GRADE/TOP OF MULCH
5. 1/2" SCH 40 PVC RISER (PAINT BLACK) (LENGTH AS REQUIRED)
6. 1/2-INCH FEMALE NPT x 0.490-INCH BARB ELBOW:RAIN BIRD MODEL SBFE-050
7. SWING PIPE, 12-INCH LENGTH:RAIN BIRD MODEL SP-100
8. PVC LATERAL PIPE
9. 1/2-INCH MALE NPT x .490-INCH BARB ELBOW:RAIN BIRD MODEL SBE-050
10. PVC SCH 40 TEE OR ELL

4 NOZZLE ON A RISER

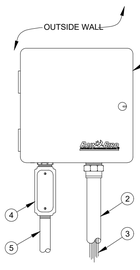
SECTION — NTS



1.EARTHERN BERM AROUND TREE PIT (REFER TO LANDSCAPE PLANS)
2. TREE ROOT BALL
3. FLOOD BUBBLERS (REFER TO IRRIGATION PLANS)
4. PVC LATERAL PIPE

5 BUBBLER HEAD PLACEMENT

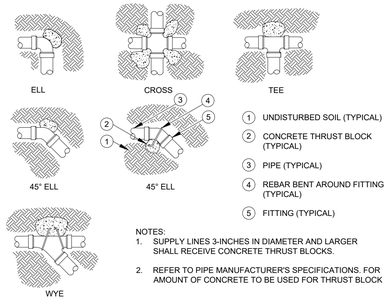
SECTION — NTS



1. HYBRID CONTROLLER: RAIN BIRD ESP-MC SERIES OUTDOOR WALL MOUNT
2. 2-INCH PVC SCH 40 CONDUIT AND FITTINGS
3. WIRES TO REMOTE CONTROL VALVES
4. JUNCTION BOX
5. 1-INCH PVC SCH 40 CONDUIT AND FITTINGS TO POWER SUPPLY

6 HYBRID CONTROLLER

SECTION — NTS

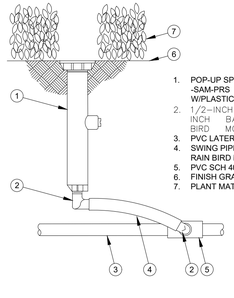


1. UNDISTURBED SOIL (TYPICAL)
2. CONCRETE THRUST BLOCK (TYPICAL)
3. PIPE (TYPICAL)
4. REBAR BENT AROUND FITTING (TYPICAL)
5. FITTING (TYPICAL)

NOTES:
1. SUPPLY LINES 3-INCHES IN DIAMETER AND LARGER SHALL RECEIVE CONCRETE THRUST BLOCKS.
2. REFER TO PIPE MANUFACTURER'S SPECIFICATIONS. FOR AMOUNT OF CONCRETE TO BE USED FOR THRUST BLOCK

7 THRUST BLOCK

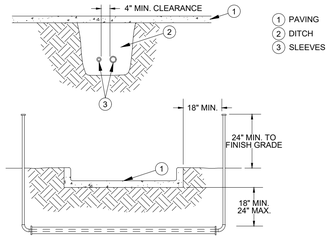
SECTION — NTS



1. POP-UP SPRAY SPRINKLER: -SAM-PRS RAIN BIRD 1806 W/PLASTIC MPR NOZZLE
2. 1/2-INCH MALE NPT x .490 INCH BARB ELBOW: RAIN BIRD MODEL SBE-050
3. PVC LATERAL PIPE
4. SWING PIPE, 12-INCH LENGTH: RAIN BIRD MODEL SP-100
5. PVC SCH 40 TEE OR ELL
6. FINISH GRADE/TOP OF MULCH
7. PLANT MATERIAL

8 POP-UP SPRAY SPRINKLER

SECTION — NTS

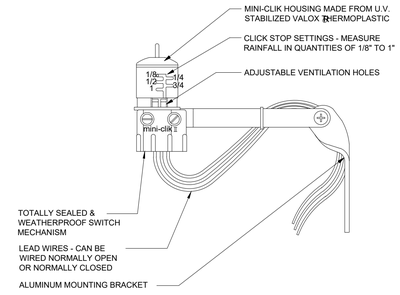


1. PAVING
2. DITCH
3. SLEEVES

NOTES:
1. ALL PVC IRRIGATION SLEEVES TO BE SCH 40 PVC PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. MECHANICALLY TAMP TO 95% PROCTOR.

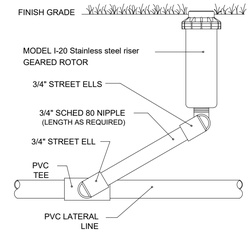
9 SLEEVING

SECTION — NTS



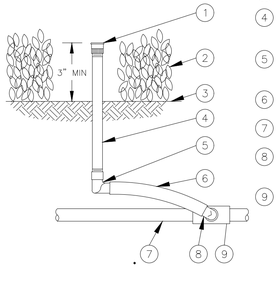
10 RAIN MOISTURE SENSOR

SECTION — NTS



11 POP-UP ROTOR RIGID SWING ARM

SECTION — NTS



1. PRESSURE COMPENSATING FULL CIRCLE BUBBLER: RAIN BIRD 1400
2. PLANT MATERIAL
3. FINISH GRADE/TOP OF MULCH
4. UV RADIATION RESISTANT 1/2 INCH PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
5. 1/2-INCH FEMALE NPT x 0.490-INCH BARB ELBOW: RAIN BIRD MODEL SBFE-050
6. SWING PIPE, 12-INCH LENGTH:
7. PVC LATERAL PIPE
8. 1/2-INCH MALE NPT x .490-INCH BARB ELBOW: RAIN BIRD MODEL SBE-050
9. PVC SCH 40 TEE OR ELL

11 PRESSURE COMPENSATING FULL CIRCLE BUBBLER 1400 SERIES

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK

STATE OF FLORIDA — LA 0667549 — REGISTERED LANDSCAPE ARCHITECT

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CITY OF WINTER SPRINGS

SHEET TITLE
IRRIGATION DETAILS

DWG EDITION 02.4

☒ PRELIMINARY
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☐ FOR CONSTRUCTION

JOB NO.	:FLA230280.00
STORE	: #05814
DATE	: 05/21/2024
DRAWN BY	: GD
CHECKED BY	: BW
CAD ID	: IRRG

SHEET
C-705

IRRIGATION SPECIFICATIONS

PART 1 - GENERAL 1.01 SCOPE

A. PROVIDE COMPLETE SPRINKLER INSTALLATION AS DETAILED AND SPECIFIED HEREIN, INCLUDING FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT FOR THE PROPER INSTALLATION. WORK INCLUDES BUT IS NOT LIMITED TO:
1. TRENCHING AND BACKFILL.
2. AUTOMATIC CONTROLLED SYSTEM.
3. UPON COMPLETION OF INSTALLATION, SUPPLY RECORD DRAWINGS SHOWING DETAILS OF CONSTRUCTION INCLUDING LOCATION OF MAINLINE PIPING, MANUAL AND AUTOMATIC VALVES, ELECTRICAL SUPPLY TO VALVES, AND SPECIFICALLY EXACT LOCATION OF AUTOMATIC VALVES.

B. NOTE: ALL SLEEVES AS SHOWN ON PLANS WILL BE FURNISHED BY GENERAL CONTRACTOR. METER AND POWER SOURCE TO BE PROVIDED BY GENERAL CONTRACTOR AS REQUIRED BY LOCAL JURISDICTION.

1.02 APPLICABLE STANDARDS

A. D1785 - POLY (VINLY CHLORIDE) (PVC) PLASTIC PIPE, SCHEDULES 40, 80, AND CL200
B. D2464 - POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE FITTINGS THREADED, SCHEDULE 40
C. D2466 - POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE FITTINGS SOCKET TYPE, SCHEDULE 40
D. D2564 - SOLVENT CEMENTS FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE FITTINGS
E. STANDARD RECOMMENDED PRACTICE FOR:

1. D2855 - MAKING SOLVENT - CEMENTED JOINTS WITH POLY (VINYL CHLORIDE) (PVC) PIPE AND FITTINGS.

1.03 MAINTENANCE AND GUARANTEE

A. MATERIALS AND WORKMANSHIP SHALL BE FULLY GUARANTEED FOR ONE (1) YEAR AFTER FINAL ACCEPTANCE.
B. PROVIDE MAINTENANCE OF SYSTEM, INCLUDING RAISING AND LOWERING OF HEADS TO COMPENSATE FOR LAWN GROWTH, CLEANING AND ADJUSTMENT OF HEADS, RAISING AND LOWERING OF SHRUB HEADS TO COMPENSATE FOR SHRUB GROWTH, FOR ONE (1) YEAR AFTER COMPLETION OF INSTALLATION.
C. CONTRACTOR SHALL BLOWOUT, CLOSE AND OPEN THE SYSTEM ONCE DURING THE GUARANTEE PERIOD.
D. GUARANTEE IS LIMITED TO REPAIR AND REPLACEMENT OF DEFECTIVE MATERIALS OR WORKMANSHIP, INCLUDING REPAIR OF BACKFILL SETTLEMENT.

1.04 SUBMITTALS

A. USE OF MATERIALS DIFFERING IN QUALITY, SIZE, OR PERFORMANCE FROM THOSE SPECIFIED WILL ONLY BE ALLOWED UPON WRITTEN APPROVAL OF OWNER/IRRIGATION DESIGNER. THE DECISION WILL BE BASED ON COMPARATIVE ABILITY OF MATERIAL OR ARTICLE TO PERFORM FULLY ALL PURPOSES OF MECHANICS AND GENERAL DESIGN CONSIDERED TO BE POSSESSED BY ITEM SPECIFIED. BIDDERS DESIRING TO MAKE A SUBSTITUTION FOR SPECIFIED SPRINKLERS SHALL SUBMIT MANUFACTURER'S CATALOG SHEET SHOWING FULL SPECIFICATION OF EACH TYPE OF SPRINKLER PROPOSED AS A SUBSTITUTE, INCLUDING DISCHARGE IN GPM MAXIMUM ALLOWABLE OPERATING PRESSURE AT SPRINKLER. APPROVAL OF SUBSTITUTE SPRINKLER SHALL NOT RELIEVE CONTRACTOR OF HIS RESPONSIBILITY TO DEMONSTRATE THAT FINAL INSTALLED SPRINKLER SYSTEM WILL OPERATE ACCORDING TO INTENT OF ORIGINALLY DESIGNED AND SPECIFIED SYSTEM.
B. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO DEMONSTRATE THAT FINAL INSTALLED SPRINKLER SYSTEM WILL OPERATE ACCORDING TO INTENT OF ORIGINALLY DESIGNED AND SPECIFIED SYSTEM. IF IRRIGATION CONTRACTOR NOTES ANY PROBLEMS IN HEAD SPACING OR POTENTIAL COVERAGE, IT IS HIS RESPONSIBILITY TO NOTIFY THE IRRIGATION DESIGNER IN WRITING, BEFORE PROCEEDING WITH WORK. IRRIGATION CONTRACTOR GUARANTEES 100% COVERAGE OF ALL AREAS TO BE IRRIGATED.
C. CONTRACTOR TO FURNISH AN AS BUILT DRAWING OF ENTIRE SYSTEM FOR REVIEW PRIOR TO ACCEPTANCE.

1.05 TESTING

A. PERFORM TESTING REQUIRED WITH OTHER TRADES, INCLUDING EARTHWORK, PAVING, AND PLUMBING, TO AVOID UNNECESSARY CUTTING, PATCHING AND BORING.

1.06 COORDINATION

A. COORDINATE INSTALLATION WITH OTHER TRADES, INCLUDING EARTHWORK, PAVING, AND PLUMBING, TO AVOID UNNECESSARY CUTTING, PATCHING AND BORING.

PART 2 - PRODUCTS

2.01 GENERAL

A. SPRINKLER MAINS: SPRINKLER MAINS ARE THAT PORTION OF PIPING FROM WATER SOURCE TO OPERATING VALVES. THIS PORTION OF PIPING IS SUBJECT TO SURGES, BEING A CLOSED PORTION OF SPRINKLER SYSTEM. QUICK COUPLER LINES ARE CONSIDERED A PART OF SPRINKLER MAIN.
B. LATERAL PIPING: LATERAL PIPING IS THAT PORTION OF PIPING FROM OPERATING VALVE TO SPRINKLER HEADS & DRIPLINE. THIS PORTION OF PIPING IS NOT SUBJECT TO SURGES, BEING AN "OPEN END" PORTION OF SPRINKLER SYSTEM.

2.02 POLY VINYL CHLORIDE PIPE (PVC)

A. PVC PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH COMMERCIAL STANDARDS NOTED HEREIN.
B. MARKING AND IDENTIFICATION: PVC PIPE SHALL BE CONTINUOUSLY AND PERMANENTLY MARKED WITH THE FOLLOWING INFORMATION: MANUFACTURER'S NAME, PIPE SIZE, TYPE OF PIPE, AND MATERIAL, SDR NUMBER, PRODUCT STANDARD NUMBER, AND THE NSF (NATIONAL SANITATION FOUNDATION) SEAL.
C. PVC PIPE FITTINGS: SHALL BE OF THE SAME MATERIAL AS THE PVC PIPE SPECIFIED AND SHALL BE COMPATIBLE WITH PVC PIPE FURNISHED.

2.03 POLYETHYLENE PIPE

A. POLYETHYLENE PIPE TO BE MANUFACTURED AND SUPPLIED IN ACCORDANCE WITH COMMERCIAL STANDARDS BY A REPUTABLE DEALER.

2.04 COPPER TUBING

A. HARD, STRAIGHT, LENGTHS OF DOMESTIC MANUFACTURE ONLY. NO COPPER TUBE OF FOREIGN EXTRUSION OR ANY SO-CALLED IRRIGATION TUBING (THIN WALL) SHALL BE USED.

2.05 COPPER TUBE FITTINGS

A. CAST BRASS OR WROUGHT COPPER, SWEAT-SOLDER TYPE.

2.06 WIRE

A. TYPE UF WITH A 4/64" INSULATION THICKNESS WHICH IS UNDERWRITER'S LABORATORY APPROVED FOR DIRECT UNDERGROUND BURIAL WHEN USED IN A NATIONAL ELECTRIC CODE CLASS II CIRCUIT (30 VOLTS AC OR LESS).

2.07 SCHEDULE 80 PVC NIPPLES

A. COMPOSED OF STANDARD SCHEDULE 40 PVC FITTINGS AND PVC MEETING NOTED STANDARDS. NIPPLES FOR HEADS AND SHRUB RISERS, WHERE APPLICABLE, NO CLAMPS OR WIRES MAY BE USED. TO BE NOMINAL ONE-HALF (1/2") INCH DIAMETER BY EIGHT (8") INCHES LONG.

B. POLYETHYLENE NIPPLES SIX (6") INCHES LONG TO BE USED ON ALL POP-UP SPRAY HEADS.

2.08 MATERIALS - SEE IRRIGATION PLAN

A. SPRINKLER HEADS IN LAWN AREA AS SPECIFIED ON PLAN.
B. PVC PIPE: CLASS 200, SDR 21 COPPER TUBING (MUNICIPAL CONNECTION): TYPE "M"
24V WIRE: AWG 14 SINGLE STRAND, TYPE U.F.
C. ELECTRIC VALVES TO BE ALL PLASTIC CONSTRUCTION AS INDICATED ON PLANS.
D. REFER TO DRAWING FOR BACKFLOW PREVENTION REQUIREMENTS. COORDINATE EXACT LOCATION WITH IRRIGATION DESIGNER.

PART 3 EXECUTION 3.01 INSTALLATION - GENERAL

A. CONTRACTOR IS TO VERIFY PRESSURE AND FLOW RATES PRIOR TO BEGINNING INSTALLATION. CONTRACTOR TO PROVIDE ANY PRESSURE REDUCING VALVES OR BOOSTER PUMPS TO ACHIEVE STATIC PRESSURE AS STATED.
B. STAKING: BEFORE INSTALLATION IS STARTED, PLACE A STAKE WHERE EACH SPRINKLER IS TO BE LOCATED, IN ACCORDANCE WITH DRAWING. STAKING SHALL BE APPROVED BY IRRIGATION DESIGNER AS REQUIRED.
C. EXCAVATIONS: EXCAVATIONS ARE UNCLASSIFIED AND INCLUDE EARTH, LOOSE ROCK, ROCK OR ANY COMBINATION THEREOF, IN WET OR DRY STATE. BACKFILL TRENCHES WITH MATERIAL THAT IS SUITABLE FOR COMPACTION AND CONTAINS NO LUMPS, CLODS, ROCK, DEBRIS, ETC. SPECIAL BACKFILL SPECIFICATIONS, IF FURNISHED TAKE PREFERENCE OVER THIS GENERAL SPECIFICATION.
D. BACKFILL: FLOOD OR HAND-TAMP TO PREVENT AFTER SETTLING. HAND RAKE TRENCHES AND ADJOINING AREA TO LEAVE GRADE IN AS GOOD OR BETTER CONDITION THAN BEFORE INSTALLATION.
E. PIPING LAYOUT: PIPING LAYOUT IS DIAGRAMMATIC. ROUTE PIPING AROUND TREES AND SHRUBS IN SUCH A MANNER AS TO AVOID DAMAGE TO PLANTINGS. DO NOT DIG WITHIN BALL OF NEWLY PLANTED TREES OR SHRUBS.

3.02 PIPE INSTALLATION
A. SPRINKLER MAINS: INSTALL A FOUR (4") INCH MINIMUM WIDTH TRENCH WITH A MINIMUM OF TWELVE (12") INCHES OF COVER.
B. LATERAL PIPING: INSTALL A FOUR (4") INCH WIDE MINIMUM TRENCH DEEP ENOUGH TO ALLOW FOR INSTALLATION OF SPRINKLER HEADS AND VALVES, BUT IN NO CASE, WITH LESS THAN EIGHT (8") INCHES OF COVER.
C. TRENCHING: REMOVE LUMBER, RUBBISH, AND LARGE ROCKS FROM TRENCHES. PROVIDE FIRM, UNIFORM BEARING FOR ENTIRE LENGTH OF EACH PIPE LINE TO PREVENT UNEVEN SETTLEMENT. WEDGING OR BLOCKING OF PIPE WILL NOT BE PERMITTED. REMOVE FOREIGN MATTER OR DIRT FROM INSIDE OF PIPE BEFORE WELDING, AND KEEP PIPING CLEAN BY APPROVED MEANS DURING AND AFTER LAYING OF PIPE.

3.03 PVC PIPE AND FITTING ASSEMBLY

A. SOLVENT: USE ONLY SOLVENT RECOMMENDED BY MANUFACTURER TO MAKE SOLVENT-WELDED JOINTS. THOROUGHLY CLEAN PIPE AND FITTINGS OF DIRT, DUST AND MOISTURE BEFORE APPLYING SOLVENT.
B. PVC TO METAL CONNECTION: WORK METAL CONNECTIONS FIRST. USE A NON-HARDENING PIPE DOPE SUCH AS PERMATEX NO. 2 ON THREADED PVC ADAPTERS INTO WHICH PIPE MAY BE WELDED.

3.04 COPPER TUBING AND FITTING ASSEMBLY

A. CLEAN PIPE AND FITTING THOROUGHLY AND LIGHTLY SAND PIPE CONNECTIONS TO REMOVE RESIDUE FROM PIPE. ATTACH FITTINGS TO TUBING IN AN APPROVED MANNER USING 50-50 SOFT SOLID CORE SOLDER.

3.05 SHRUB SPRAY HEADS (FIXED)

A. SHRUB SPRAY HEADS: SUPPLY IN ACCORDANCE WITH MATERIALS LIST, WITH NOZZLING IN ACCORDANCE WITH DRAWINGS. DRAWINGS INDICATE SIZE OF NOZZLING AND DEGREE OF ARC. DETERMINE CORRECT DEGREE OF ARC OF NOZZLE (IF CONDITIONS WARRANT) BY AREA TO BE COVERED AND BY WIND CONDITIONS THAT MAY AFFECT COVERAGE.

3.06 POP-UP SPRAY HEADS A. SUPPLY POP-UP SPRAY HEADS IN ACCORDANCE WITH MATERIALS LIST AND PLAN. ATTACH SPRINKLER TO LATERAL PIPING WITH A SEMI-FLEXIBLE POLYETHYLENE SCH 80 NIPPLE NOT LESS THAN THREE (3") INCHES OR MORE THAN SIX (6") INCHES LONG.

3.07 VALVES
A. SUPPLY VALVES IN ACCORDANCE WITH MATERIALS LIST AND SIZED ACCORDING TO DRAWINGS. INSTALL VALVES IN A LEVEL POSITION IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. SEE PLAN FOR TYPICAL INSTALLATION OF ELECTRIC VALVE, VALVE BOX.

3.08 WIRING
A. ALL VALVE CONTROL WIRING SHALL BE THROUGH TWO-WIRE FROM CONTROLLER TO DECODER. ALL CONNECTIONS SHALL BE AS PER THEIR MANUFACTURER'S INSTRUCTIONS. NO CONDUIT WILL BE REQUIRED FOR U.F. WIRE UNLESS OTHERWISE NOTED ON THE PLAN. WIRE SHALL BE TUCKED UNDER THE PIPING.
B. A WIRE TYPE AND METHOD OF INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL AND STATE CODES.

3.09 AUTOMATIC SPRINKLER CONTROLS

A. SUPPLY IN ACCORDANCE WITH IRRIGATION PLAN. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

3.10 TESTING

A. SPRINKLER MAINS: TEST SPRINKLER MAIN ONLY FOR A PERIOD OF TWELVE (12) TO FOURTEEN (14) HOURS UNDER NORMAL PRESSURE. IF LEAKS OCCUR, REPLACE JOINT OR JOINTS AND REPEAT TEST.
B. COMPLETE TESTS PRIOR TO BACKFILLING. SUFFICIENT BACKFILL MATERIAL MAY BE PLACED IN TRENCHES BETWEEN FITTINGS TO INSURE STABILITY OF LINE UNDER PRESSURE. IN EACH CASE, LEAVE FITTINGS AND COUPLINGS OPEN TO VISUAL INSPECTION FOR FULL PERIOD OF TEST.

3.11 FINAL ADJUSTMENT

A. AFTER INSTALLATION HAS BEEN COMPLETED, MAKE FINAL ADJUSTMENT OF SPRINKLER SYSTEM IN PREPARATION FOR IRRIGATION DESIGNER'S FINAL INSPECTION. COMPLETELY FLUSH SYSTEM TO REMOVE DEBRIS FROM LINES AND TURNING ON SYSTEM. CHECK SPRINKLERS FOR PROPER OPERATION AND PROPER ALIGNMENT FOR DIRECTION OF FLOW. CHECK EACH SECTION OF SPRAY HEADS FOR OPERATING PRESSURE AND BALANCE TO OTHER SECTIONS BY USE OF FLOW ADJUSTMENT AND TOP OF EACH VALVE. CHECK NOZZLING FOR PROPER COVERAGE. PREVAILING WIND CONDITIONS MAY INDICATE THAT ARC OF ANGLE OF SPRAY SHOULD BE OTHER THAN SHOWN ON DRAWINGS. IN THIS CASE, CHANGE NOZZLES TO PROVIDE CORRECT COVERAGE.

NOTE:

- PLANS DESIGNED BY PROFESSIONAL IRRIGATION DESIGNER. ALL IRRIGATION COMPONENTS SHALL BE INSTALLED BY CERTIFIED IRRIGATION CONTRACTOR
- THIS PLAN IS TO BE UTILIZED FOR IRRIGATION PURPOSES ONLY
- REFER TO UTILITY PLAN FOR PROPOSED & EXISTING UNDERGROUND UTILITIES
- REFER TO IRRIGATION NOTES & DETAILS SHEET FOR SPECIFICATIONS & DETAILS (C-705 & C-706)

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	08/06/2024	FDOT DRAINAGE COMMENTS	RI / KK
2	10/24/2024	CITY OF WINTER SPRINGS COMMENTS	LS/RI / KK

STATE OF FLORIDA
BRETT MICHAEL WALDMAN
LICENSE NUMBER
LA 6667349
Digitally signed by Brett Waldman
DN: c=US, o=BOHLER ENGINEERING FL LLC, cn=Brett Waldman, ou=Florida, email=brett.waldman@bohlerengineering.com
Date: 2025.02.17 13:56:03-05'00'
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY BRETT MICHAEL WALDMAN, PLA, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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Phone: (813) 812-4100
Fax: (813) 812-4101
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STORE
P14-LE-XP - #05814
WINTER SPRINGS
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

SHEET TITLE
IRRIGATION NOTES

DWG EDITION 02.4

☒ PRELIMINARY
☐ 80% SUBMITTAL
☐ FOR CONSTRUCTION

JOB NO.	FLA230280.00
STORE	#05814
DATE	05/21/2024
DRAWN BY	GD
CHECKED BY	BW
CAD ID	IRRG

SHEET
C-706

TRAFFIC IMPACT ANALYSIS

MICHAEL BLAKE BOULEVARD DEVELOPMENT (F.K.A. ACE HARDWARE DEVELOPMENT)

WINTER SPRINGS, SEMINOLE COUNTY

Prepared for:

McMillan Ace Hardware
5040 W State Road 46,
Sanford, FL 32771

Prepared by:

Traffic Planning and Design, Inc.
535 Versailles Drive
Maitland, Florida 32751
407-628-9955

June 2024

TPD № 5824.1

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic Planning and Design, Inc., a corporation authorized to operate as an engineering business, EB-3702, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Michael Blake Boulevard Development (F.K.A. Ace Hardware Development)

LOCATION: Winter Spring, Seminole County

CLIENT: McMillian Ace Hardware

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Turgut Dervish

P.E. No.: 20400

DATE: **June 27, 2024**

SIGNATURE: _____

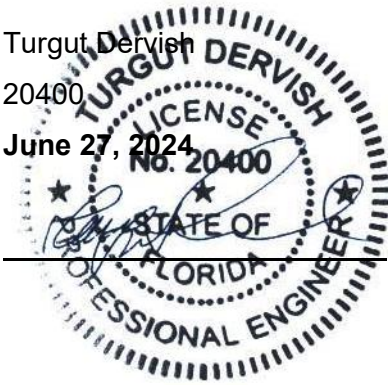


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B Traffic Data and Roadway Concurrency Information
C Existing Intersection Counts and FDOT Seasonal Factors
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INTRODUCTION

This analysis was conducted in order to assess the traffic impact of the proposed Michael Blake Boulevard Development, f.k.a. Ace Hardware Development in the City of Winter Springs, Seminole County. The development is located in the northeast corner of the Tuskawilla Road and Michael Blake Boulevard intersection. **Figure 1** depicts the site location. Access to the site is proposed via three access driveways, a full access connection on Michael Blake Boulevard and right in/right out driveways on Tuskawilla Road and SR 434. **Figure 2** depicts the conceptual site plan.

The analysis was conducted in accordance with a study methodology submitted and reviewed by Seminole County. The project is in the Seminole County Dense Urban Land Use Area (DULA). As per Seminole County requirements, the classified roadways within the one-mile sphere of influence (or impact area) and major intersections within a quarter mile from the site were included in the traffic analysis. The study methodology and related correspondence are included in **Appendix A.** Data used in the analysis consisted of site plan and development information provided by the Project Engineers, daily traffic volume data obtained from Seminole County, and A.M. & P.M. peak hour intersection counts made by Traffic Planning and Design, Inc. (TPD) personnel.

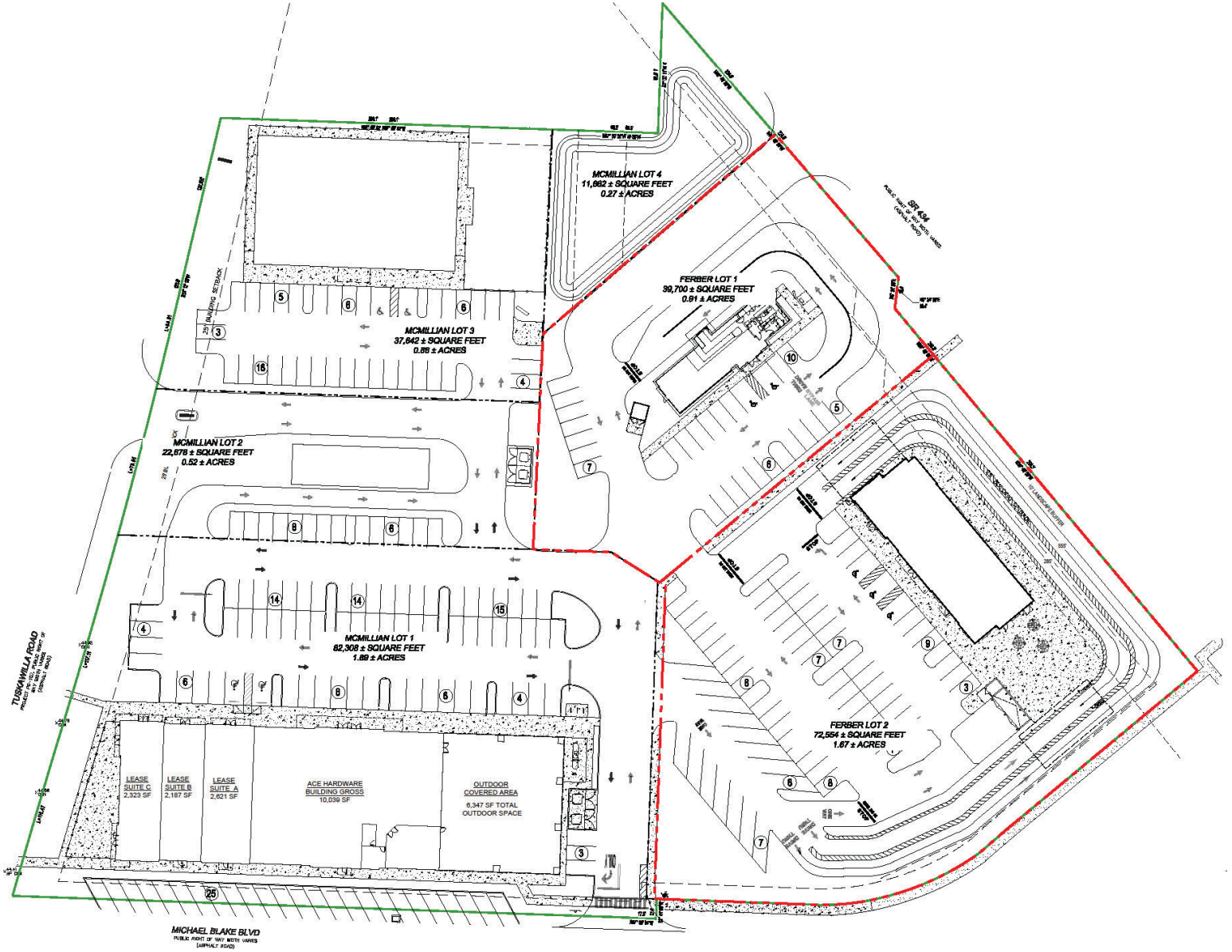


Michael Blake Boulevard Development
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Site Location

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Michael Blake Boulevard Development
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Figure 2
Page 3

Concept Plan

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EXISTING TRAFFIC CONDITIONS

Existing traffic conditions were analyzed using daily traffic volumes for the study roadways and A.M. & P.M. peak hour traffic volumes for the study intersections. The roadway analysis consisted of a generalized capacity analysis with the existing traffic volumes and the available capacity. The intersection analysis was conducted as per the procedures of the Highway Capacity Manual. Pertinent roadway segment data sheets showing the existing and committed trips along with the corresponding segment capacities are included in **Appendix B**.

Analysis of Daily Traffic Conditions

A roadway segment analysis was performed for the study roadway segments by comparing the daily traffic volume of each segment with the corresponding capacity of the segment. **Table 1** shows each of the roadway segments along with their number of lanes, adopted daily LOS/capacities, existing traffic volumes, available capacities, and existing Levels of Service (LOS). The results of the analysis indicate that the roadway segments currently operate satisfactorily with excess traffic capacity available.

Table 1
Existing Roadway Conditions Analysis

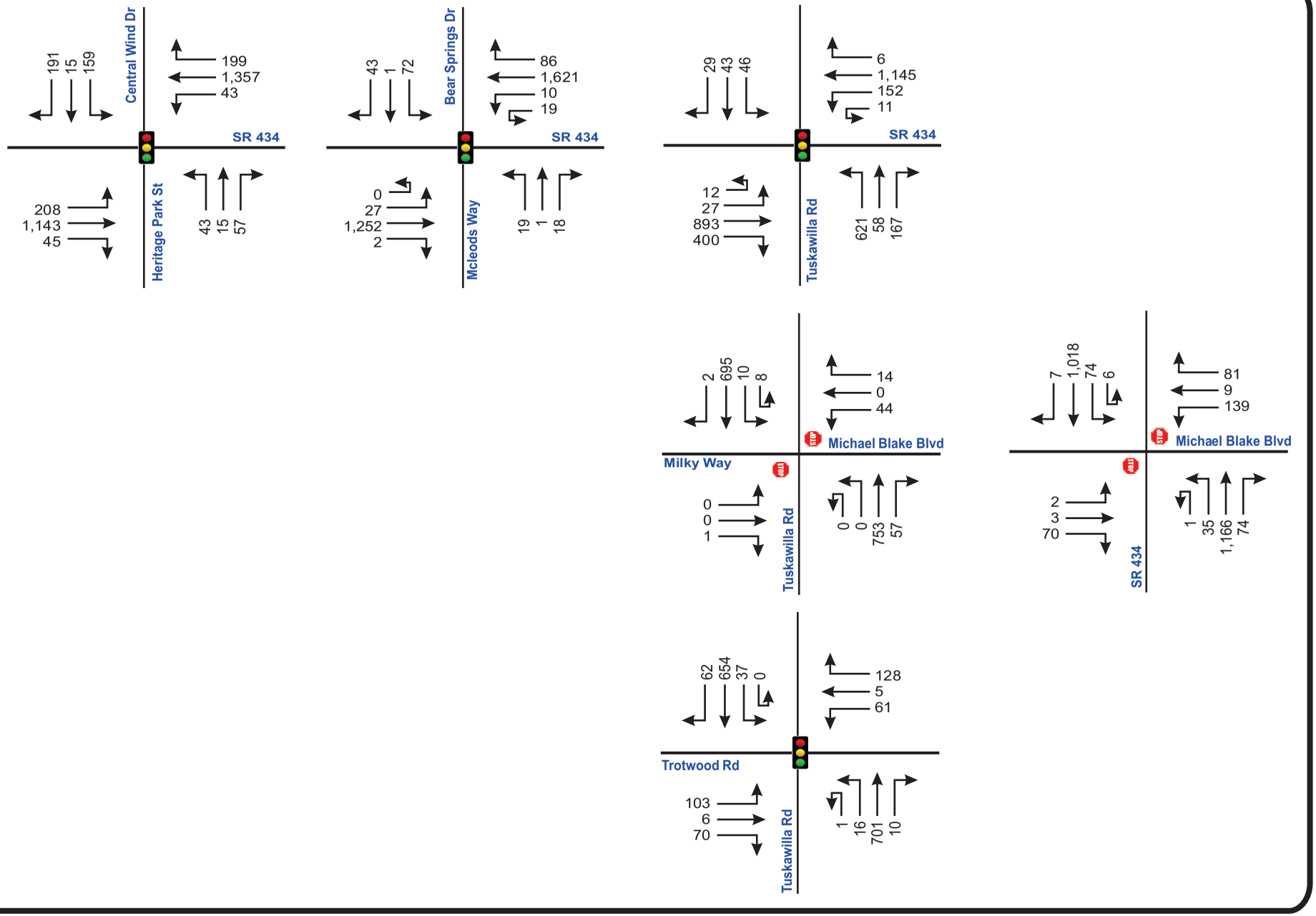
Seg #	Roadway Segment	Lanes	Daily Capacity	Existing Daily Traffic	Committed Trips	Available Capacity	LOS
Tuscawilla Road							
326	SR 434 to Trotwood Blvd	4L	42,560	21,241	0	21,319	C
327	Trotwood Blvd to Winter Springs Blvd	4L	42,560	20,748	8	21,804	C
SR 434							
296	Springs Ave to Tuskawilla Rd	4L	48,000	27,610	293	20,097	C
297	Tuskawilla Rd to SR 419	4L	48,000	36,344	0	11,656	C

Analysis of Peak Hour Traffic Conditions

A capacity analysis was conducted for the A.M. & P.M. peak hour traffic conditions for the study intersections. The analysis was conducted utilizing Highway Capacity Software in accordance with the procedures of the Highway Capacity Manual. Existing traffic consisting of turning movement counts are included in **Appendix C** along with the FDOT Peak Season Factor report. The traffic counts were made on September 12, 2023, when the FDOT seasonal factor for Seminole County was 1.04 and therefore the counts were adjusted. The existing peak hour traffic volumes are shown in **Figures 3 and 4**. The intersection capacity analysis results are summarized in **Table 2** and indicate that the study intersections are currently operating at satisfactory Levels of Service except for the southbound movement at the intersection of SR 434 and Tuskawilla Road during the P.M. peak hour and the westbound movement at the intersection of SR 434 & Michael Blake Boulevard during the A.M. and P.M. peak hours. Detailed capacity analysis worksheets are included in **Appendix D.**

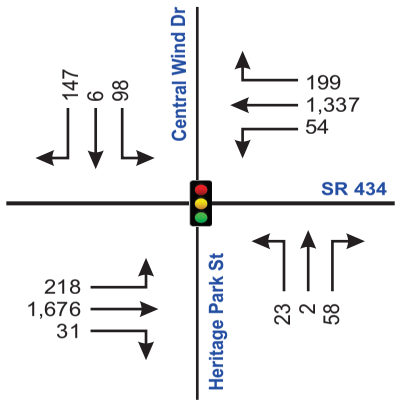
Table 2
Existing Intersection LOS Analysis

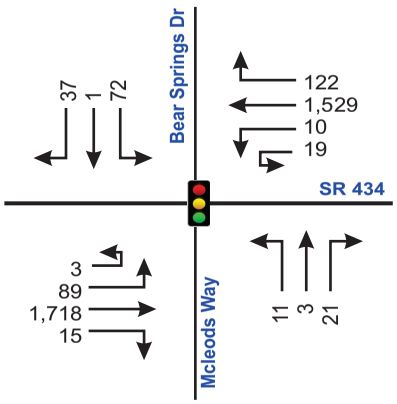
Intersection	Time Period	Control	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Tuskawilla Rd & Trotwood Blvd	A.M.	Signal	38.8	D	52.3	D	15.9	B	15.0	B	21.6	C
	P.M		43.9	D	47.2	D	13.2	B	14.7	B	18.3	B
Tuskawilla Rd & Michael Blake Blvd	A.M.	Stop	10.6	B	20.2	C	0.0	A	0.3	A	--	--
	P.M.		12.1	B	26.6	D	0.0	A	0.6	A	--	--
SR 434 & Tuskawilla Rd	A.M.	Signal	33.8	C	39.7	D	57.4	E	75.7	E	42.8	D
	P.M.		44.4	D	49.4	D	73.6	E	99.1	F	54.8	D
SR 434 & Michael Blake Blvd	A.M.	Stop	16.3	C	181.8	F	0.3	A	1.0	A	--	--
	P.M.		41.2	E	199.4	F	0.4	A	1.8	A	--	--
SR 434 & Bear Springs Dr/McLeod Way	A.M.	Signal	9.1	A	13.7	B	64.8	E	70.0	E	14.5	B
	P.M.		11.3	B	13.0	B	65.3	E	69.9	E	14.4	B
SR 434 & Central Winds Dr/Heritage Park St	A.M.	Signal	31.8	C	54.7	D	70.8	E	77.9	E	48.4	D
	P.M.		26.6	C	32.8	C	75.7	E	81.3	F	33.8	C

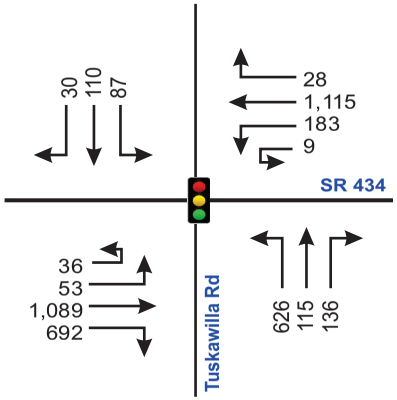


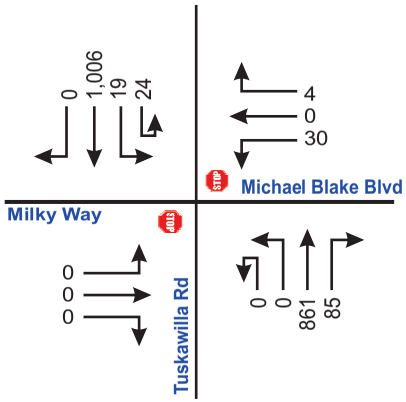
Existing A.M. Peak Hour Turning Movements

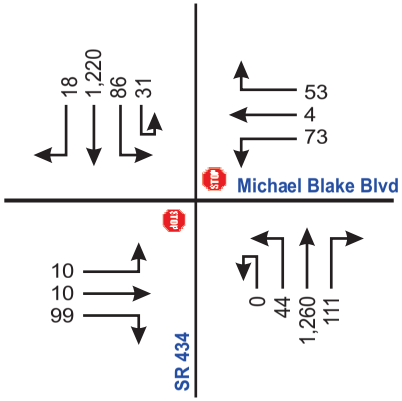
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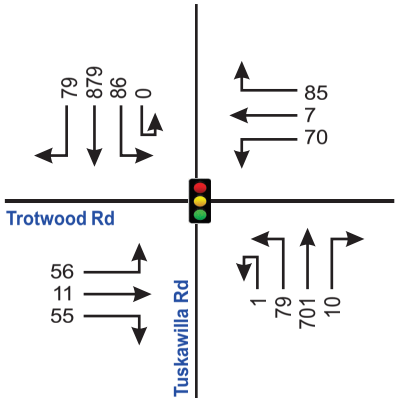

147
6
98
Central Wind Dr
199
1,337
54
SR 434
218
1,676
31
Heritage Park St
23
2
58


37
1
72
Bear Springs Dr
122
1,529
10
19
SR 434
3
89
1,718
15
Mcleods Way
11
3
21


30
110
87
28
1,115
183
9
SR 434
36
53
1,089
692
Tuskawilla Rd
626
115
136


0
1,006
19
24
4
0
30
Michael Blake Blvd
Milky Way
0
0
0
Tuskawilla Rd
0
0
861
85


18
1,220
86
31
53
4
73
Michael Blake Blvd
10
10
99
SR 434
0
44
1,260
111


79
879
86
0
85
7
70
Trotwood Rd
56
11
55
Tuskawilla Rd
1
79
701
10

PROPOSED DEVELOPMENT AND TRIP GENERATION

The proposed development will consist of a 10,000 square foot Day Care facility, 23,586 square foot strip retail center with Ace Hardware as the anchor tenant and three fast food restaurants with drive through windows totaling 12,101 square feet. To determine the impact of this development in the area, an analysis of its trip generation characteristics was made. This included the determination of the trips to be generated and the distribution/ assignment of these trips to the area roadways.

Trip Generation

The trip generation of the proposed development was calculated using rates provided by the *11th Edition* of the *Institute of Transportation Engineers (ITE) Trip Generation Manual.* The results of the trip generation calculation are summarized in **Table 3** and ITE trip generation sheets are included in the Study Methodology, in Appendix A. As shown in the table, the proposed development will generate 3,898 net new daily trips, of which 414 will occur during the A.M. peak hour and 384 will occur during the P.M. peak hour.

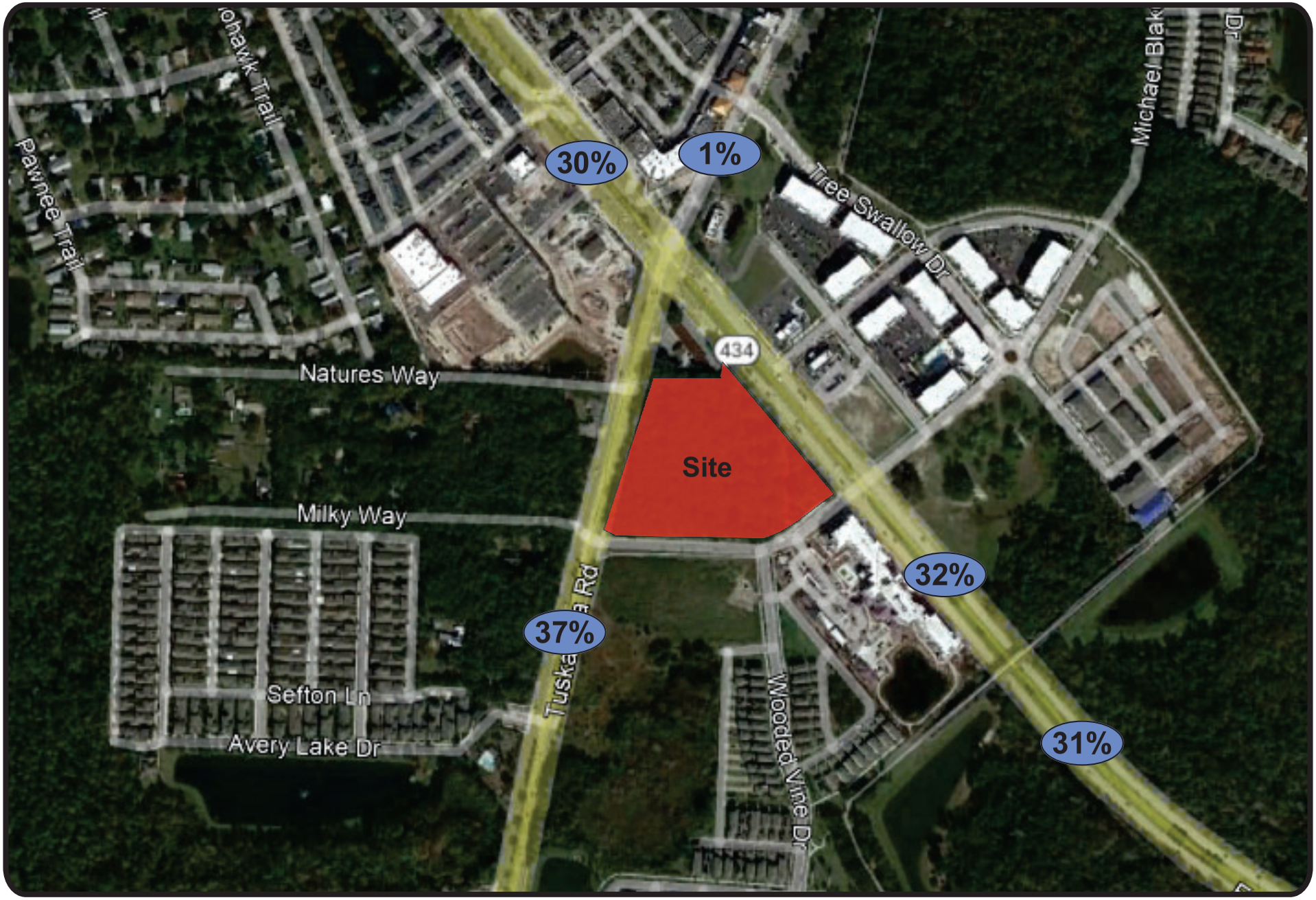
Table 3
Trip Generation Summary

ITE Code	Land Use	Size (KSF)[1]	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate[2]	Trips	Rate[2]	Enter	Exit	Total	Rate[2]	Enter	Exit	Total
565	Day Care	10.00	47.62	476	11.00	58	52	110	11.12	52	59	111
822	Strip Retail Plaza (<40K)	23.586	51.94	1,225	2.36	33	23	56	6.59	78	77	155
934	Fast Food w/Drive Through (3 sites)	12.101	467.48	5,657	44.61	275	265	540	33.03	208	192	400
Sub-Total				7,358	---	366	340	706	---	338	328	666
Retail Pass-by (40%)[2]				490	---	13	9	22	---	31	31	62
Fast Food Pass-by (AM=50%, PM=55%, Daily=52.5%)[2]				2,970	---	137	133	270	---	114	106	220
Total Net New Trips				**3,898**	**---**	**216**	**198**	**414**	**---**	**193**	**191**	**384**

[1]KSF=1,000 sq. ft. [2]Equation utilized when R^2 >0.75 [3]Pass-by rates obtained from ITE's Trip Generation Manual, 11th Edition, LUC 821

Trip Distribution and Assignment

A distribution pattern will be determined with the use of the 2030 Central Florida Regional Planning Model (CFRPM v7). The model was revised to add a traffic zone representing the project and its proposed development. Subsequently, the model was run with a Select Zone Analysis which produced a trip distribution for the project trips. **Figure 5** depicts the trip distribution on the area roadways. The model distribution plot is included in the study methodology, in Appendix A.



Michael Blake Boulevard Development
Project № 5824.1
Figure 5
Page 10

Trip Distribution

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PROJECTED TRAFFIC CONDITIONS

Projected traffic conditions were analyzed using daily traffic volumes for the study roadways and A.M. & P.M. peak hour traffic volumes for the study intersections. The roadway analysis consisted of a generalized capacity analysis with the projected traffic consisting of background traffic and project trips. The intersection analysis was conducted as per the procedures of the Highway Capacity Manual. Background traffic consisting of existing traffic and committed trips was provided by Seminole County.

Analysis of Daily Traffic Conditions

A roadway segment analysis was performed for the study roadway segments by comparing the total daily traffic volume of each segment with the corresponding capacity of the segment. The roadway segment analysis is summarized in **Table 4**. The table shows each of the road segments along with their number of lanes, adopted daily LOS/capacities, projected traffic volumes and resultant Levels of Service. The results of the analysis indicate that the impacted road segments are projected to operate similar to existing conditions with excess traffic capacity available.

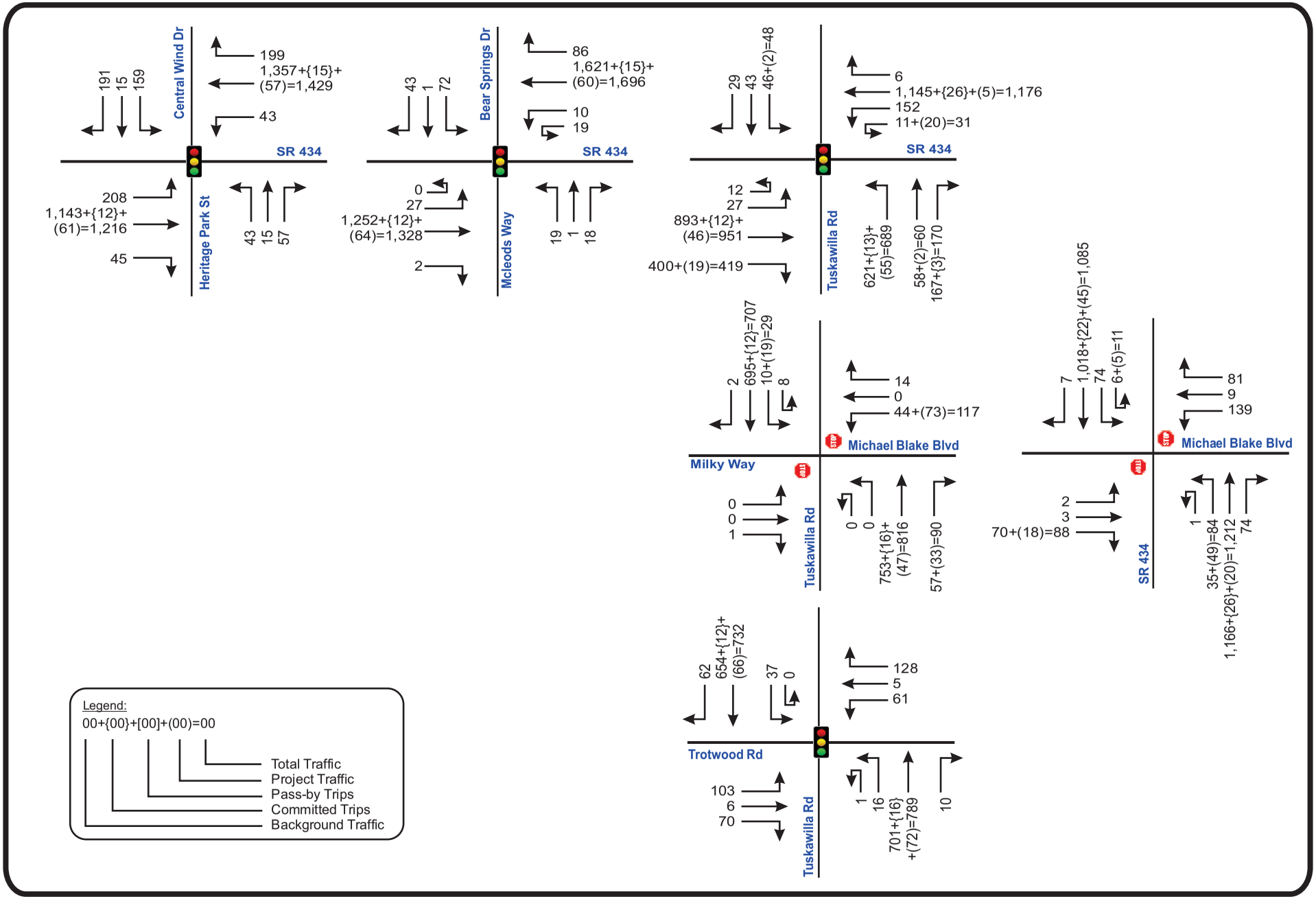
Table 4
Future Roadway Conditions Analysis

Seg #	Roadway Segment	Lns	Daily Capacity	Background Daily Traffic		Project Daily Trips		Total Daily Volume	Available Capacity	LOS
				Existing	Committed[1]	%[2]	Volume			
Tuscawilla Road										
326	SR 434 to Trotwood Blvd	4L	42,560	21,241	425[1]	37%	1,442	23,108	19,452	C
327	Trotwood Blvd to Winter Springs Blvd	4L	42,560	20,748	8	33%	1,286	22,042	20,518	C
SR 434										
296	Springs Ave to Tuskawilla Rd	4L	48,000	27,610	293	32%	1,247	29,150	18,850	C
297	Tuskawilla Rd to SR 419	4L	48,000	36,344	727[1]	30%	1,169	38,240	9,760	C

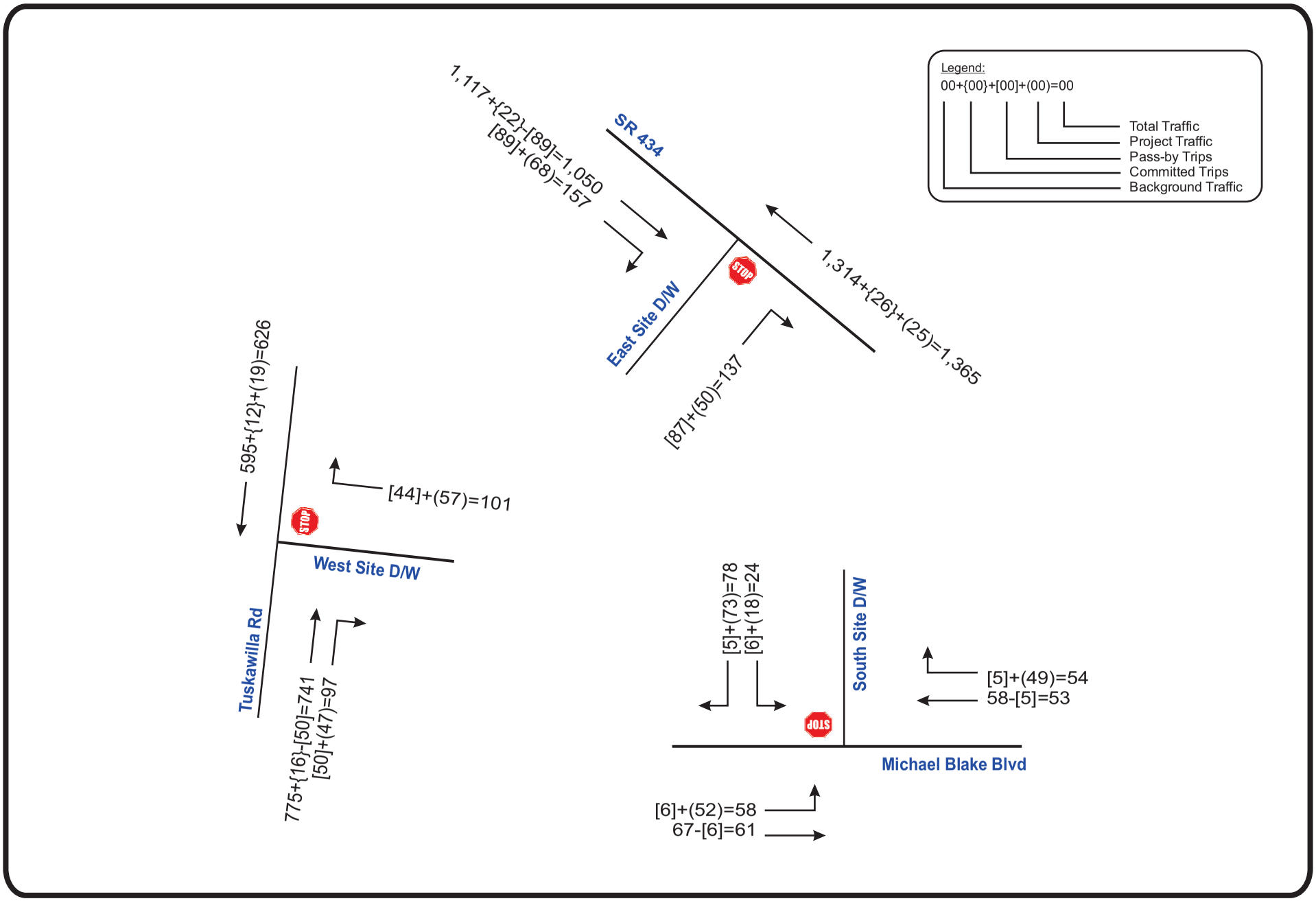
[1]2% of existing traffic volume added when no committee trip were originally assigned [2]Highest Percentage on the Segment

Analysis of Peak Hour Traffic Conditions

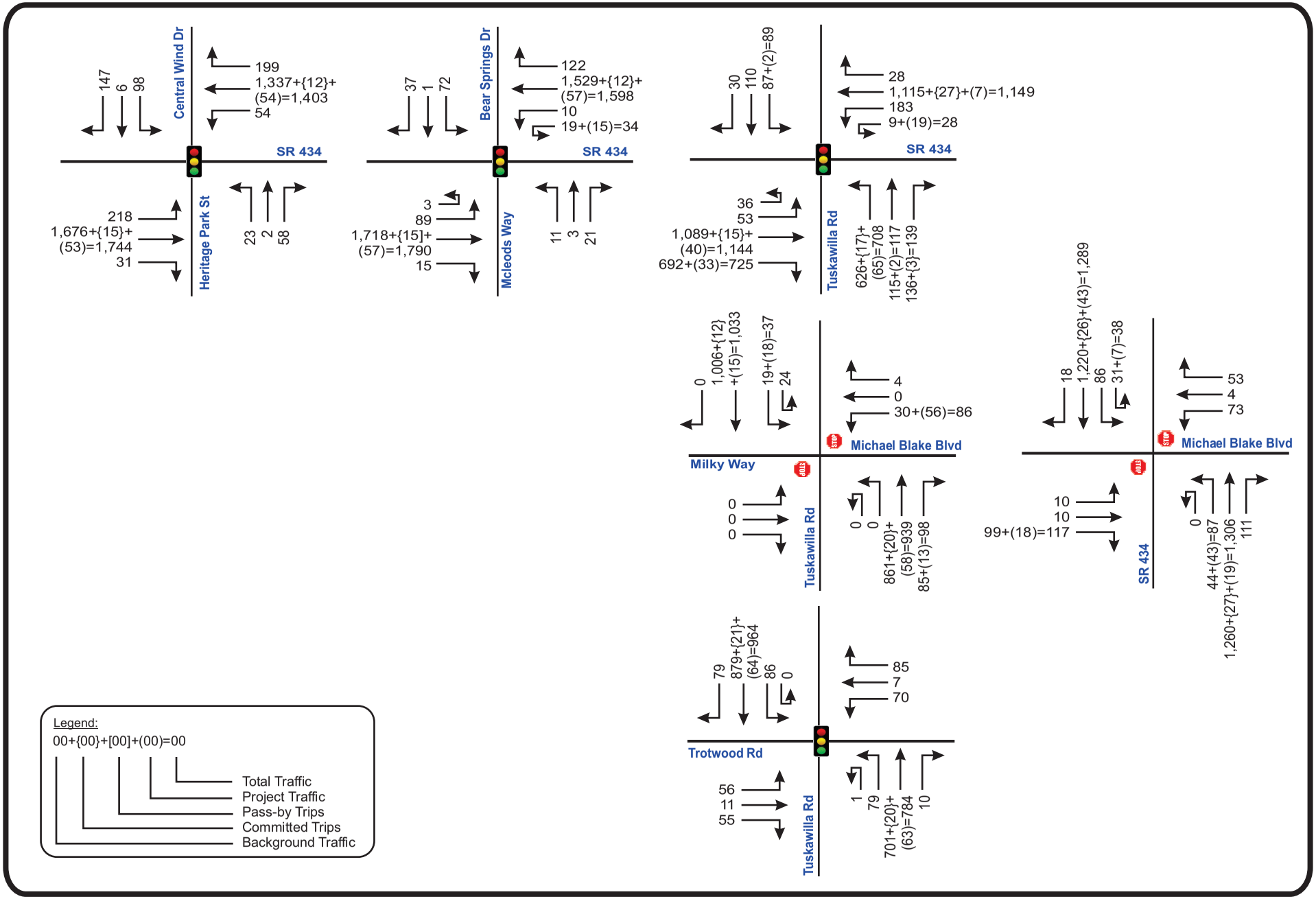
The peak hour traffic conditions at the study intersections were estimated by adding the project trips to existing traffic and committed trips. Daily committed trips were converted to peak hour directional trips using an A.M. and P.M. K=0.091 factors, and an A.M. and P.M. D=0.568 factor. These trips were assigned to the intersections based upon the existing traffic patterns at the intersections. The projected A.M. peak hour traffic volumes are shown in **Figures 6 and 7** and the projected P.M. peak hour traffic volumes are shown in **Figures 8 and 9**.



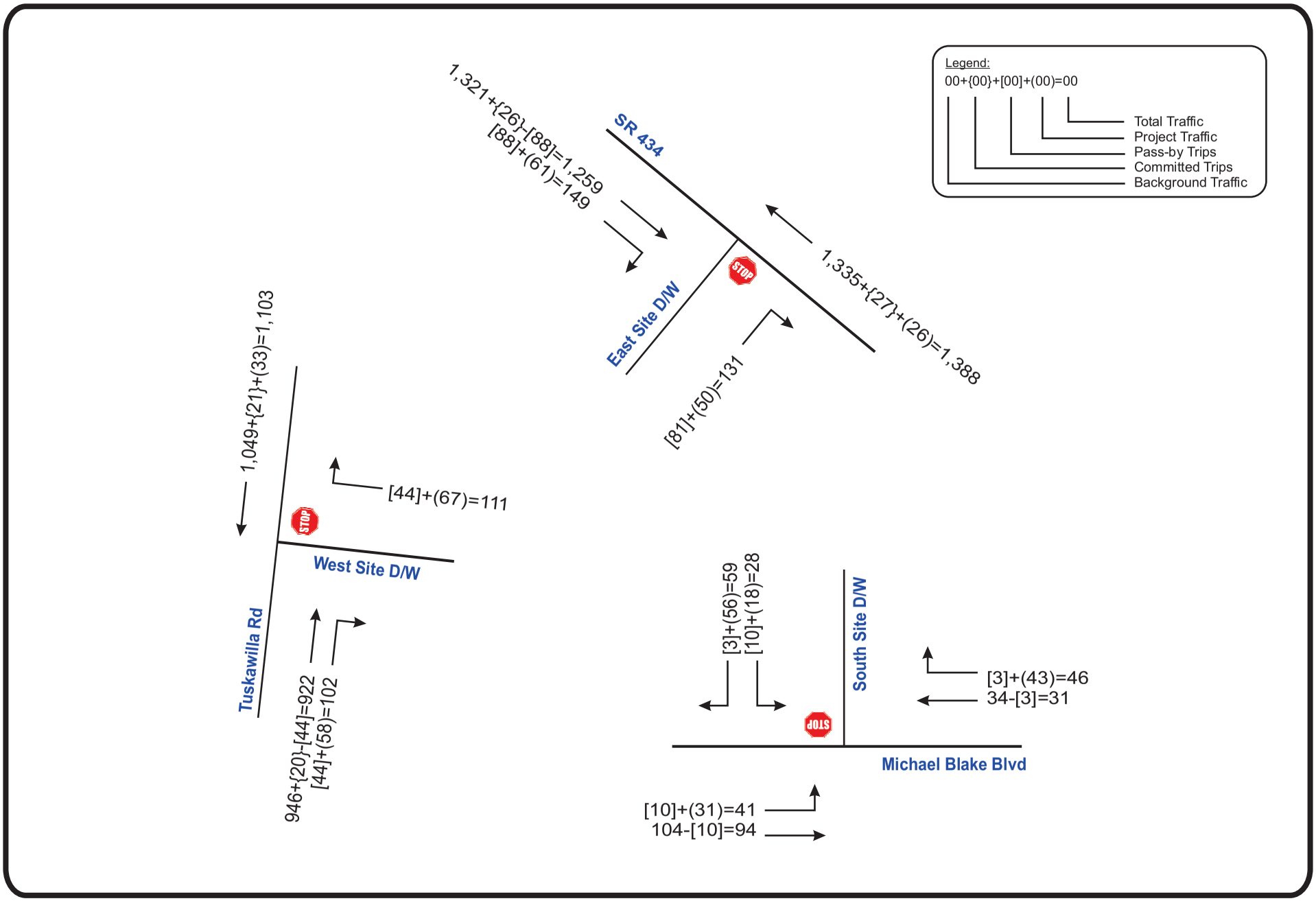
Projected A.M. Peak Hour Turning Movements



Projected A.M. Peak Hour Turning Movements



Projected P.M. Peak Hour Turning Movements



Projected P.M. Peak Hour Turning Movements

An analysis of projected peak hour traffic conditions was performed using the Highway Capacity software and procedures of the *Highway Capacity Manual* for intersections. The analysis was accomplished utilizing existing intersection geometry and traffic controls; however, the intersection of SR 434 and Michael Blake Boulevard was analyzed under signal control. The City of Winter Springs has installed a traffic signal at this intersection. The results of the capacity analysis as summarized in **Table 5** indicate satisfactory traffic operating conditions (LOS "E" or better) for the study intersections and project driveways except for the following:

- The southbound movement at the intersection of SR 434 and Tuskawilla Road during the P.M. peak hour. Similar to existing conditions, this movement is failing, however the volume to capacity (v/c) ratio is less than one, which indicates that there is capacity.

- The southbound movement at the intersection of SR 434 and Central Winds Drive / Heritage Park Street. The southbound movement is failing however, the project is not contributing any trips to this movement.

The HCS capacity worksheets are included in **Appendix E.**

Table 5
Projected Intersection LOS Analysis

Intersection	Time Period	Control	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Tuskawilla Rd & Trotwood Blvd	A.M.	Signal	38.8	D	52.3	D	16.7	B	15.6	B	21.6	C
	P.M.		43.9	D	47.2	D	13.8	B	15.4	B	18.6	B
Tuskawilla Rd & Michael Blake Blvd	A.M.	Stop	10.7	B	39.2	E	0.0	A	0.6	A	--	--
	P.M.		12.2	B	49.6	E	0.0	A	0.8	A	--	--
SR 434 & Tuskawilla Rd	A.M.	Signal	39.3	D	44.0	D	56.7	E	75.7	E	46.3	D
	P.M.		52.3	D	55.8	E	72.4	E	99.4	F	60.0	E
SR 434 & Michael Blake Blvd	A.M.	Signal	57.9	E	45.5	D	24.5	C	22.8	C	26.5	C
	P.M.		56.2	E	46.5	D	24.2	C	24.6	C	26.7	C
SR 434 & Bear Springs Dr/McLeod Way	A.M.	Signal	9.6	A	14.5	B	64.8	E	70.0	E	15.0	B
	P.M.		12.5	B	14.2	B	65.3	E	69.9	E	15.4	B
SR 434 & Central Winds Dr/Heritage Park St	A.M.	Signal	32.1	C	61.7	E	70.8	E	77.9	E	51.6	D
	P.M.		27.2	C	34.3	C	75.7	E	81.3	F	34.5	C
Michael Blake Blvd & South Site Driveway	A.M.	Stop	3.8	A	--	--	--	--	9.6	A	--	--
	P.M.		2.4	A	--	--	--	--	9.5	A	--	--
Tuskawilla Rd & West Site Driveway	A.M.	Stop	--	--	13.0	B	--	--	--	--	--	--
	P.M.		--	--	15.0	B	--	--	--	--	--	--
SR 434 and East Site Driveway	A.M.	Stop	18.6	C	--	--	--	--	--	--	--	--
	P.M.		22.1	C	--	--	--	--	--	--	--	--

CONCLUSIONS

This analysis was undertaken in order to assess the traffic impact of a proposed Michael Blake Boulevard Development, f.k.a. Ace Hardware Development located in the northeast corner of the intersection of Tuskawilla Road & Michael Blake Boulevard in the City of Winter Springs, Seminole County. The following is a summary of the results:

- The proposed development will generate 3,898 net new daily trips, of which 414 will occur during the A.M. peak hour and 384 will occur during the P.M. peak hour. These vehicles were distributed and assigned to the project driveways and area roadways within the development's one-mile impact area.

- The impacted roadways segments were analyzed utilizing projected traffic volumes consisting of existing traffic volumes and project trips plus committed trips provided by Seminole County. The roadway capacity analysis revealed that the impacted roadway segments currently operate satisfactorily within their adopted LOS standards. Similar to existing conditions, the impact roadway segments will continue to operate satisfactorily within their adopted LOS standard with the project trips added during the A.M. and P.M. peak hours.

- The intersection capacity analysis conducted in accordance with the procedures of the HCM revealed that the existing study intersections currently operate at satisfactory Levels of Service during the A.M. and P.M. peak hours except for the southbound movement at the intersection of SR 434 and Tuskawilla Road during the P.M. peak hour and the westbound movement at the intersection of SR 434 & Michael Blake Boulevard during the A.M. and P.M. peak hours. The City of Winter Springs has installed a traffic signal at the intersection of SR 434 and Michael Blake Boulevard, which improves the operation and brings it to an acceptable Level of Service. Similar to existing conditions, the study intersections will continue to operate at satisfactory Levels of Service with the project trips added during the A.M. and P.M. peak hours except for the southbound movements at the intersections of SR 434 and Tuskawilla Road during the P.M. peak hour and SR 434 and Central Winds Drive / Heritage Park Street. As reference, the project is contributing no trips to these movements and the other movements show that the volume to capacity (v/c) ratio is less than one, which indicates that there is capacity.

APPENDICES

APPENDIX A

Study Methodology

Fast-Food Restaurant with Drive-Through Window
(934)

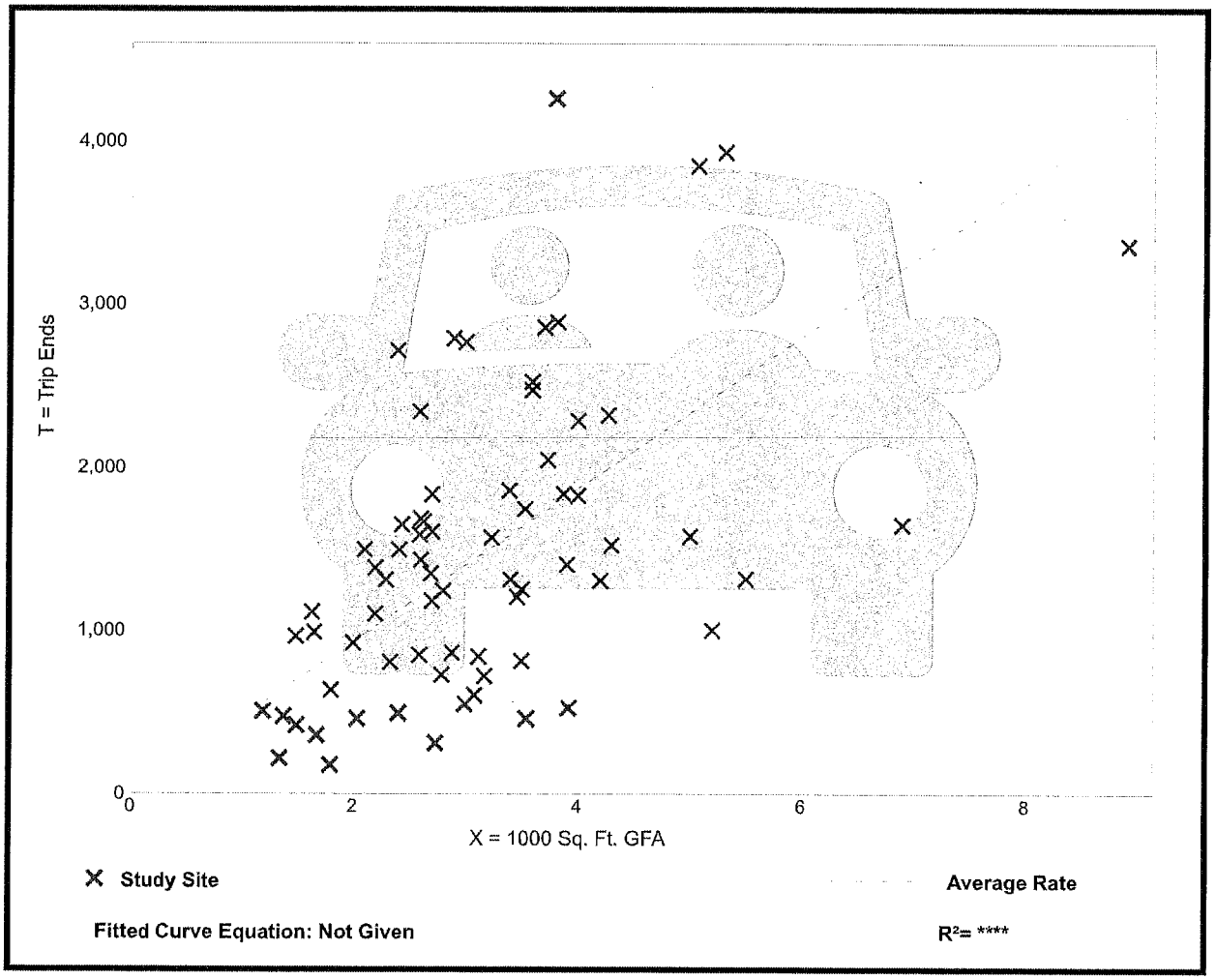
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 71
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



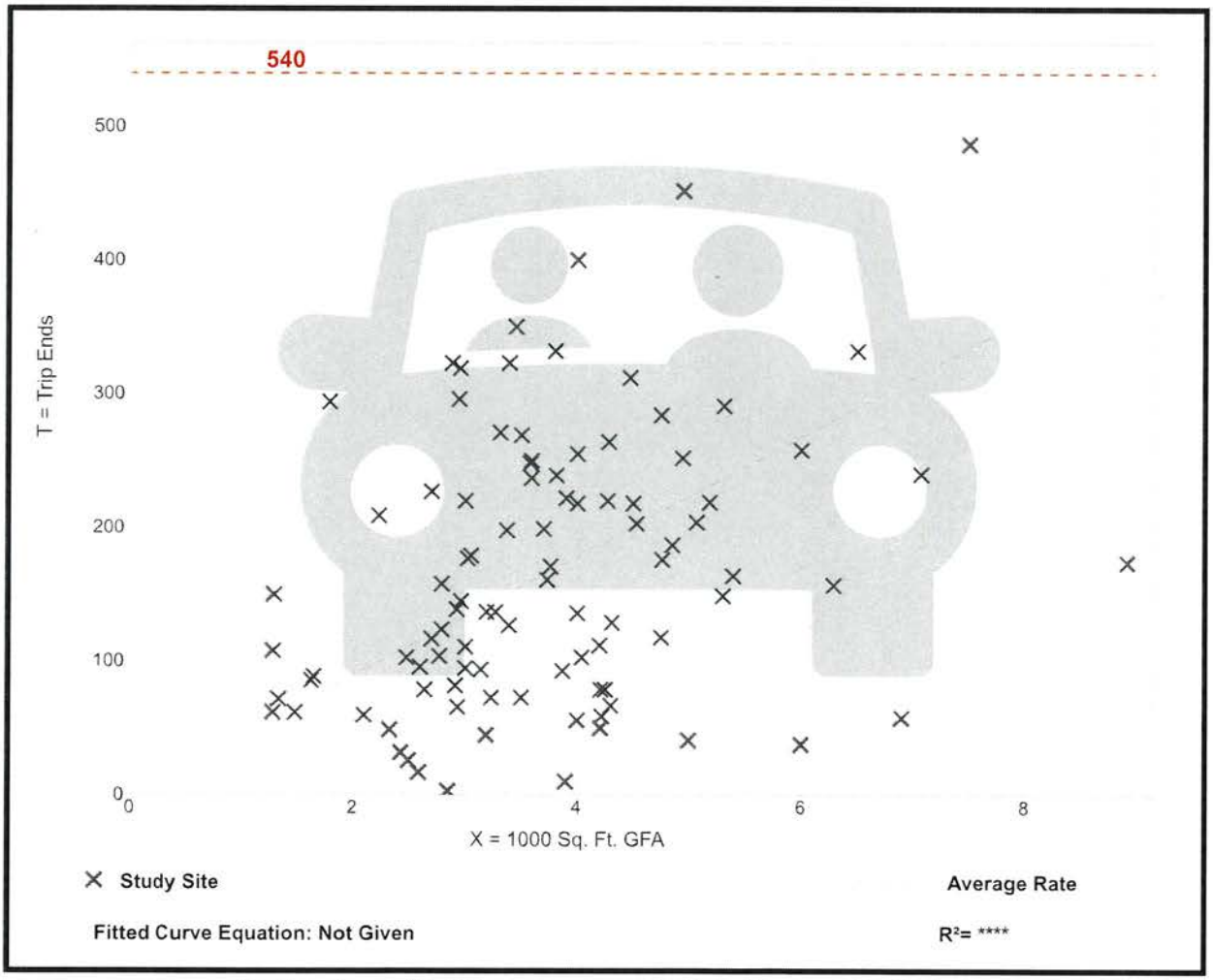
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	96
Avg. 1000 Sq. Ft. GFA:	4
Directional Distribution:	51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation



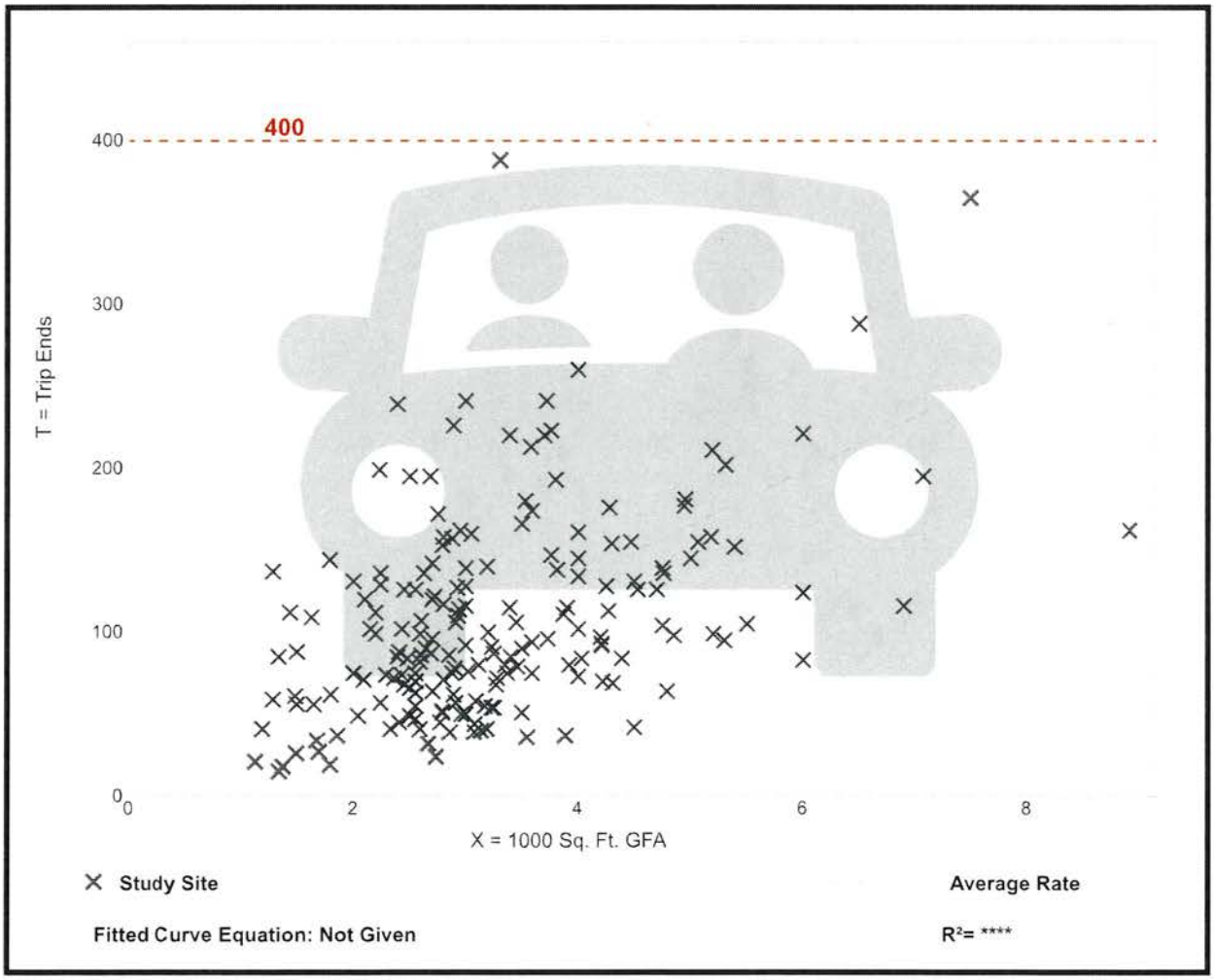
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 190
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation



Trip Gen Manual, 11th Edition • Institute of Transportation Engineers

Day Care Center
(565)

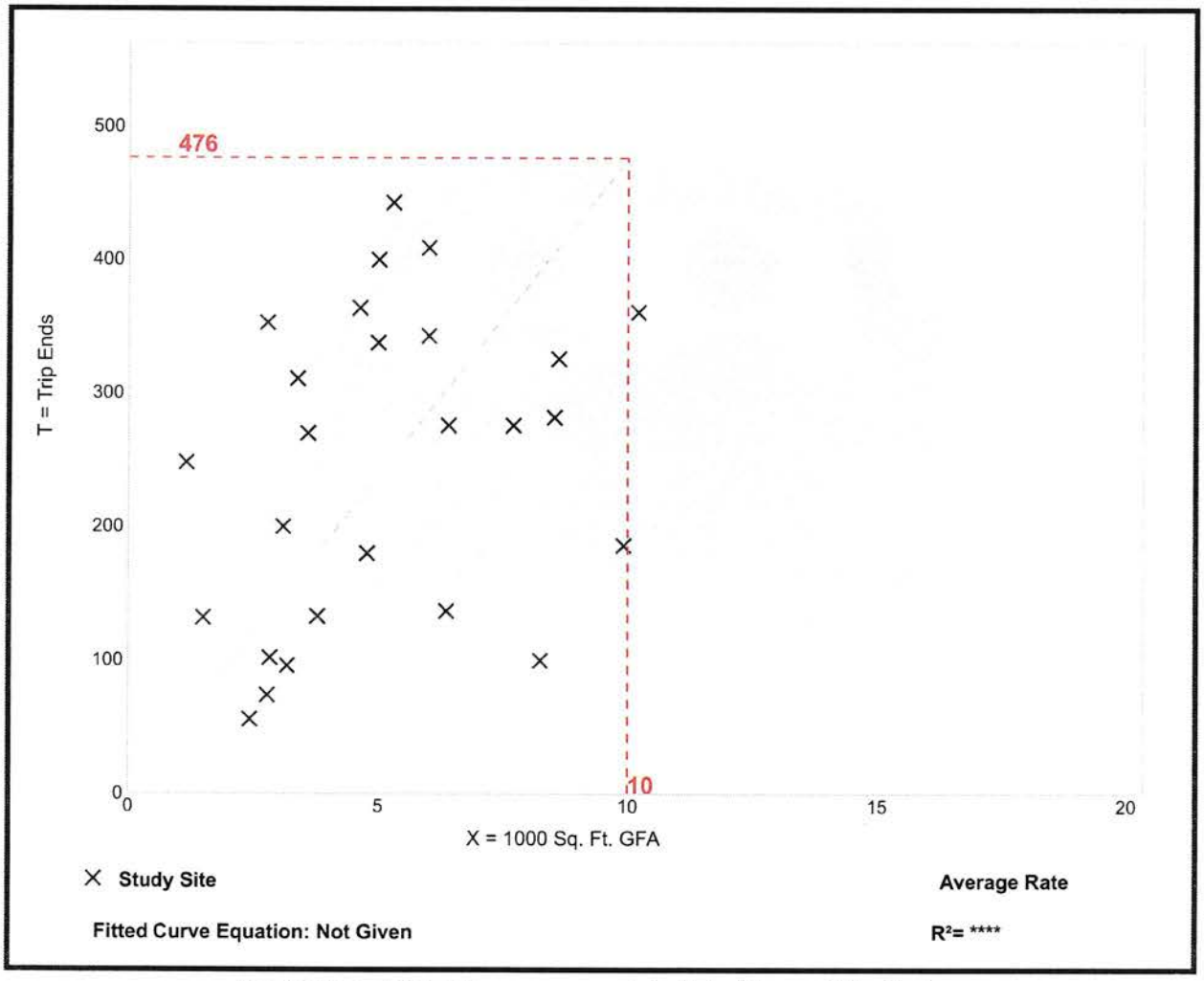
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
47.62	12.12 - 211.06	29.78

Data Plot and Equation



Trip Gen Manual, 11th Edition • Institute of Transportation Engineers

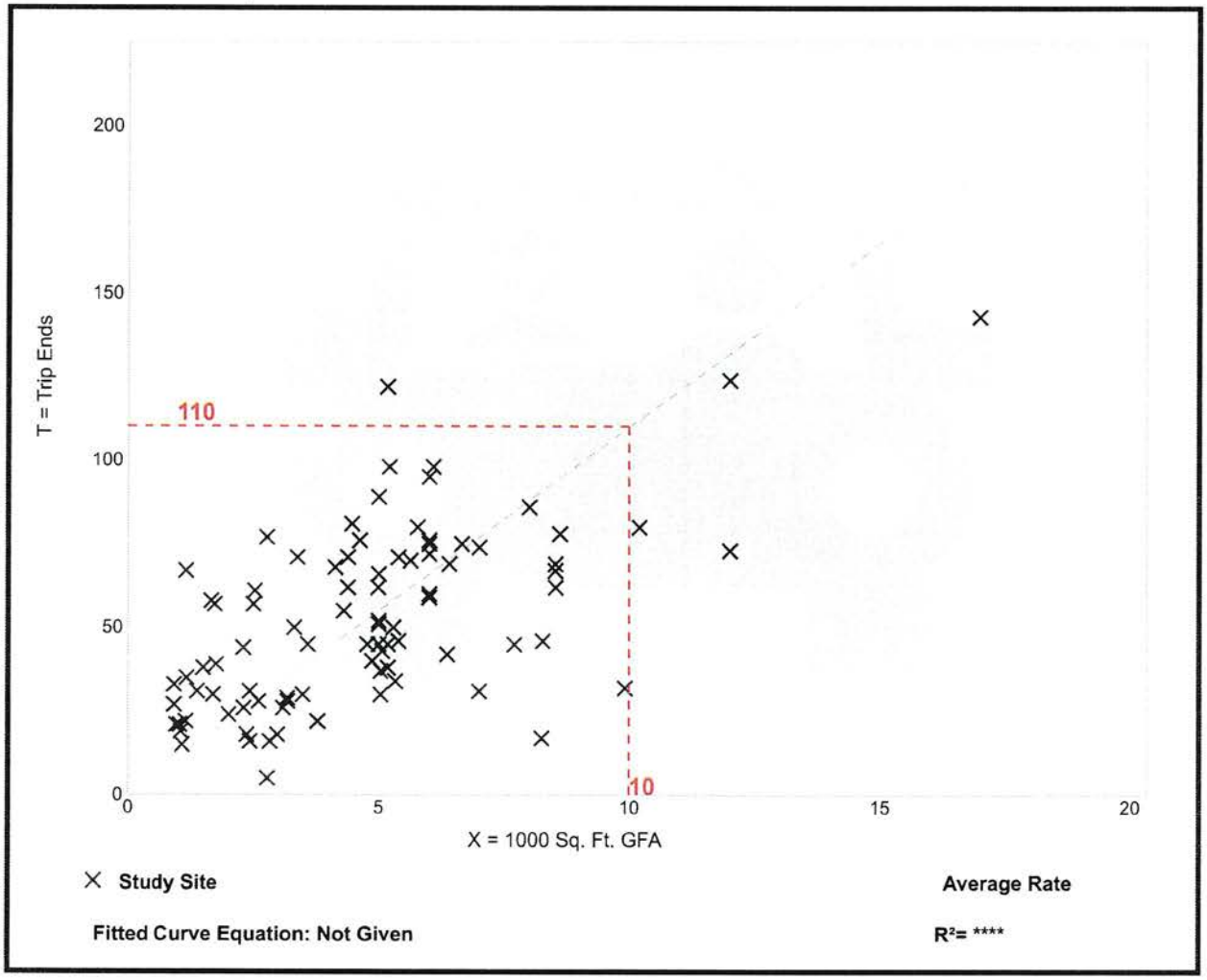
Day Care Center
(565)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 89
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.00	1.79 - 57.02	6.08

Data Plot and Equation



Trip Gen Manual, 11th Edition • Institute of Transportation Engineers

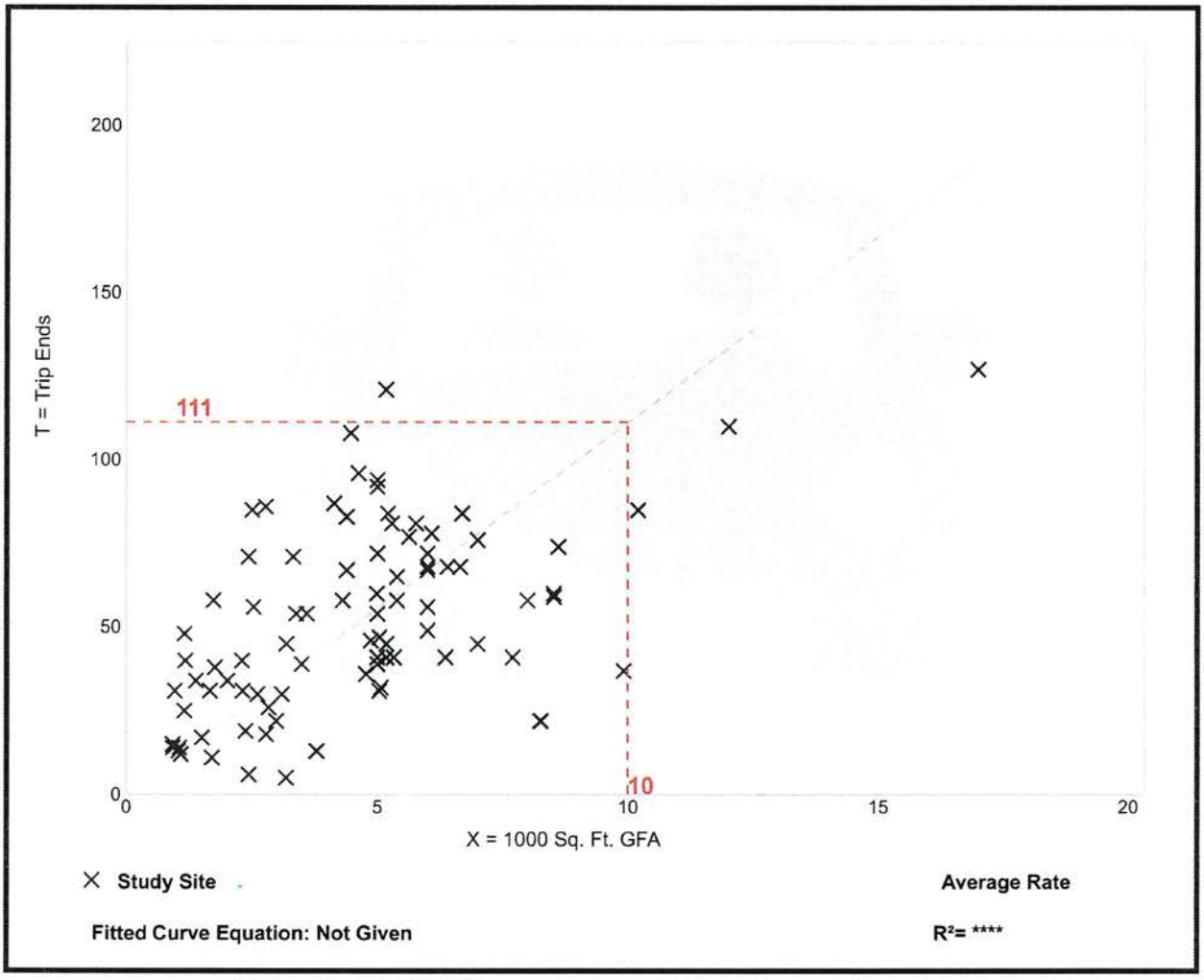
Day Care Center
(565)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 90
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.12	1.56 - 40.85	6.28

Data Plot and Equation



Trip Gen Manual, 11th Edition • Institute of Transportation Engineers

Jay Davoll

From: Rita Merhi
Sent: Tuesday, August 29, 2023 10:29 AM
To: Jay Davoll
Subject: FW: TPD# 5824 Winter Springs Ace Hardware and Future Development

Regards,

Rita Merhi

Traffic Planning and Design, Inc.
535 Versailles Drive
Maitland, Florida 32751
407.628.9955
www.tpdtraffic.com

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From: Nick Tafelsky <ntafelsky@winterspringsfl.org>
Sent: Friday, August 25, 2023 1:13 PM
To: Turgut Dervish <turgut@tpdtraffic.com>
Cc: Rita Merhi <rita@tpdtraffic.com>; Planning <planning@winterspringsfl.org>
Subject: RE: TPD# 5824 Winter Springs Ace Hardware and Future Development

The City does not review methodologies before submittal. Once a project is submitted along with the traffic study, we will advise if there are any concerns about the methodology used.

Nick Tafelsky, AICP
Senior City Planner
P: (407) 327-5968 **F:** (407) 327-4753

A: 1126 East State Road 434
Winter Springs, Florida 32708

Jay Davoll

From: Perez, Arturo <aperez07@seminolecountyfl.gov>
Sent: Tuesday, August 29, 2023 5:31 PM
To: Rita Merhi
Cc: Turgut Dervish; Jay Davoll; Wharton, William
Subject: RE: TPD# 5824 Winter Springs Ace Hardware and Future Development

Rita,

The requested changes have been satisfactorily made. The methodology to prepare the TIS is approved.

Stay safe.

Regards,

Arturo

Arturo J. Perez, MSCE, P.E. (FL, GA, CO)
Professional Engineer - Transportation
Public Works Department | Engineering Division
Phone: 407-665-5716
100 East First Street
Sanford, FL 32771
aperez07@seminolecountyfl.gov

From: Rita Merhi <rita@tpdtraffic.com>
Sent: Tuesday, August 29, 2023 10:45 AM
To: Perez, Arturo <aperez07@seminolecountyfl.gov>
Cc: Turgut Dervish <turgut@tpdtraffic.com>; Jay Davoll <jay@tpdtraffic.com>
Subject: TPD# 5824 Winter Springs Ace Hardware and Future Development

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Good morning Arturo,

As you can see from the emails below, the City of Winter Springs is not going to review our proposed methodology.
Attached please find the response to methodology comments and the revised methodology for Ace Hardware.
We will be requesting turning movements count to be collected next week and we will proceed with the traffic study.

Thank you for your assistance.

Regards,

Rita Merhi

Jay Davoll

From: Perez, Arturo <aperez07@seminolecountyfl.gov>
Sent: Friday, August 25, 2023 12:01 PM
To: Rita Merhi; rgironella@winterspringsfl.org
Cc: Turgut Dervish; Jay Davoll; Benjamin Weinberg
Subject: RE: TPD# 5824 Winter Springs Ace Hardware and Future Development
Attachments: 5824 Ace Hardware Winter Springs TIA Methodology_AJP08252023.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Rita,

The methodology looks good, I just have a few minor edits. Go ahead and make those changes, anything else Rachel requires and resubmit.

Regards,

Arturo

Arturo J. Perez, MSCE, P.E. (FL, GA, CO)
Professional Engineer - Transportation
Public Works Department | Engineering Division
Phone: 407-665-5716
100 East First Street
Sanford, FL 32771
aperez07@seminolecountyfl.gov

From: Rita Merhi <rita@tpdtraffic.com>
Sent: Monday, August 21, 2023 11:06 AM
To: rgironella@winterspringsfl.org; Perez, Arturo <aperez07@seminolecountyfl.gov>
Cc: Turgut Dervish <turgut@tpdtraffic.com>; Jay Davoll <jay@tpdtraffic.com>; Benjamin Weinberg <ben@weinberg-eng.com>
Subject: TPD# 5824 Winter Springs Ace Hardware and Future Development

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Good morning Rachel & Arturo,

Attached please find our proposed study methodology for Ace Hardware Development in Winter Springs.
Please review and let us know if you have any questions or comments.

Thank you for your assistance.

Regards,

Rita Merhi

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535 Versailles Drive
Maitland, Florida 32751
407.628.9955
www.tpdtraffic.com

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RESPONSE TO SEMINOLE COUNTY COMMENTS
ACE HARDWARE DEVELOPMENT

The following is our response to Seminole County comments regarding the TIA Methodology for Ace Hardware Development located in the northeast corner of the intersection of Tuskawilla Road and Michael Blake Boulevard. The comments are listed first in **bold** followed by our responses.

Comment 1. Proposed Development, add the type of connection that will be utilized.

Response – The type of connection was added to the description. See the revised methodology.

Comment 2. Include the intersection of SR 434 and site access to the list of intersections.

Response – SR 434 and site access was added to the list of itersections. See revised methodology.

TPD No. 5824
August 29, 2023

TO: Rachel Gironella, Civil Engineer
City of Winter Springs

To: Arturo J. Perez, MSCE, P.E.
Professional Engineer - Transportation
Seminole County Public Works Department – Engineering Division

FROM: Turgut Dervish, P.E.

DATE: August 29, 2023

RE: Traffic Impact Study Methodology - Revised
Ace Hardware Development – Winter Springs
TPD No. 5824

The following is an outline of the proposed methodology for the Traffic Impact Study for the proposed retail project in Winter Springs, Seminole County. The project site is located in the northeast corner of Tuskawilla Road and Michael Blake Boulevard. The project is anticipated to be completed by the end of 2025. **Figure 1** depicts the site location and the area roadways.

1. Proposed Development

The proposed development will consist of a 10,000 square foot Day Care facility, 23,586 square foot strip retail center with Ace Hardware as the anchor tenant, three fast food restaurants with drive through windows totaling 9,000 square feet and two stand-alone high-turnover (sit-down) restaurants totaling 9,500 square feet. Access to the site is proposed via a full access connection from Michael Blake Boulevard and right in / right out (RI/RO) connections from SR 434 and Tuskawilla Road. **Figure 2** depicts the conceptual site plan and the access configuration.

2. Trip Generation

Trip generation data from the 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual* will be used for the trip generation estimation of the development. **Table 1** provides a summary of the trip generation calculation for the proposed retail development. ITE Trip Generation sheets are attached. As shown in the table, the proposed development is estimated to generate 3,354 net new daily trips, of which 293 will occur during the A.M. peak hour and 285 during the P.M. peak hour.

3. Trip Distribution

A distribution pattern will be determined with the use of the 2030 Central Florida Regional Planning Model (CFRPM v7). The model was revised to add a traffic zone representing the project and its proposed development. Subsequently, the model was run with a Select Zone Analysis which produced a trip distribution for the project trips. **Figure 3** depicts the trip distribution on the area roadways. The model distribution plot is provided in the Attachment.

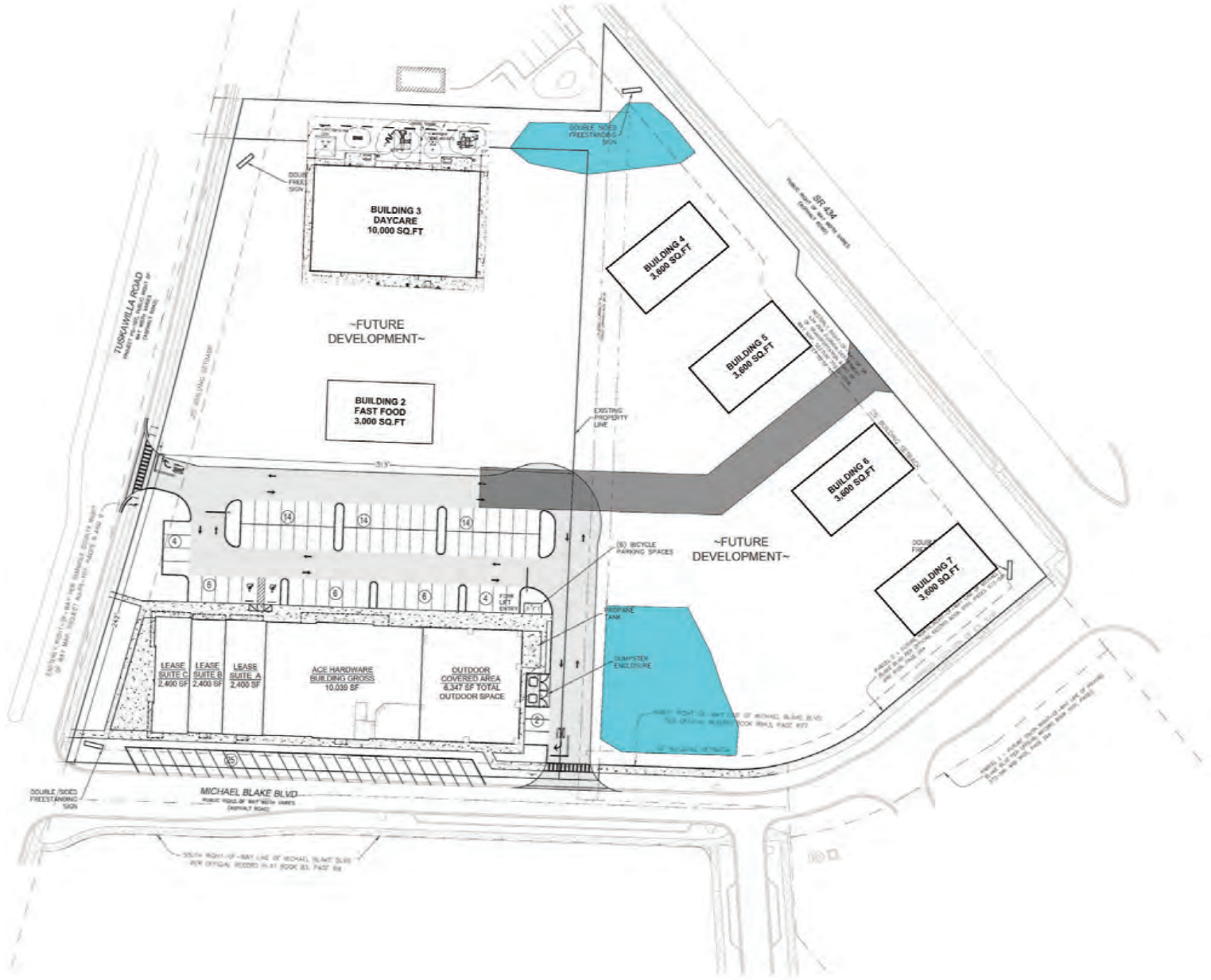


Ace Hardware - Winter Springs
Project № 5824
Figure 1

Site Location

N
NTS

1131



Ace Hardware - Winter Springs
Project № 5824
Figure 2

Concept Plan

N
NTS

1132



Ace Hardware - Winter Springs
Project № 5824
Figure 3

Trip Distribution

N
NTS

Table 1
Trip Generation Summary

ITE Code	Land Use	Size (KSF)[1]	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate[2]	Trips	Rate[2]	Enter	Exit	Total	Rate[2]	Enter	Exit	Total
565	Day Care	10.00	4.09	41	0.78	4	4	8	0.79	4	4	8
822	Strip Retail Plaza (<40K)	23.586	51.94	1,225	2.36	33	23	56	6.59	78	77	155
934	Fast Food w/Drive Through (3 sites)	9.00	467.48	4,207	44.61	205	196	401	33.03	155	142	297
932	High Turnover (Sit-Down) Restaurant (2 stand-alone sites)	9.50	107.20	1,018	9.57	50	41	91	9.05	52	34	86
Sub-Total				6,491	---	292	264	556	---	289	257	546
Retail Pass-by (40%)[2]				490	---	13	9	22	---	31	31	62
Fast Food Pass-by (AM=50%, PM=55%, Daily=52.5%)[2]				2,209	---	103	98	201	---	85	78	163
High Turnover Restaurant Pass-by (43%)[2]				438	---	22	18	40	---	22	14	36
Total Net New Trips				**3,354**	**---**	**154**	**139**	**293**	**---**	**151**	**134**	**285**

[1]KSF=1,000 sq. ft. [2]Equation utilized when R^2 >0.75 [3]Pass-by rates obtained from ITE's Trip Generation Manual, 11th Edition, LUC 821

4. Impact Area

As per Seminole County TIA guidelines, major roadways within a one-mile radius and intersections within a quarter mile radius of the site will be included in the analysis.

The concurrency roadways within one mile to be included in the area analysis are:

- Tuskawilla Road
  - SR 434 to Trotwood Blvd (Segment 326)
  - Trotwood Blvd to Winer Springs Blvd (Segment 327)
- SR 434
  - Springs Avenue to Tuskawilla Road (Segment 296)
  - Tuskawilla Road to SR 419 (Segment 297)

The intersections to be included in the area analysis are:

- Tuskawilla Road and Trotwood Boulevard
- Tuskawilla Road and Michael Blake Boulevard/Milky Way
- Tuskawilla Road and SR 434
- SR 434 and Michael Blake Boulevard
- SR 434 and Bear Springs Drive/McLeod's Way
- SR 434 and Central Winds Drive/Heritage Park Street
- SR 434 and Site access connection (RI/RO)
- Tuskawilla Road and Site access connection (RI/RO)
- Michael Blake Boulevard and Site access connection (full access)

5. Traffic Impact Assessment

a) Roadways

- Obtain background traffic volumes on the study roadway segments from Seminole County for use in the traffic analysis.
- Determine background traffic by combining existing traffic counts with committed trips to be provided by the City of Winter Spring and/or Seminole County.
- Combine project traffic with background traffic to obtain total traffic volumes.
- Perform daily roadway capacity analysis utilizing the City of Winter Springs and Seminole County standards.

Intersections

- Conduct intersection counts during the A.M./P.M. peak hour period at the study intersections.
- Determine background traffic by combining existing traffic counts with committed trips to be provided by Seminole County.
- Combine project traffic with background traffic to obtain total traffic.
- Perform intersection capacity analysis utilizing the HCM/HCS operational analysis for the A.M./P.M. peak hour.

7. Traffic Report

Prepare traffic report summarizing study procedures, analyses and recommendations.

If you have any questions or concerns, please contact us at (407) 628-9955.

Attachments

Strip Retail Plaza (<40k)
(822)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday**

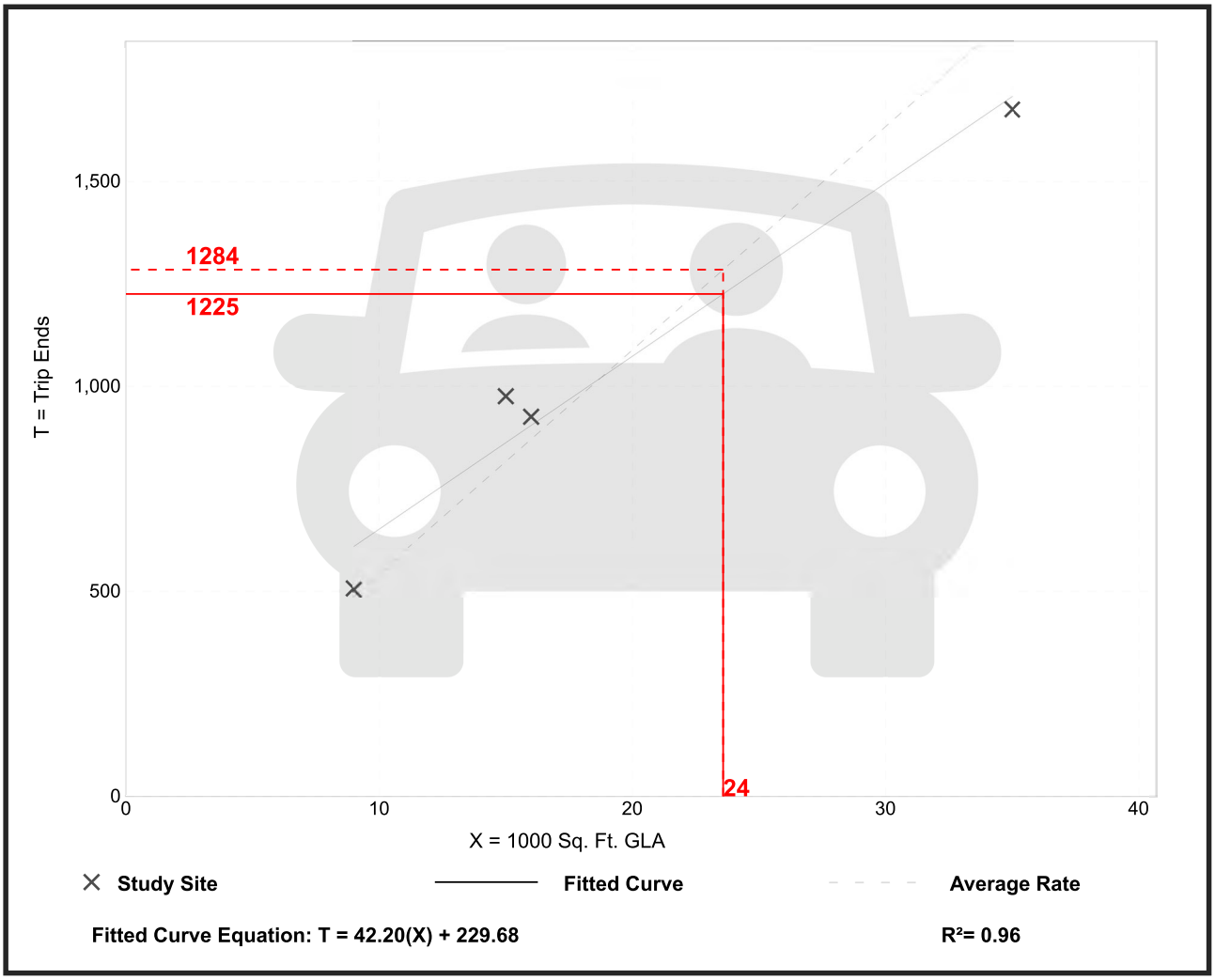
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. 1000 Sq. Ft. GLA: 19
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
54.45	47.86 - 65.07	7.81

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: T = 42.20(X) + 229.68

R^2= 0.96

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Strip Retail Plaza (<40k)
(822)

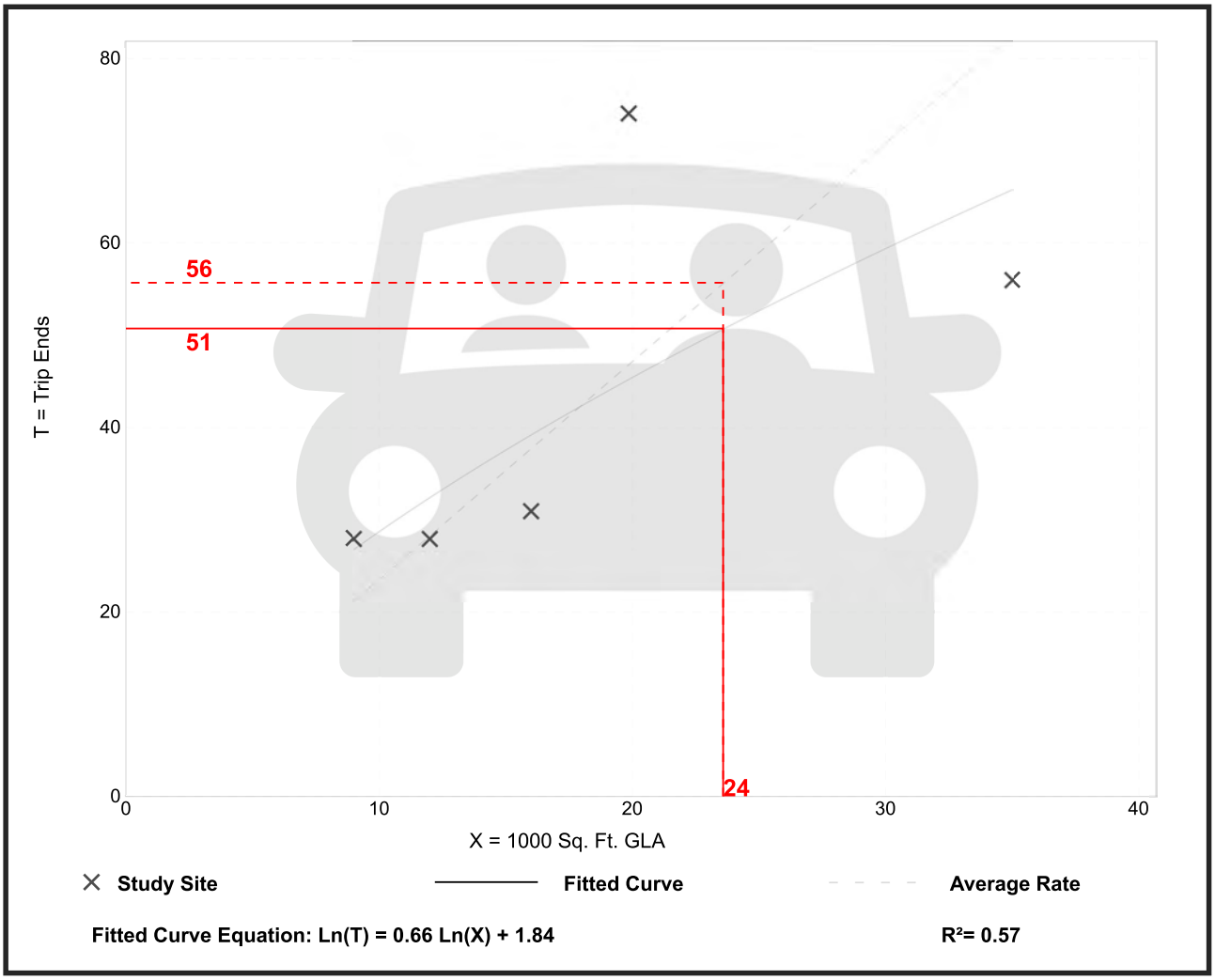
Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. 1000 Sq. Ft. GLA: 18
Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

Data Plot and Equation

Caution – Small Sample Size



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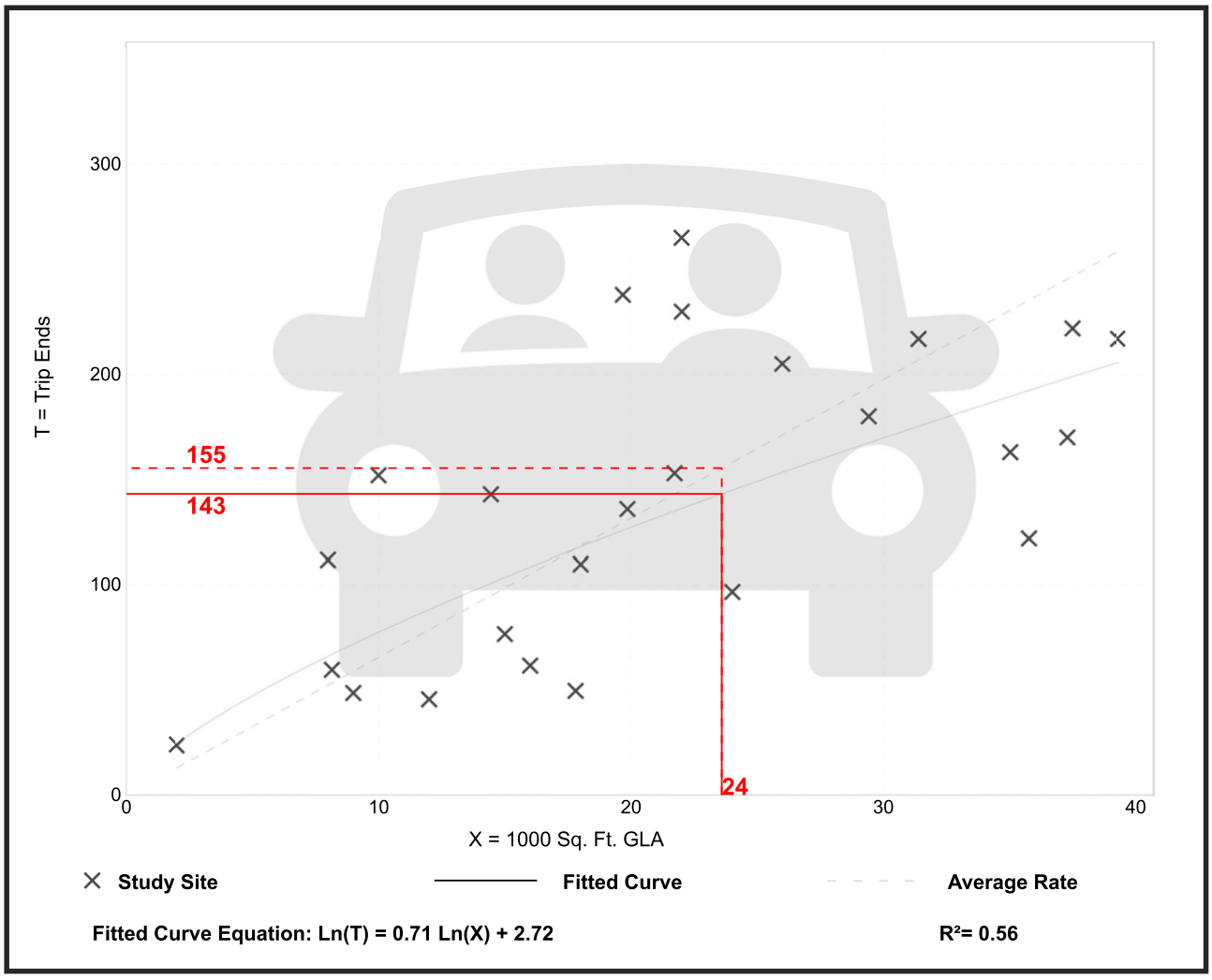
Strip Retail Plaza (<40k)
(822)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 25
Avg. 1000 Sq. Ft. GLA: 21
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

Data Plot and Equation



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Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	821
Land Use	Shopping Plaza (40 - 150k)
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	15
Average Pass-By Rate	40%

Pass-By Characteristics for Individual Sites

GLA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
45	Florida	1992	844	56	24	20	44	—	30
50	Florida	1992	555	41	41	18	59	—	30
52	Florida	1995	665	42	33	25	58	—	30
53	Florida	1993	162	59	—	—	41	—	30
57.23	Kentucky	1993	247	31	53	16	69	2659	34
60	Florida	1995	1583	40	38	22	60	—	30
69.4	Kentucky	1993	109	25	42	33	75	1559	34
77	Florida	1992	365	46	—	—	54	—	30
78	Florida	1991	702	55	23	22	45	—	30
82	Florida	1992	336	34	—	—	66	—	30
92.857	Kentucky	1993	133	22	50	28	78	3555	34
100.888	Kentucky	1993	281	28	50	22	72	2111	34
121.54	Kentucky	1993	210	53	30	17	47	2636	34
144	New Jersey	1990	176	32	44	24	68	—	24
146.8	Kentucky	1993	—	36	39	25	64	—	34

Fast-Food Restaurant with Drive-Through Window
(934)

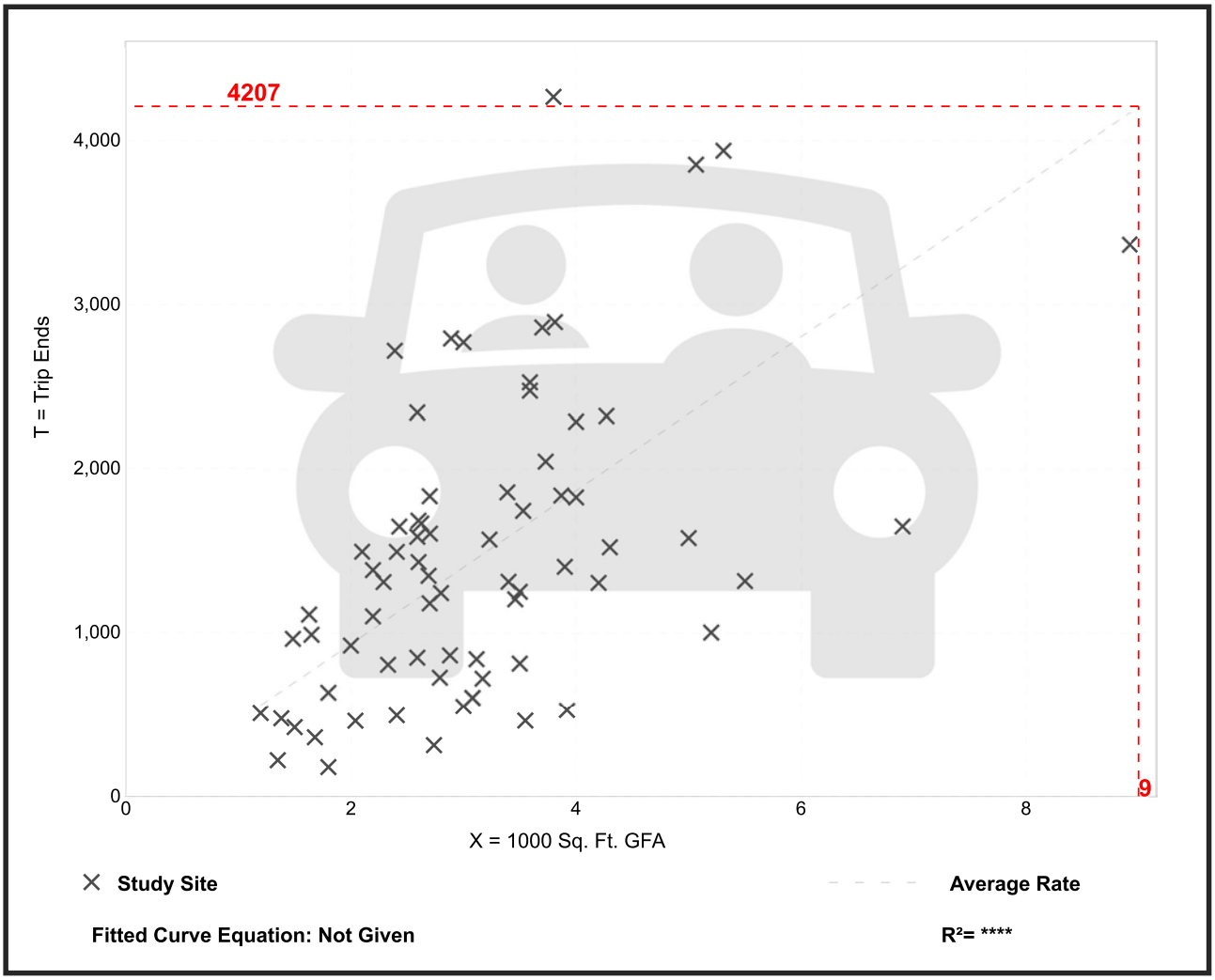
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 71
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



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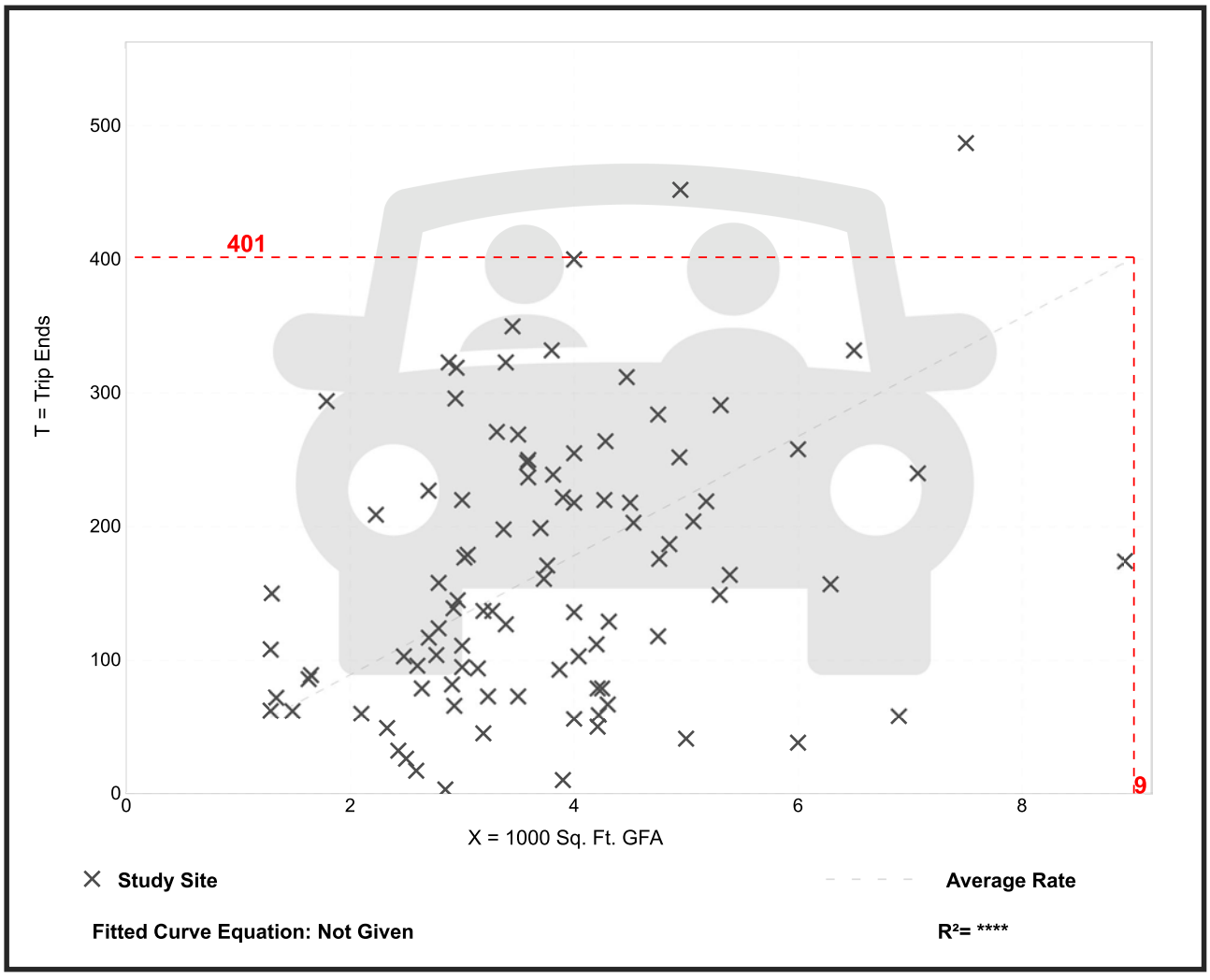
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	96
Avg. 1000 Sq. Ft. GFA:	4
Directional Distribution:	51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation



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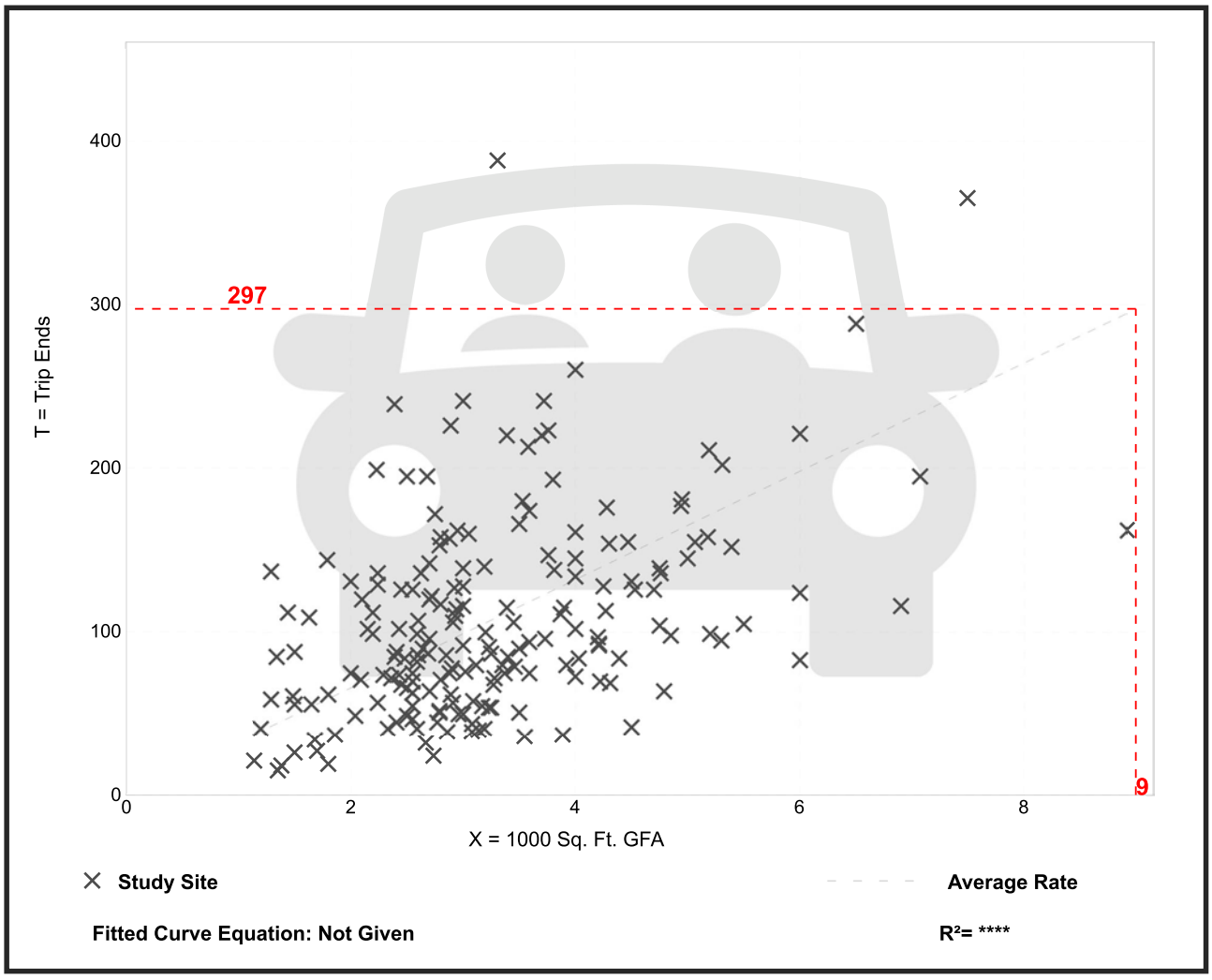
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 190
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday AM Peak Period
# Data Sites	5
Average Pass-By Rate	50%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	11
Average Pass-By Rate	55%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

High-Turnover (Sit-Down) Restaurant
(932)

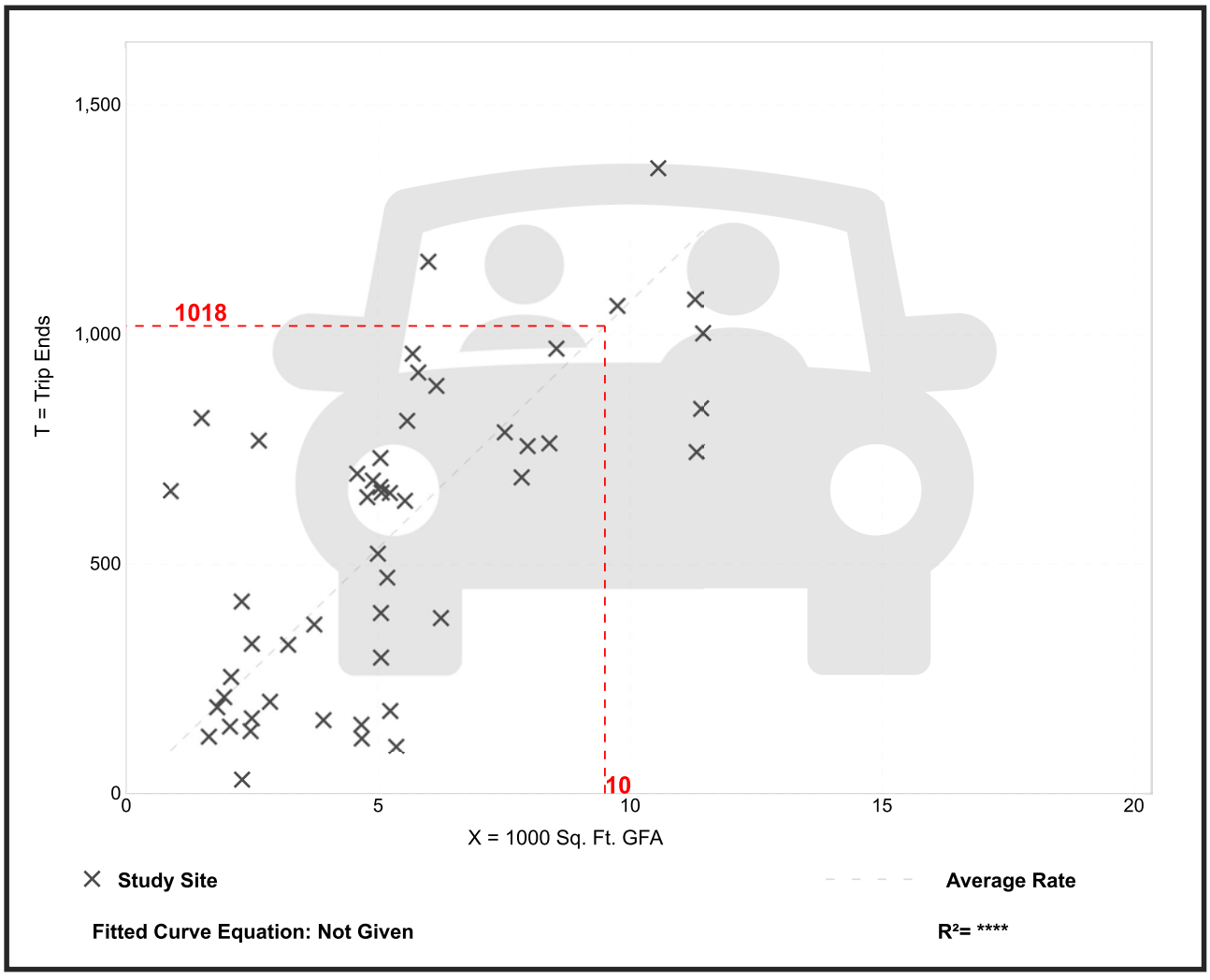
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 50
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
107.20	13.04 - 742.41	66.72

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

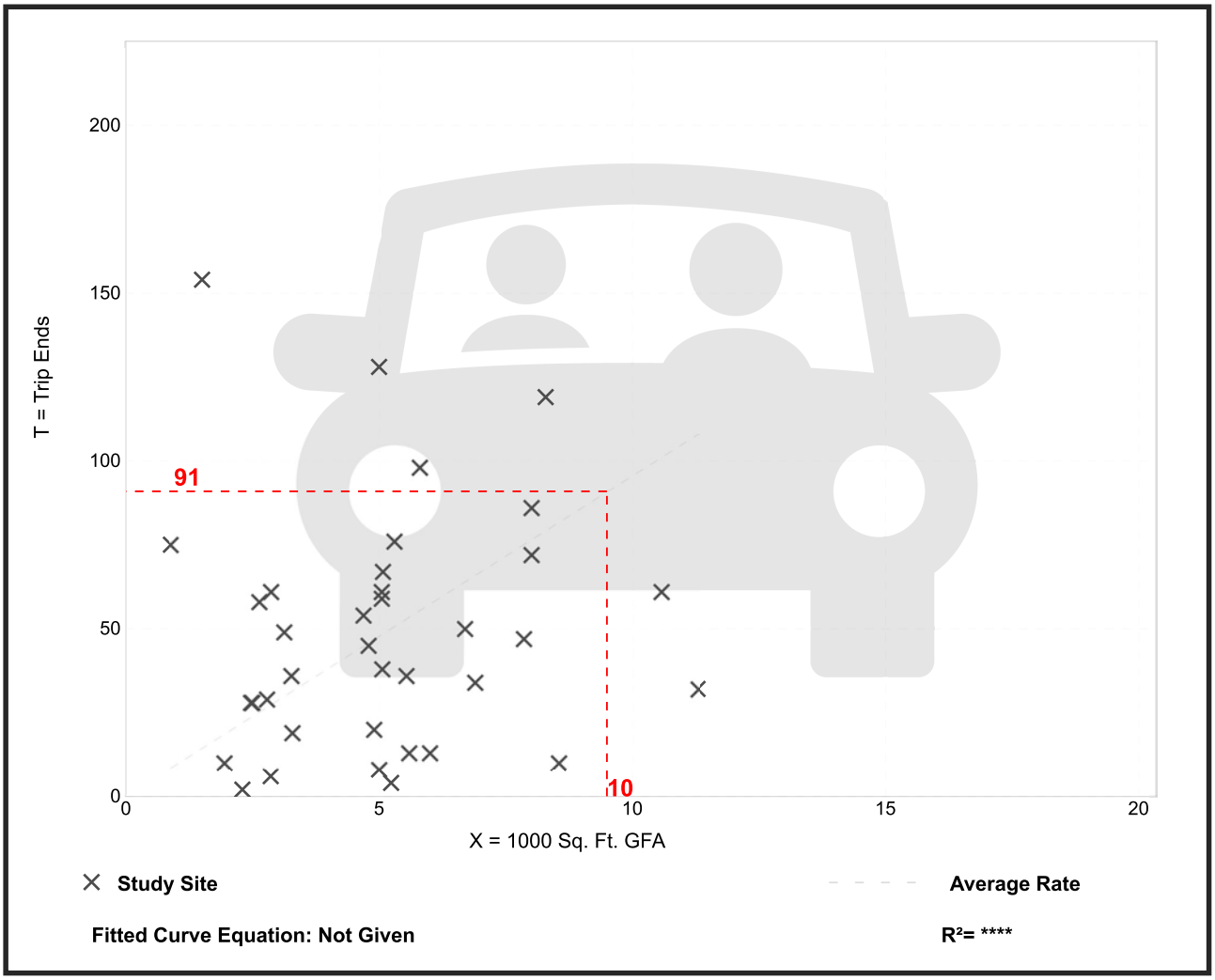
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 37
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.57	0.76 - 102.39	11.61

Data Plot and Equation



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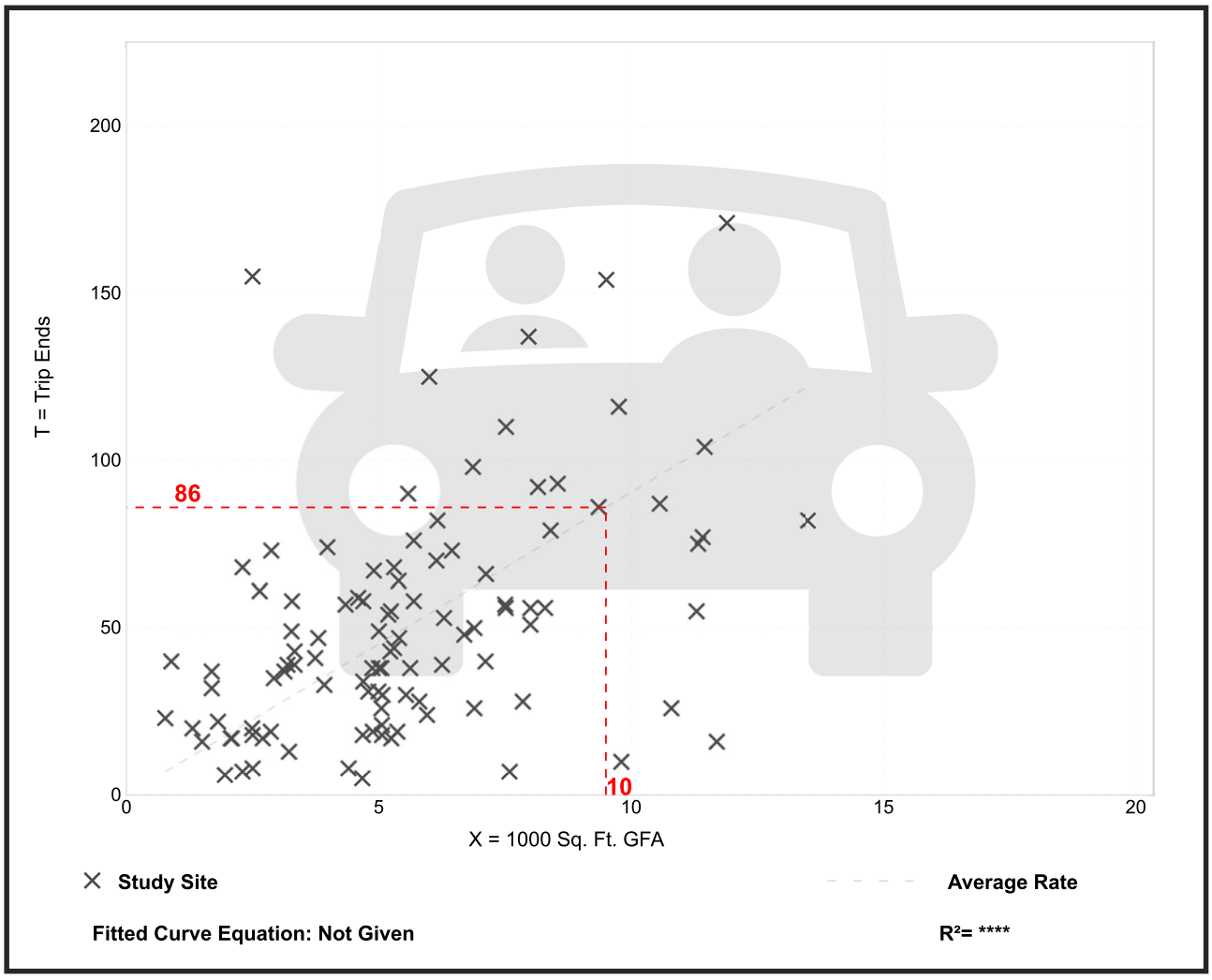
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 104
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.05	0.92 - 62.00	6.18

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

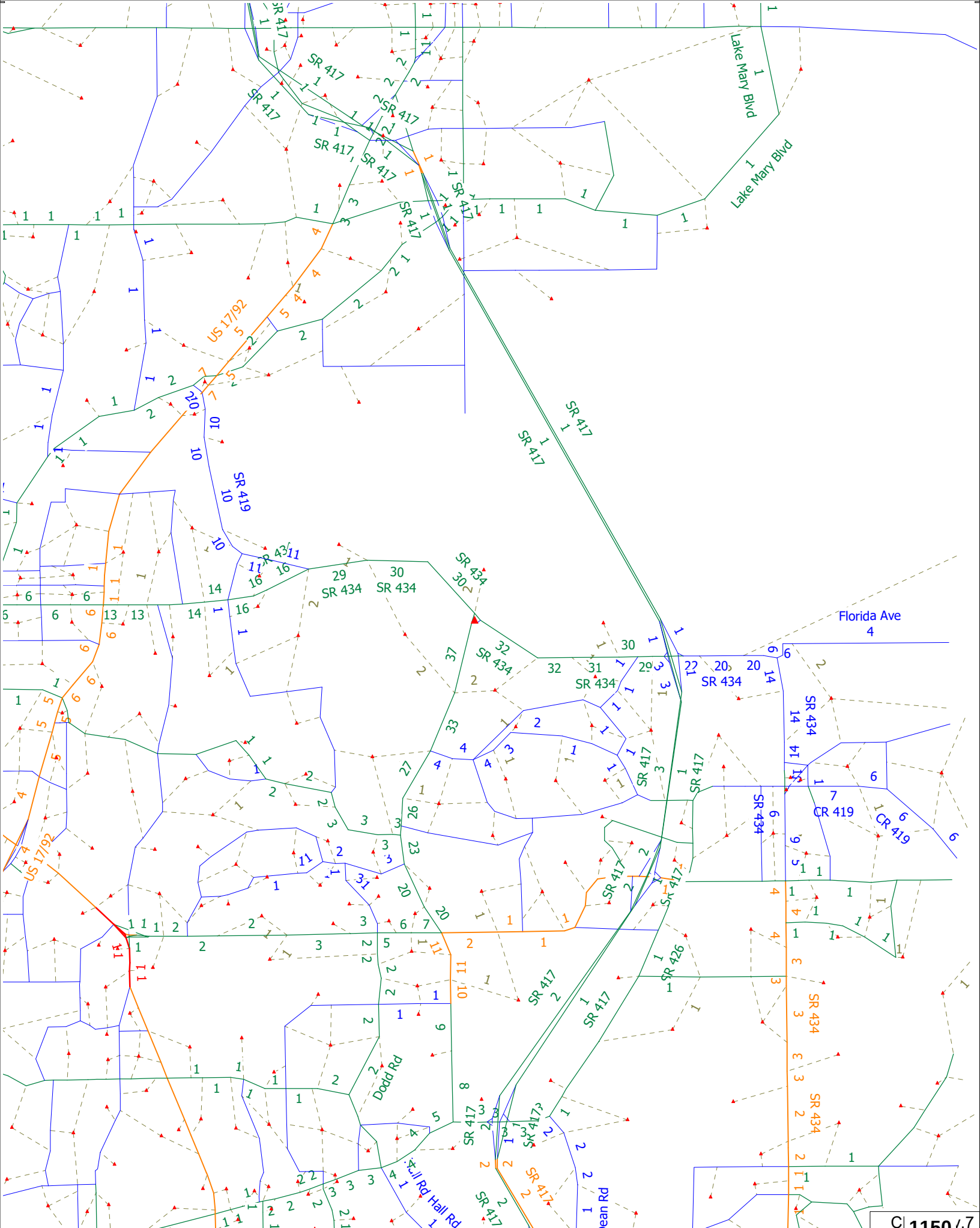
Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	932
Land Use	High-Turnover (Sit-Down) Restaurant
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	12
Average Pass-By Rate	43%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
2.9	Kentucky	1993	41	37	27	36	63	3935	2
3.1	Kentucky	1993	21	38	29	33	62	2580	2
4.6	Florida	1992	276	63	—	—	37	—	30
5	Florida	1992	65	58	—	—	42	—	30
5.3	Kentucky	1993	24	50	37	13	50	1615	2
5.7	Florida	1994	308	57	—	—	43	—	30
5.8	Florida	1992	150	32	—	—	68	—	30
6.2	Florida	1995	521	46	43	11	54	—	30
7.1	Indiana	1993	—	23	23	54	77	1565	2
8	Florida	1995	664	40	39	21	60	—	30
11	Florida	1996	267	38	43	19	62	—	30
12	Florida	1996	317	29	51	20	71	—	30



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APPENDIX B

Traffic Data and Roadway Concurrency Information

Summary of Roadway Concurrency Information

Traffic Counter ID	Roadway Name	From	To
			Net Available Capacity 15958
325	TRIPLET LAKE	US 17-92	N. Triplet Lake Dr
			Current Traffic Count 2483 Roadway Link Capacity 19360 Committed Trips 0 Net Available Capacity 16877
326	TUSKAWILLA RD	SR 434	Trotwood Blvd
			Current Traffic Count 21241 Roadway Link Capacity 42560 Committed Trips 0 Net Available Capacity 21319
327	TUSKAWILLA RD	Trotwood Blvd	Winter Springs Blvd
			Current Traffic Count 20748 Roadway Link Capacity 42560 Committed Trips 8 Net Available Capacity 21804

This information has been provided by Tony Nelson, P.E. at Seminole County Engineering and is current information as of the above referenced date.

Summary of Roadway Concurrency Information

Traffic Counter ID	Roadway Name	From	To
			Net Available Capacity -1617
294	SR 434	DeLeon St	E-W Expressway
			Current Traffic Count 23955 Roadway Link Capacity 18270 Committed Trips 293 Net Available Capacity -5978
295	SR 434	E-W Expressway	Springs Ave
			Current Traffic Count 27563 Roadway Link Capacity 48000 Committed Trips 0 Net Available Capacity 20437
296	SR 434	Springs Ave	Tuskawilla Rd
			Current Traffic Count 27610 Roadway Link Capacity 48000 Committed Trips 293 Net Available Capacity 20097

This information has been provided by Tony Nelson, P.E. at Seminole County Engineering and is current information as of the above referenced date.

Summary of Roadway Concurrency Information

Traffic Counter ID	Roadway Name	From	To
297	SR 434	Tuskawilla Rd	SR 419
		Current Traffic Count	36344
		Roadway Link Capacity	48000
		Committed Trips	0
		Net Available Capacity	11656
298	SR 434	SR 419	Belle Ave
		Current Traffic Count	24671
		Roadway Link Capacity	48000
		Committed Trips	0
		Net Available Capacity	23329
299	SR 434	Belle Ave	US 17-92
		Current Traffic Count	33165
		Roadway Link Capacity	48000
		Committed Trips	0
		Net Available Capacity	14835
300	SR 434	US 17-92	CR 427
		Current Traffic Count	23146

This information has been provided by Tony Nelson, P.E. at Seminole County Engineering and is current information as of the above referenced date.

APPENDIX C

Existing Intersection Counts, FDOT Seasonal Factors, Signal Timings

Prepared by National Data & Surveying Services

Tuskawilla Rd & SR 434/SR 419

Peak Hour Turning Movement Count

ID: 23-130259-001
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS		COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	3473	0	4145
PHF	0.96		0.98

SOUTHBOUND (Tuskawilla Rd)

	Left	Thru	Right	U-Turn	Total
AM	28	41	44	0	88
NOON	0	0	0	0	0
PM	29	106	84	0	189

EASTBOUND (SR 434/SR 419)

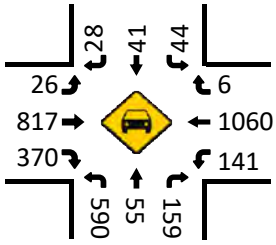
	Left	Thru	Right	U-Turn	Total
AM	385	859	26	12	1282
NOON	0	0	0	0	0
PM	665	1047	51	35	1798

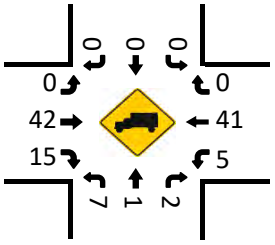
WESTBOUND (SR 434/SR 419)

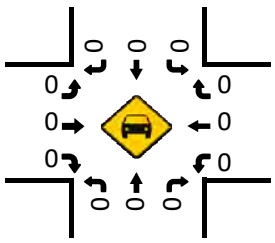
	Left	Thru	Right	U-Turn	Total
AM	176	1072	27	9	1284
NOON	0	0	0	0	0
PM	146	1101	6	11	1264

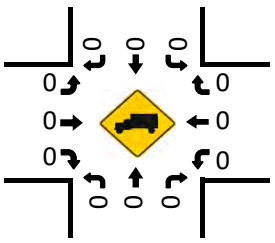
NORTHBOUND (Tuskawilla Rd)

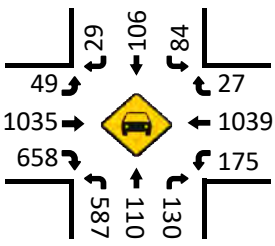
	Left	Thru	Right	U-Turn	Total
AM	572	597	56	161	1386
NOON	0	0	0	0	0
PM	947	602	111	131	1791

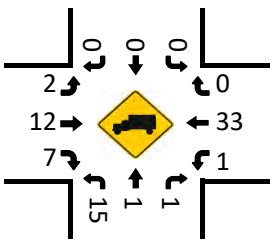


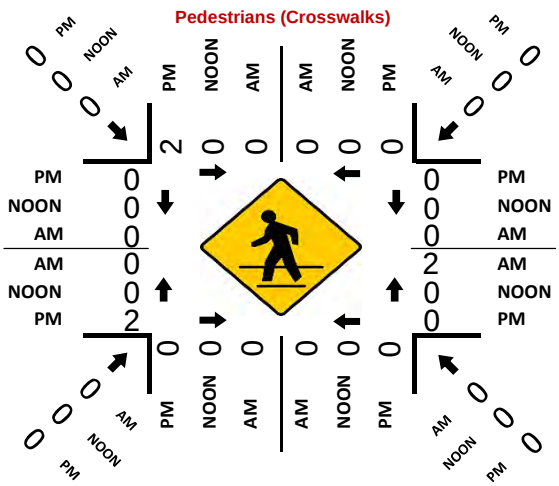








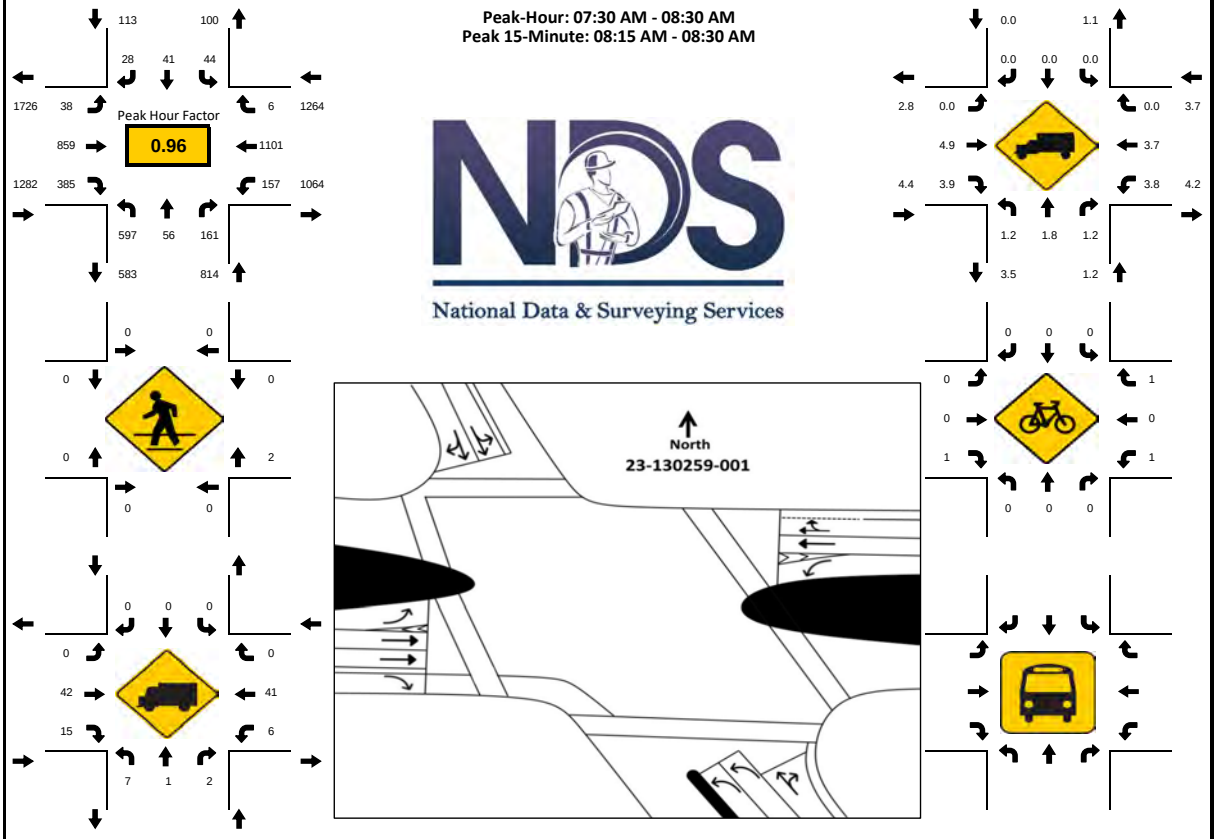



Pedestrians (Crosswalks)
PM
NOON
AM
0
2
0
0
0
0
0
0
0
0
0

LOCATION: Tuskawilla Rd & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-001
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:30 AM - 08:30 AM
Peak 15-Minute: 08:15 AM - 08:30 AM

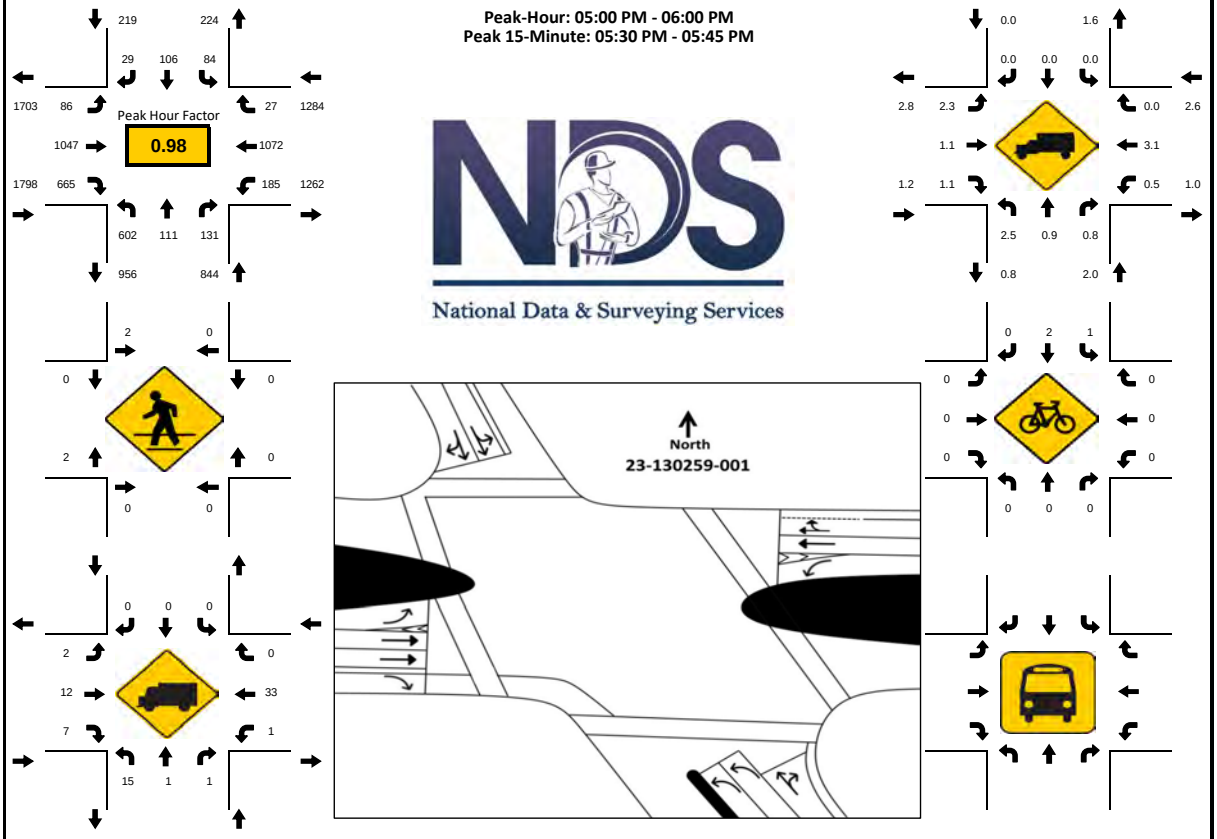


15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	163	15	42	0		12	13	2	0		7	173	135	5		27	183	1	0		778	3300
7:15 AM	118	8	28	0		6	9	6	0		4	186	134	6		39	227	1	4		776	3343
7:30 AM	130	10	47	0		7	9	9	0		7	221	91	6		39	292	0	3		871	3473
7:45 AM	154	14	47	0		14	6	6	0		6	194	89	3		41	298	1	2		875	3455
8:00 AM	151	14	27	0		12	11	9	0		6	187	89	1		37	270	3	4		821	3363
8:15 AM	162	18	40	0		11	15	4	0		7	257	116	2		29	241	2	2		906	2542
8:30 AM	116	7	37	0		11	10	4	0		6	240	140	4		51	221	4	2		853	1636
8:45 AM	127	16	30	0		10	15	5	0		9	189	129	2		42	198	8	3		783	783
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	648	72	188	0		56	60	36	0		28	1028	464	24		164	1192	12	16		**3988**	
Heavy Trucks	16	4	4	0		0	0	0	0		0	56	32	0		8	60	0	4		**180**	
Pedestrians		0					0					0					8				**8**	
Bicycles	0	0	0	0		0	0	0	0		0	0	4	0		4	0	4	0		**12**	
Buses																						
Stopped Buses																						

LOCATION: Tuskawilla Rd & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-001
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:30 PM - 05:45 PM

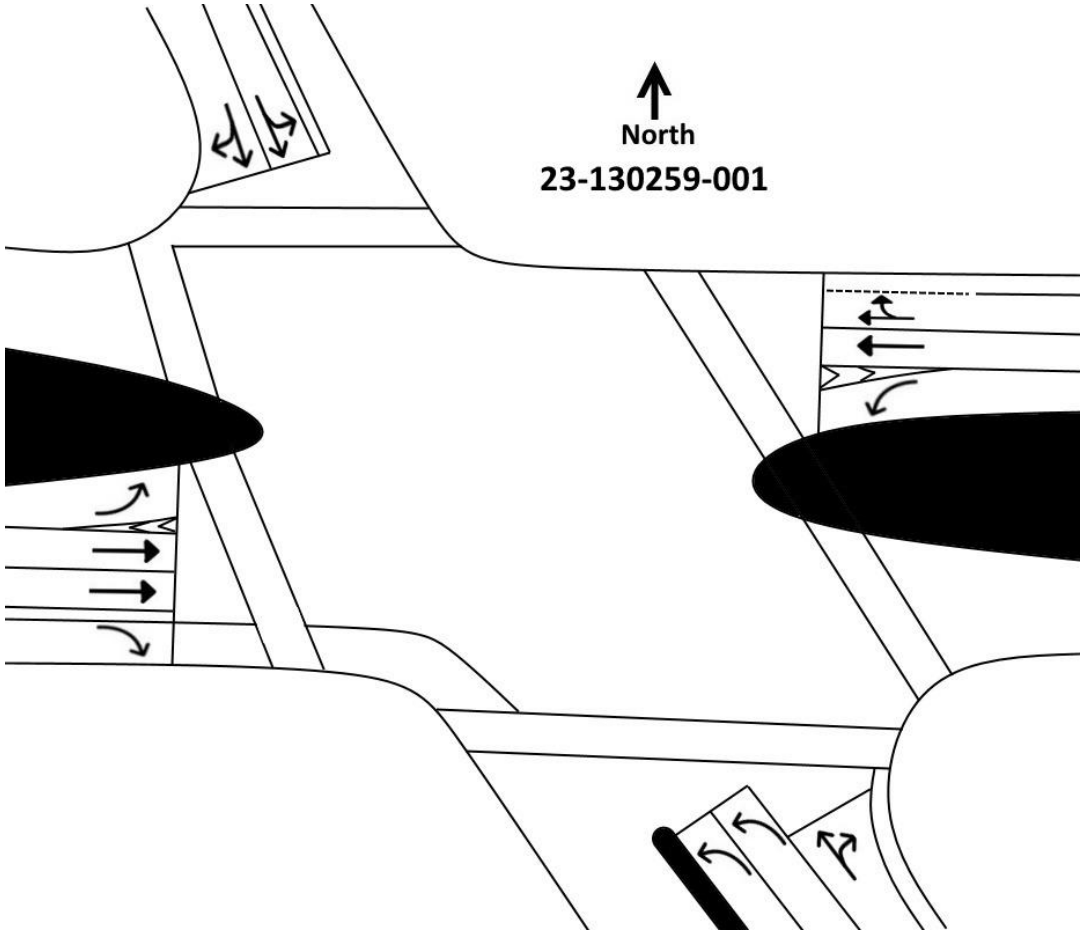


15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	124	9	32	0		15	14	5	0		11	217	133	17		45	156	4	2		784	3654
4:15 PM	179	27	50	0		16	16	5	0		6	277	128	9		32	215	10	2		972	3902
4:30 PM	161	20	34	0		20	17	12	0		8	212	128	10		35	251	2	1		911	3977
4:45 PM	170	13	38	0		17	22	7	0		16	244	132	11		50	261	3	3		987	4123
5:00 PM	136	15	35	0		20	27	6	0		12	272	156	9		43	290	6	5		1032	4145
5:15 PM	133	33	31	0		25	24	6	0		16	277	150	3		44	297	8	0		1047	3113
5:30 PM	173	42	33	0		20	26	8	0		12	269	173	8		42	240	9	2		1057	2066
5:45 PM	160	21	32	0		19	29	9	0		11	229	186	15		47	245	4	2		1009	1009
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**						
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	**Total**	
All Vehicles	692	168	140	0		100	116	36	0		64	1108	744	60		188	1188	36	20		**4660**	
Heavy Trucks	24	4	4	0		0	0	0	0		4	20	16	0		4	48	0	0		**124**	
Pedestrians		0					8					8					0				**16**	
Bicycles	0	0	0	0		4	4	0	0		0	0	0	0		0	0	0	0		**8**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

N/S Street: **Tuskawilla Rd**

Speed: **45/50 MPH**



E/W Street: **SR 434/SR 419**

Speed: **45 MPH**

Site Code: **23-130259-001**

Date: **09/12/2023**

Weather: **Sunny**

City: **Winter Springs**

County: **Seminole**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	**1**	**2**	**3**
SL/ST	00:55	00:22	00:26
NL/NT	00:56	00:34	00:32
EL/WL	00:18	00:18	00:17
WL/WT	00:06	00:05	00:08
ET/WT	01:10	01:08	01:15

Prepared by National Data & Surveying Services

Tuskawilla Rd & Michael Blake Blvd/Milky Way

Peak Hour Turning Movement Count

ID: 23-130259-002
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Tuskawilla Rd)

AM	2	668	10	8	745	AM
NOON	0	0	0	0	0	NOON
PM	0	967	18	23	855	PM

EASTBOUND (Michael Blake Blvd/Milky Way)

AM	NOON	PM	
2	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
AM	NOON	PM	

WESTBOUND (Michael Blake Blvd/Milky Way)

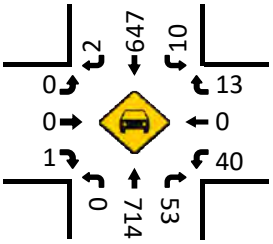
PM	NOON	AM	
4	0	13	0
0	0	0	0
29	0	42	0
0	0	0	0
100	0	65	
PM	NOON	AM	

NORTHBOUND (Tuskawilla Rd)

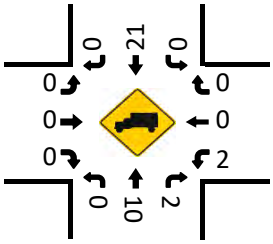
PM	996	0	0	828	82	PM
NOON	0	0	0	0	0	NOON
AM	711	0	0	724	55	AM

CONTROL			
2- Way Stop(EB/WB)			
TEV	1523 AM	0 NOON	1951 PM
PHF	0.96		0.97

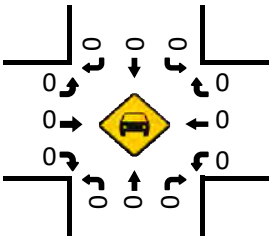
Cars (AM)



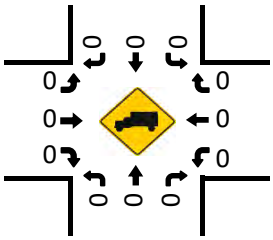
HT (AM)



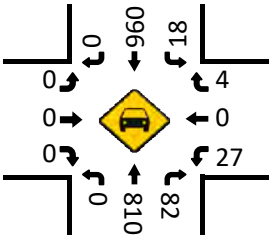
Cars (NOON)



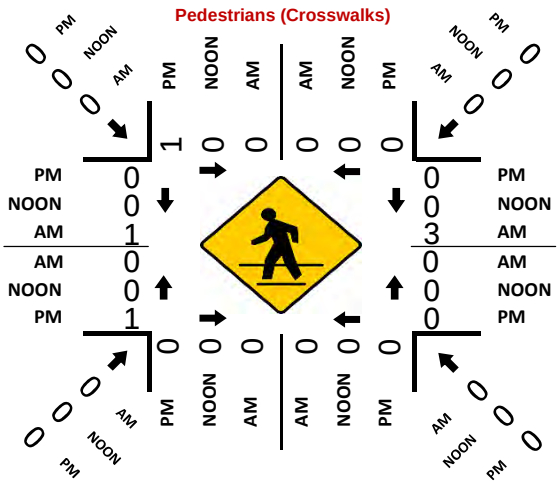
HT (NOON)



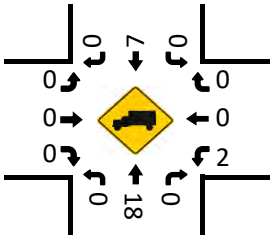
Cars (PM)



Pedestrians (Crosswalks)



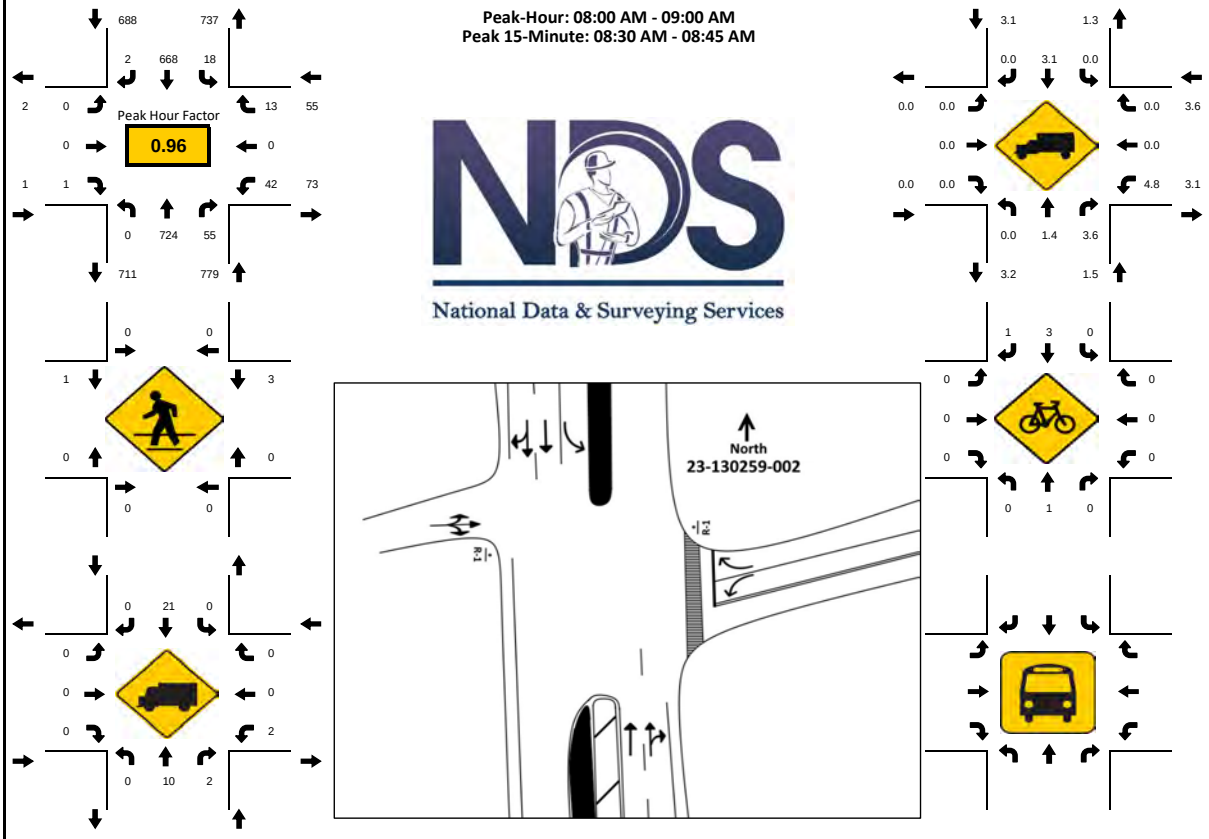
HT (PM)



LOCATION: Tuskawilla Rd & Michael Blake Blvd/Milky Way
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-002
DATE: Tue, Sep 12, 2023

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:30 AM - 08:45 AM

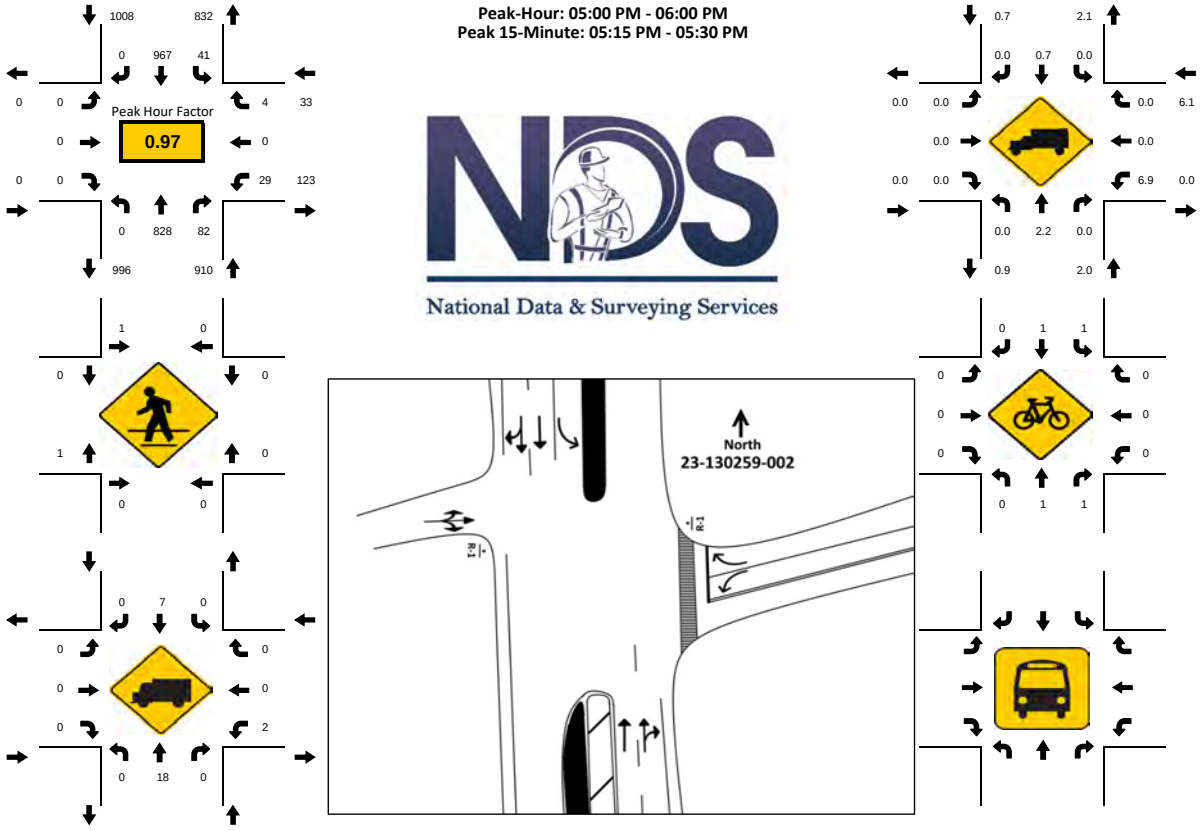


15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					Michael Blake Blvd/Milky Way Eastbound					Michael Blake Blvd/Milky Way Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	0	185	6	0		1	178	0	1		0	0	0	0		7	0	5	0		383	1480
7:15 AM	0	170	13	0		4	176	0	0		0	0	0	0		9	0	3	0		375	1471
7:30 AM	0	183	11	0		1	145	0	0		1	0	0	0		5	0	10	0		356	1464
7:45 AM	0	211	11	0		3	131	0	0		0	0	0	0		9	0	1	0		366	1505
8:00 AM	0	207	11	0		1	140	1	0		0	0	0	0		5	0	9	0		374	1523
8:15 AM	0	186	14	0		5	146	0	3		0	0	0	0		13	0	1	0		368	1149
8:30 AM	0	162	18	0		0	203	0	1		0	0	0	0		12	0	1	0		397	781
8:45 AM	0	169	12	0		4	179	1	4		0	0	1	0		12	0	2	0		384	384
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	828	72	0		20	812	4	16		0	0	4	0		52	0	36	0		**1844**	
Heavy Trucks	0	16	4	0		0	36	0	0		0	0	0	0		4	0	0	0		**60**	
Pedestrians		0					0					4					4				**8**	
Bicycles	0	4	0	0		0	8	4	0		0	0	0	0		0	0	0	0		**16**	
Buses																						
Stopped Buses																						

LOCATION: Tuskawilla Rd & Michael Blake Blvd/Milky Way
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-002
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services

15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					Michael Blake Blvd/Milky Way Eastbound					Michael Blake Blvd/Milky Way Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	0	168	12	0		3	197	0	6		0	0	0	0		6	0	4	0		396	1786
4:15 PM	0	265	25	0		3	196	1	8		1	0	0	0		8	0	4	0		511	1878
4:30 PM	0	225	18	0		4	182	0	7		0	0	1	0		7	0	2	0		446	1869
4:45 PM	0	198	15	0		2	205	0	8		0	0	0	0		3	0	2	0		433	1894
5:00 PM	0	214	18	0		7	235	0	4		0	0	0	0		9	0	1	0		488	1951
5:15 PM	0	220	31	0		5	234	0	4		0	0	0	0		7	0	1	0		502	1463
5:30 PM	0	195	21	0		3	235	0	6		0	0	0	0		10	0	1	0		471	961
5:45 PM	0	199	12	0		3	263	0	9		0	0	0	0		3	0	1	0		490	490
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	880	124	0		28	1052	0	36		0	0	0	0		40	0	4	0		**2164**	
Heavy Trucks	0	28	0	0		0	16	0	0		0	0	0	0		4	0	0	0		**48**	
Pedestrians		0					4					4					0				**8**	
Bicycles	0	4	4	0		4	4	0	0		0	0	0	0		0	0	0	0		**16**	
Buses																						
Stopped Buses																						

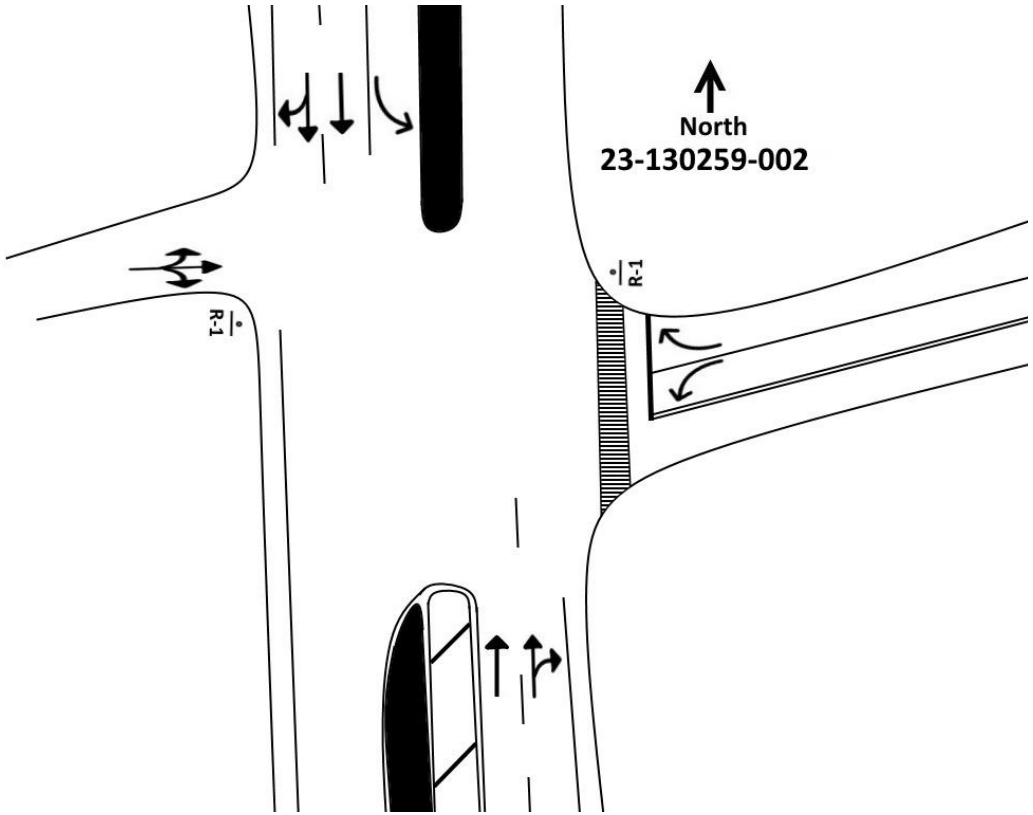
National Data & Surveying Services

Site Code:	**23-130259-002**
Date:	**09/12/2023**
Weather:	**Sunny**
City:	**Winter Springs**
County:	**Seminole**
Count Times:	**07:00 - 09:00**
	16:00 - 18:00
Control:	**2- Way Stop(EB/WB)**

N

N/S Street: **Tuskawilla Rd**

Speed: **45/50 MPH**



E/W Street: **Michael Blake Blvd/Milky Way**

Speed: **25 MPH**

Prepared by National Data & Surveying Services

Michael Blake Blvd & SR 434/SR 419

Peak Hour Turning Movement Count

ID: 23-130259-003
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

Michael Blake Blvd

SOUTHBOUND

PEAK HOURS							COUNT PERIODS
07:30 AM - 08:30 AM	AM	78	9	134	0	145	AM	7:00 AM - 09:00 AM
NONE	NOON	0	0	0	0	0	NOON	NONE
04:45 PM - 05:45 PM	PM	51	4	70	0	200	PM	4:00 PM - 06:00 PM

EASTBOUND

AM	NOON	PM	
1207	0	1303	⇦
6	0	30	↩ 0
71	0	83	↱ 0
979	0	1173	→ 0
7	0	17	↳ 0

WESTBOUND

PM	NOON	AM	
107	0	71	0 ↰
1212	0	1121	0 ←
42	0	34	0 ↶
0	0	1	0 ↩
1338	0	1181	⇨

SR 434/SR 419 (left)

SR 434/SR 419 (right)

CONTROL

2- Way Stop(NB/SB)

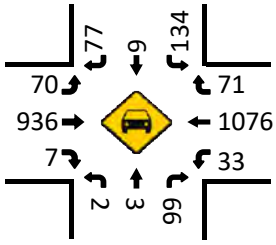
TEV	2583	0	2904
	AM	NOON	PM
PHF	0.98		0.95

NORTHBOUND

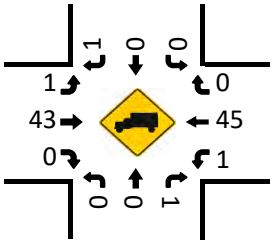
PM	63	0	10	10	95	PM
NOON	0	0	0	0	0	NOON
AM	50	0	2	3	67	AM

Michael Blake Blvd

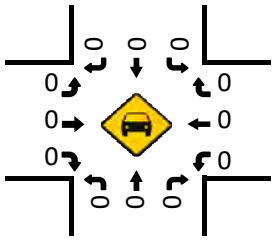
Cars (AM)



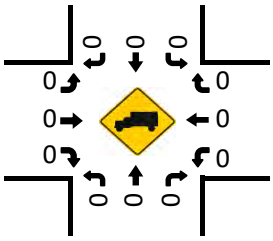
HT (AM)



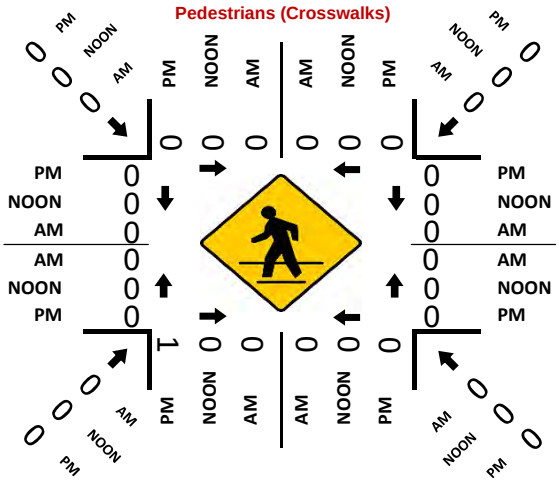
Cars (NOON)



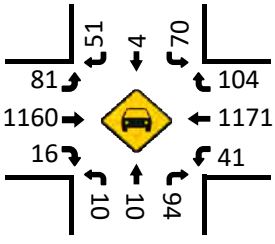
HT (NOON)



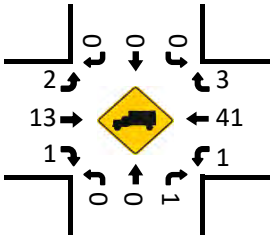
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)

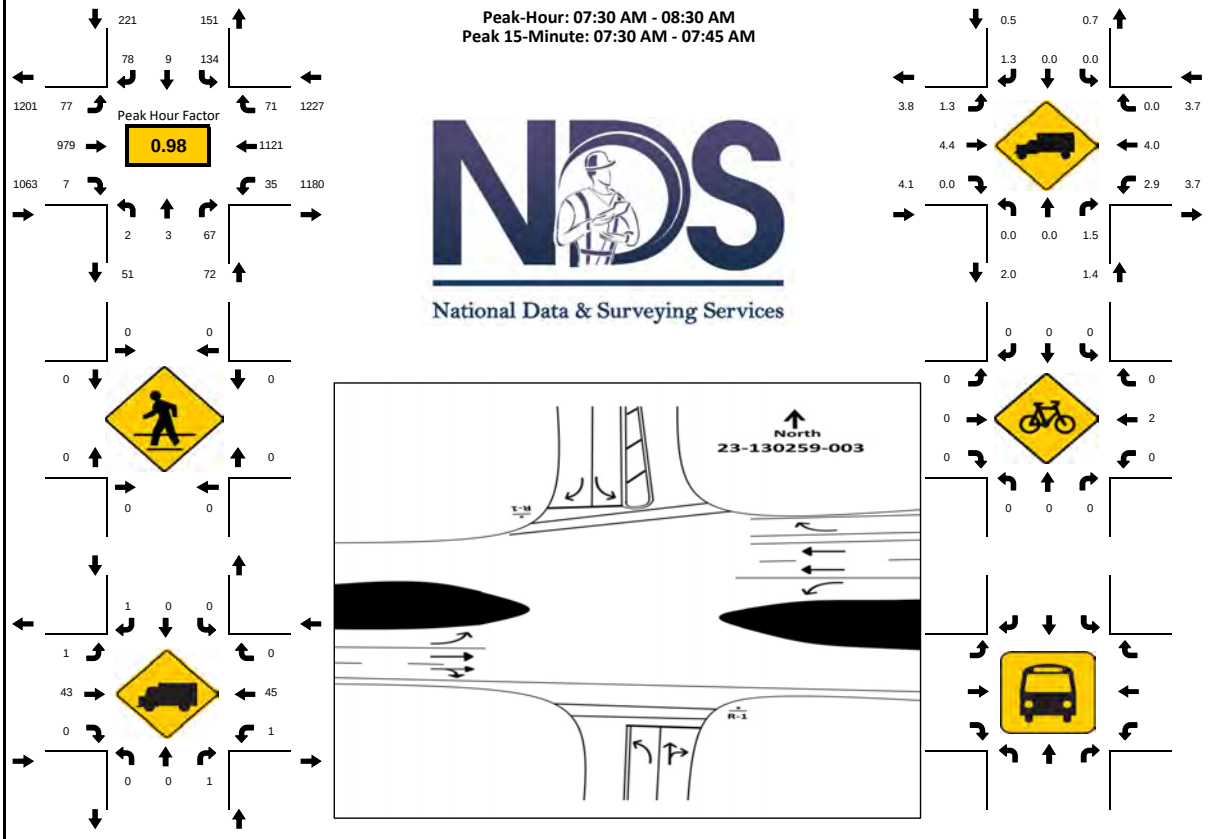


LOCATION: Michael Blake Blvd & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-003
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:30 AM - 08:30 AM
Peak 15-Minute: 07:30 AM - 07:45 AM

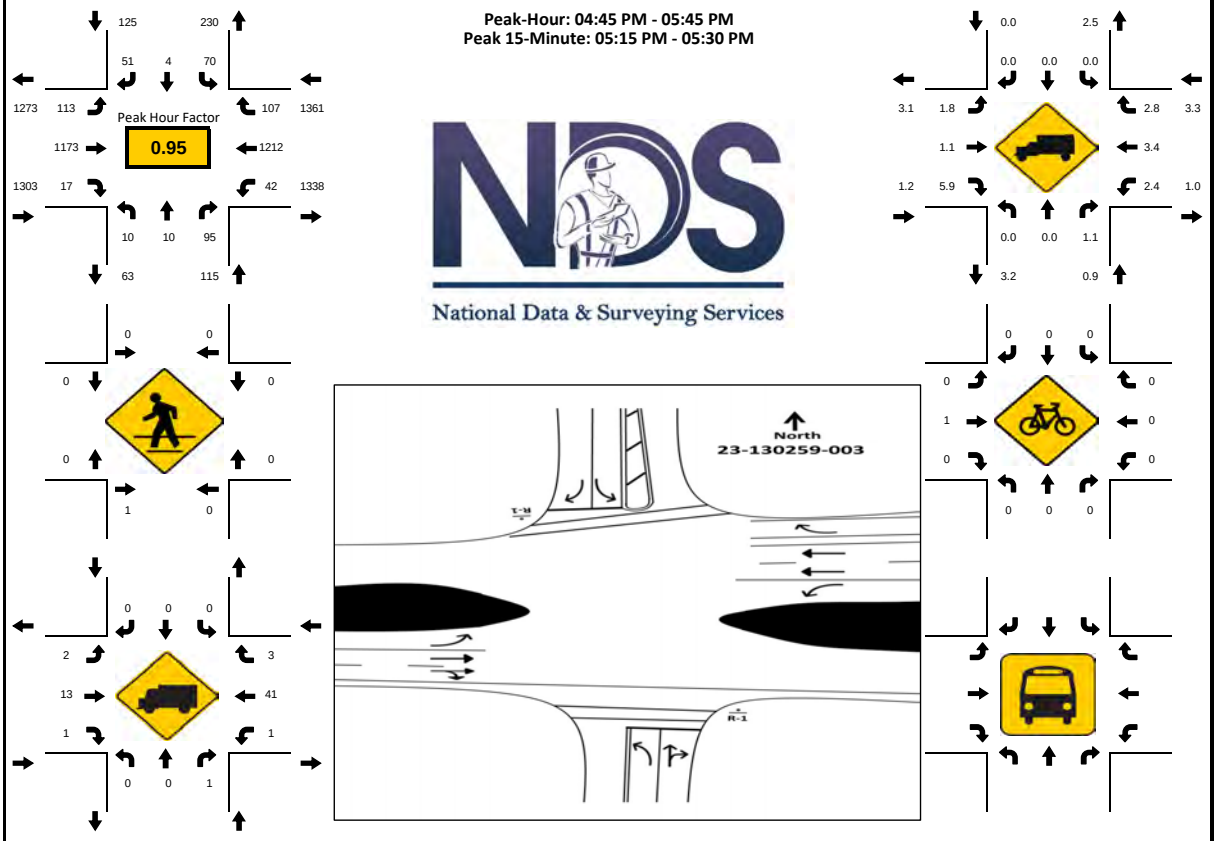
Peak Hour Factor: **0.98**



15-Min Count Period Beginning At	Michael Blake Blvd Northbound					Michael Blake Blvd Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	0	4	14	0		36	2	15	0		37	186	2	4		6	175	51	0		532	2427
7:15 AM	1	3	14	0		35	2	19	0		15	209	2	4		6	252	16	0		578	2505
7:30 AM	1	0	18	0		40	4	22	0		17	246	1	2		9	284	15	0		659	2583
7:45 AM	1	1	15	0		31	0	21	0		13	244	4	1		10	300	17	0		658	2566
8:00 AM	0	1	14	0		27	1	19	0		20	215	2	2		7	287	14	1		610	2477
8:15 AM	0	1	20	0		36	4	16	0		21	274	0	1		8	250	25	0		656	1867
8:30 AM	0	1	21	0		23	2	14	0		30	257	2	4		11	246	31	0		642	1211
8:45 AM	2	0	16	0		22	1	10	0		17	217	3	3		15	240	23	0		569	569
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	4	4	80	0		160	16	88	0		84	1096	16	8		40	1200	100	4		**2900**	
Heavy Trucks	0	0	4	0		0	0	4	0		4	60	0	0		4	60	0	0		**136**	
Pedestrians		0					0					0					0				**0**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	8	0	0		**8**	
Buses																						
Stopped Buses																						

LOCATION: Michael Blake Blvd & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-003
DATE: Tue, Sep 12, 2023



15-Min Count Period Beginning At	Michael Blake Blvd Northbound					Michael Blake Blvd Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	1	0	16	0		20	3	11	0		14	244	5	5		8	183	21	0		531	2498
4:15 PM	5	3	27	0		17	3	11	0		28	304	3	8		9	210	16	0		644	2676
4:30 PM	1	3	13	0		11	1	8	0		18	246	0	4		6	300	24	1		636	2798
4:45 PM	2	2	17	0		16	1	17	0		26	268	0	10		11	301	16	0		687	2904
5:00 PM	2	3	20	0		14	1	15	0		16	293	7	6		10	296	26	0		709	2827
5:15 PM	3	5	32	0		19	1	9	0		12	316	4	10		12	312	31	0		766	2118
5:30 PM	3	0	26	0		21	1	10	0		29	296	6	4		9	303	34	0		742	1352
5:45 PM	1	0	18	0		16	1	9	0		19	252	1	9		6	248	28	2		610	610
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	12	20	128	0		84	4	68	0		116	1264	28	40		48	1248	136	0		**3196**	
Heavy Trucks	0	0	4	0		0	0	0	0		4	24	4	0		4	64	8	0		**112**	
Pedestrians		4					0					0					0				**4**	
Bicycles	0	0	0	0		0	0	0	0		0	4	0	0		0	0	0	0		**4**	
Buses																						
Stopped Buses																						

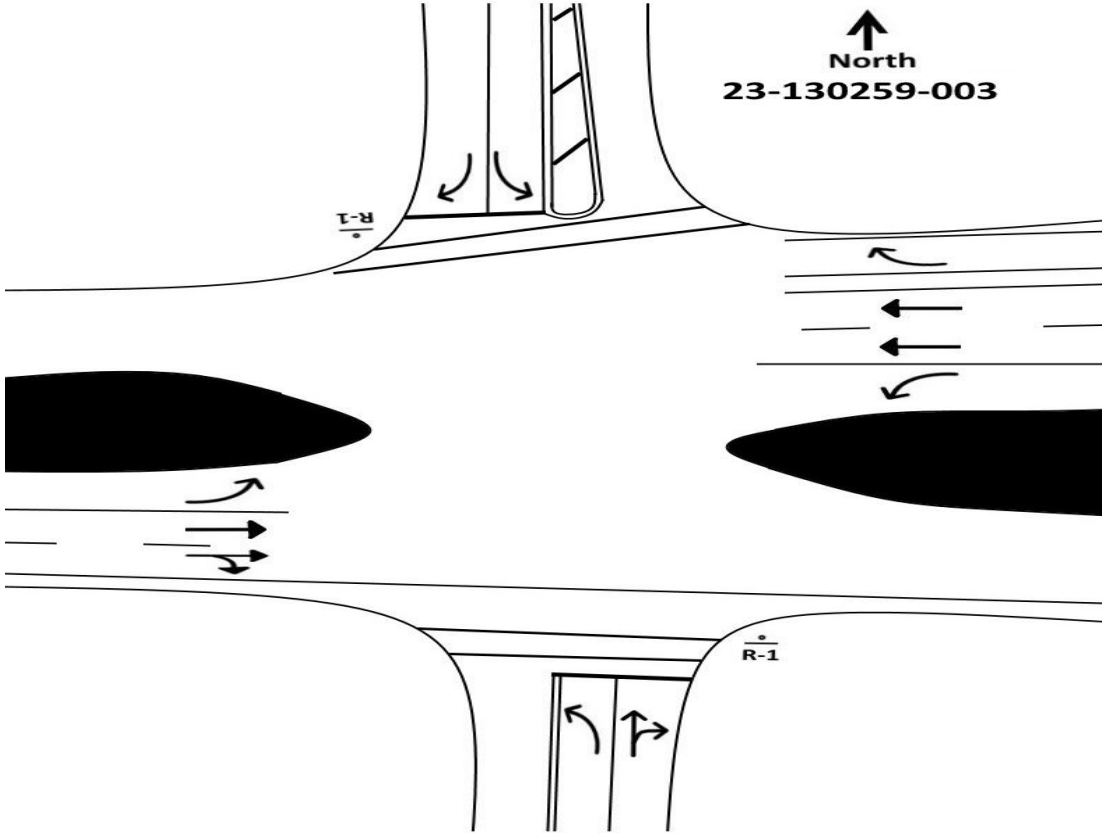
National Data & Surveying Services

Site Code:	**23-130259-003**
Date:	**09/12/2023**
Weather:	**Sunny**
City:	**Winter Springs**
County:	**Seminole**
Count Times:	**07:00 - 09:00**
	16:00 - 18:00
Control:	**2- Way Stop(NB/SB)**

N

N/S Street: **Michael Blake Blvd**

Speed: **25 MPH**



E/W Street: **SR 434/SR 419**

Speed: **45 MPH**

Prepared by National Data & Surveying Services

Tuskawilla Rd & Trotwood Blvd

Peak Hour Turning Movement Count

ID: 23-130259-004
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS		COUNT PERIODS
AM	07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Tuskawilla Rd)

AM	60	629	36	0	896	AM
NOON	0	0	0	0	0	NOON
PM	76	845	83	0	910	PM

EASTBOUND (Trotwood Blvd)

AM	NOON	PM	
80	0	159	
0	0	0	0
99	0	54	0
6	0	11	0
67	0	53	0
AM	NOON	PM	

WESTBOUND (Trotwood Blvd)

PM	NOON	AM	
82	0	123	0
7	0	5	0
67	0	59	0
0	0	0	0
190	0	52	
PM	NOON	AM	

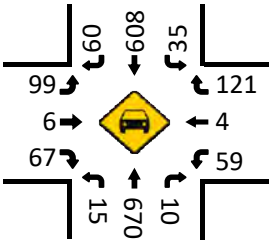
CONTROL: Signalized

TEV	1784 AM	0 NOON	2225 PM
PHF	0.92		0.96

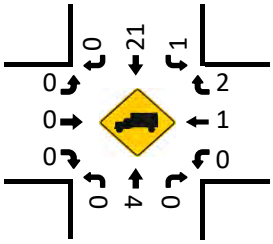
NORTHBOUND (Tuskawilla Rd)

PM	966	1	76	774	96	PM
NOON	0	0	0	0	0	NOON
AM	756	1	15	674	10	AM

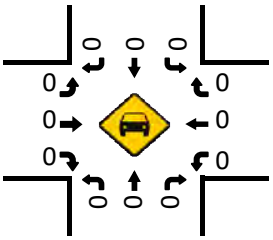
Cars (AM)



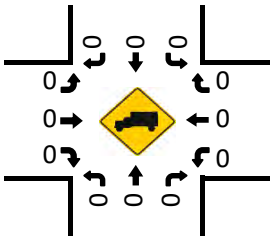
HT (AM)



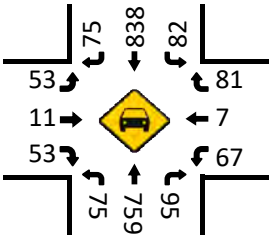
Cars (NOON)



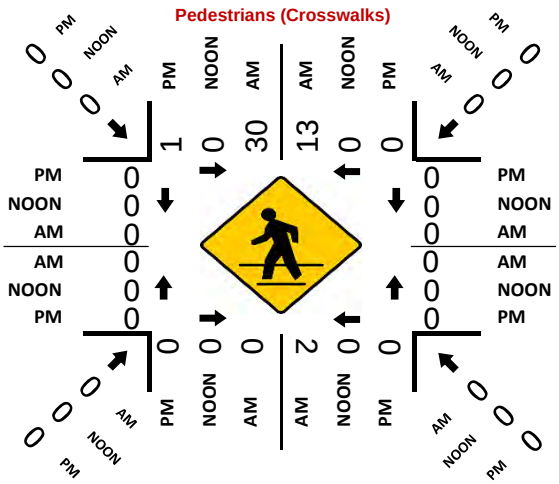
HT (NOON)



Cars (PM)



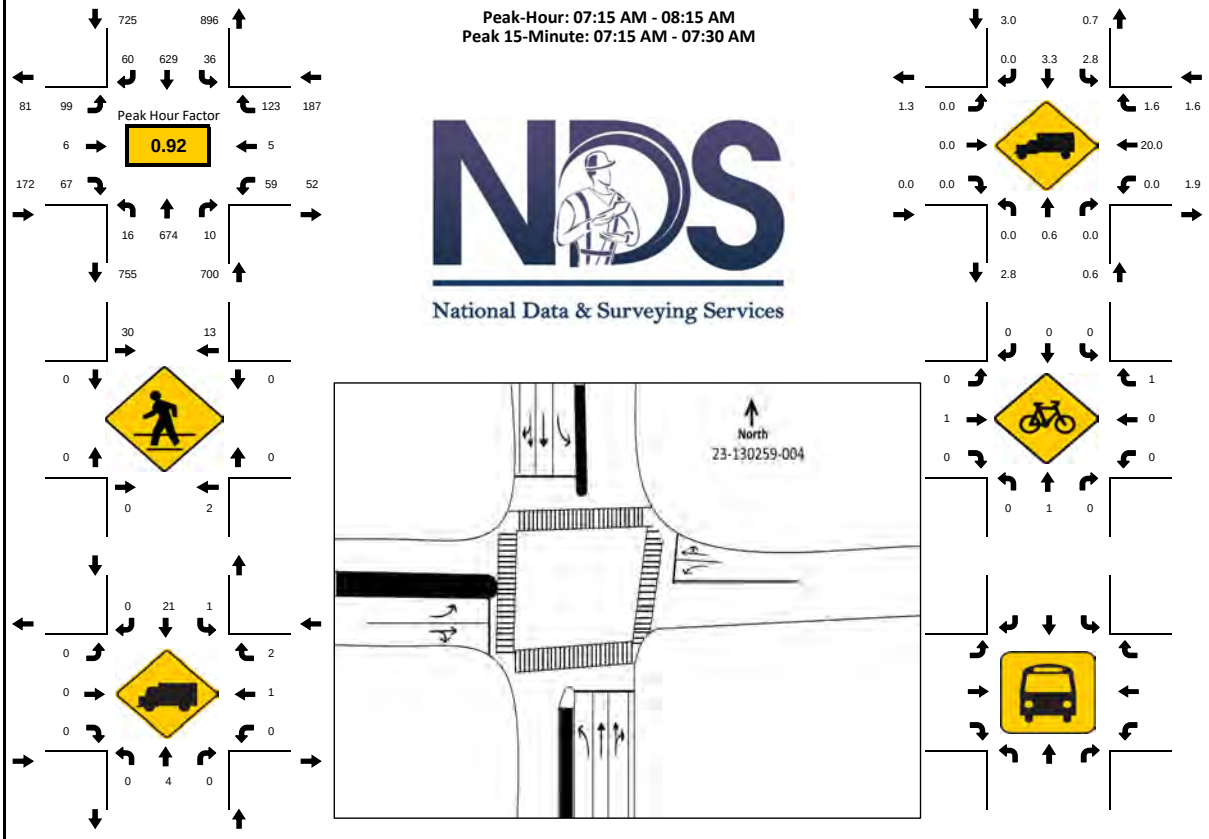
Pedestrians (Crosswalks)


PM
NOON
AM
0
1
0
30
13
0
0
0
0
0
0
0
0
0
0
0

LOCATION: Tuskawilla Rd & Trotwood Blvd
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-004
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:15 AM - 08:15 AM
Peak 15-Minute: 07:15 AM - 07:30 AM



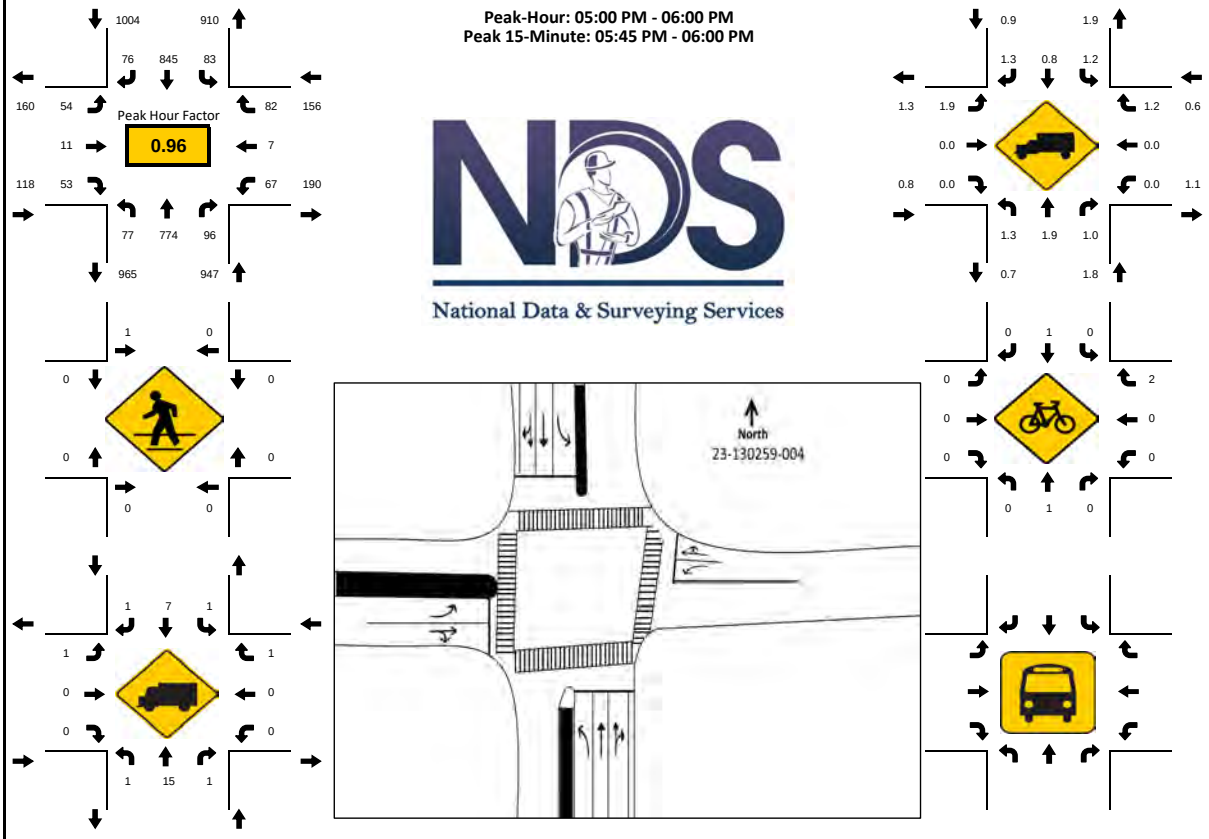
National Data & Surveying Services

15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					Trotwood Blvd Eastbound					Trotwood Blvd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	1	142	3	0		9	139	5	0		27	0	22	0		12	1	19	0		380	1773
7:15 AM	2	176	2	0		5	187	17	0		29	1	18	0		14	0	35	0		486	1784
7:30 AM	5	178	1	1		8	153	12	0		28	1	14	0		14	1	41	0		457	1703
7:45 AM	4	153	5	0		16	158	27	0		24	2	15	0		16	1	29	0		450	1653
8:00 AM	4	167	2	0		7	131	4	0		18	2	20	0		15	3	18	0		391	1620
8:15 AM	4	168	6	0		8	142	9	0		13	0	20	0		13	1	21	0		405	1229
8:30 AM	5	161	8	0		7	158	9	0		14	0	12	0		17	1	15	0		407	824
8:45 AM	5	170	11	0		13	157	4	0		16	0	11	0		16	0	14	0		417	417
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	20	712	20	4		64	748	108	0		116	8	80	0		64	12	164	0		**2120**	
Heavy Trucks	0	8	0	0		4	32	0	0		0	0	0	0		0	4	4	0		**52**	
Pedestrians		4					148					0					0				**152**	
Bicycles	0	4	0	0		0	0	0	0		0	4	0	0		0	0	4	0		**12**	
Buses																						
Stopped Buses																						

LOCATION: Tuskawilla Rd & Trotwood Blvd
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-004
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:45 PM - 06:00 PM



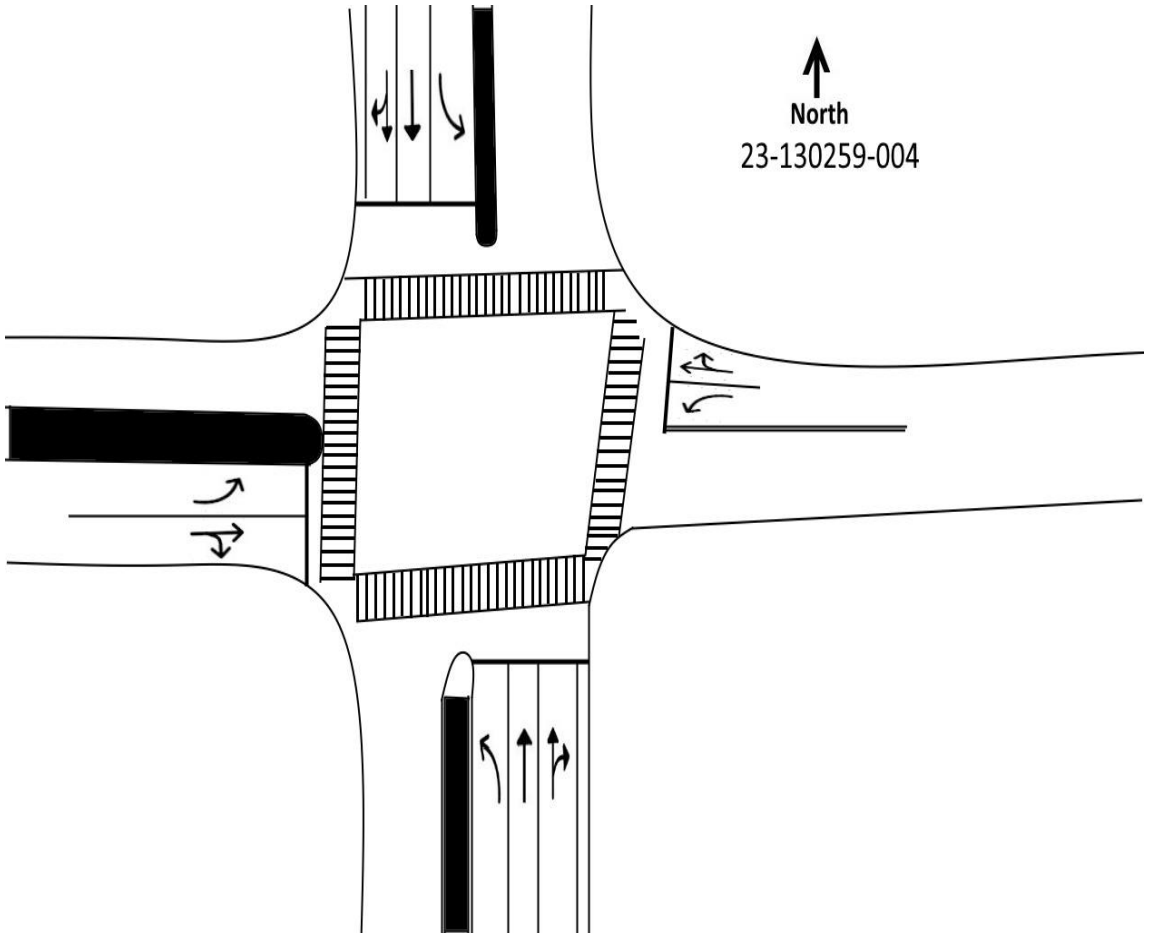
National Data & Surveying Services

15-Min Count Period Beginning At	Tuskawilla Rd Northbound					Tuskawilla Rd Southbound					Trotwood Blvd Eastbound					Trotwood Blvd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	11	176	15	0		17	176	14	0		4	1	8	0		9	1	10	0		442	2006
4:15 PM	18	166	26	0		26	239	19	0		17	2	12	0		16	1	28	0		570	2092
4:30 PM	16	190	19	0		19	181	17	0		12	0	15	0		11	2	19	0		501	2087
4:45 PM	15	182	26	0		21	175	18	0		11	3	10	0		17	3	12	0		493	2140
5:00 PM	15	195	22	0		16	197	19	0		14	2	11	0		16	2	19	0		528	2225
5:15 PM	19	205	26	0		18	205	20	0		12	4	17	0		18	2	19	0		565	1697
5:30 PM	20	185	28	1		20	217	22	0		13	2	13	0		17	2	14	0		554	1132
5:45 PM	22	189	20	0		29	226	15	0		15	3	12	0		16	1	30	0		578	578
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	88	820	112	4		116	904	88	0		60	16	68	0		72	8	120	0		**2476**	
Heavy Trucks	4	28	4	0		4	12	4	0		4	0	0	0		0	0	4	0		**64**	
Pedestrians		0					4					0					0				**4**	
Bicycles	0	4	0	0		0	4	0	0		0	0	0	0		0	0	4	0		**12**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

N/S Street: **Tuskawilla Rd**

Speed: **45/50 MPH**



E/W Street: **Trotwood Blvd**

Speed: **20 MPH**

Site Code: **23-130259-004**

Date: **09/12/2023**

Weather: **Sunny**

City: **Winter Springs**

County: **Seminole**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	**1**	**2**	**3**
NL/NT	00:15	-	-
SL/ST	-	00:17	-
NL/SL	-	-	00:13
NT/ST	01:05	00:43	00:49
EL/WL	00:13	00:13	-
WL/WT	00:41	00:16	-
EL/ET	-	-	00:17

Prepared by National Data & Surveying Services

Bear Springs Dr/McLeod's Way & SR 434/SR 419

Peak Hour Turning Movement Count

ID: 23-130259-005
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	3049	0	3635
PHF	0.92		0.98

SOUTHBOUND — Bear Springs Dr/McLeod's Way

AM	41	1	69	0	110	AM
NOON	0	0	0	0	0	NOON
PM	36	4	142	0	206	PM

EASTBOUND — SR 434/SR 419

AM	NOON	PM	
1618	0	1520	⇦
0	0	3	↶ 0
26	0	86	↱ 0
1204	0	1652	→ 0
2	0	14	↷ 0

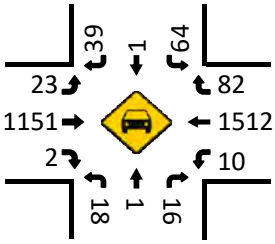
WESTBOUND — SR 434/SR 419

PM	NOON	AM	
117	0	83	0 ↰
1470	0	1559	0 ←
17	0	10	0 ↶
60	0	18	0 ↷
1874	0	1308	⇨

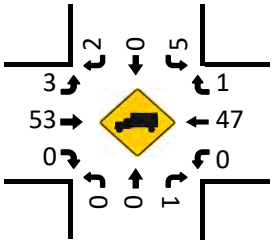
NORTHBOUND — Bear Springs Dr/McLeod's Way

PM	35	0	11	3	20	PM
NOON	0	0	0	0	0	NOON
AM	13	0	18	1	17	AM

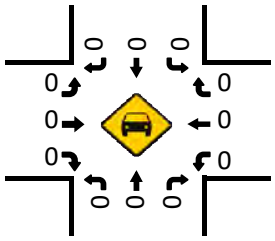
Cars (AM)



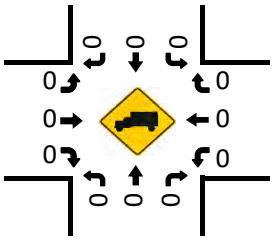
HT (AM)



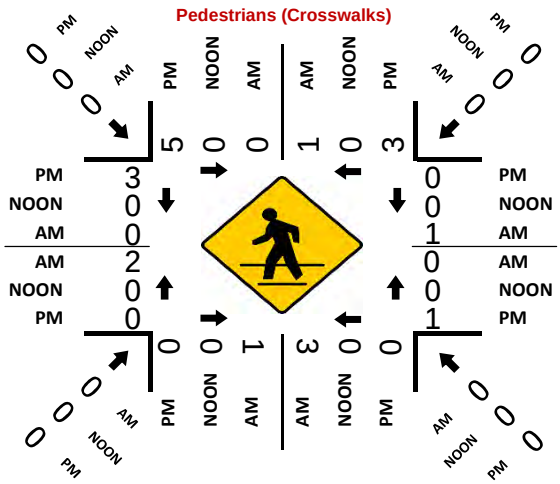
Cars (NOON)



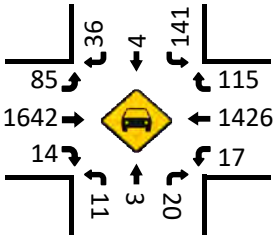
HT (NOON)



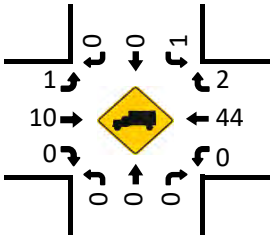
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)

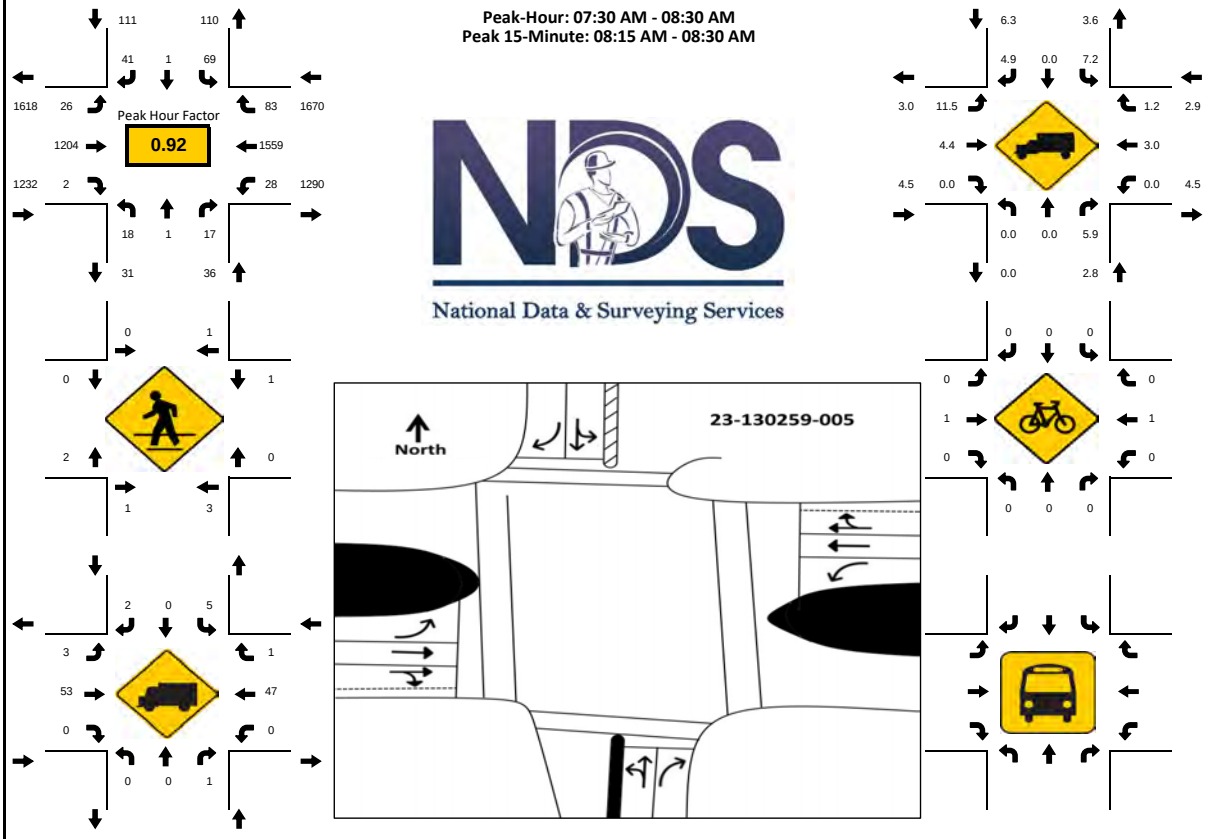


LOCATION: Bear Springs Dr/McLeod's Way & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-005
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:30 AM - 08:30 AM
Peak 15-Minute: 08:15 AM - 08:30 AM

Peak Hour Factor: **0.92**



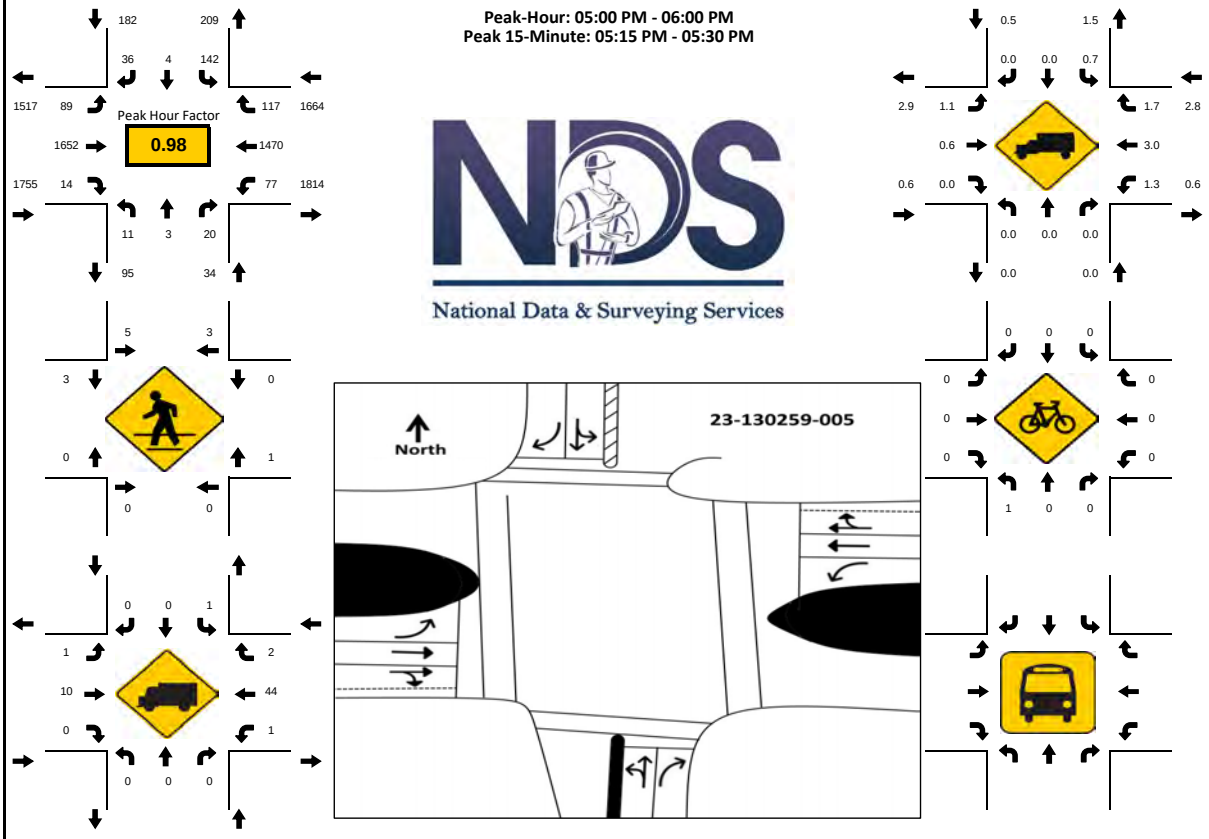
National Data & Surveying Services

15-Min Count Period Beginning At	Bear Springs Dr/McLeod's Way Northbound					Bear Springs Dr/McLeod's Way Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	3	0	7	0		46	1	14	0		18	255	0	0		0	281	43	5		673	2870
7:15 AM	5	0	8	0		51	0	15	0		5	267	0	0		2	328	14	4		699	2919
7:30 AM	6	0	4	0		17	0	13	0		4	302	1	0		0	389	18	5		759	3049
7:45 AM	6	1	4	0		11	0	5	0		3	271	1	0		6	408	18	5		739	3026
8:00 AM	5	0	5	0		18	0	14	0		8	248	0	0		2	395	23	4		722	2959
8:15 AM	1	0	4	0		23	1	9	0		11	383	0	0		2	367	24	4		829	2237
8:30 AM	7	1	6	0		11	0	12	0		9	367	0	1		2	297	17	6		736	1408
8:45 AM	1	0	6	0		12	0	6	0		14	324	0	0		2	286	10	11		672	672
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	24	4	20	0		92	4	56	0		44	1532	4	0		24	1632	96	20		**3552**	
Heavy Trucks	0	0	4	0		12	0	8	0		8	84	0	0		0	80	4	0		**200**	
Pedestrians		8					4					4					4				**20**	
Bicycles	0	0	0	0		0	0	0	0		0	4	0	0		0	4	0	0		**8**	
Buses																						
Stopped Buses																						

LOCATION: Bear Springs Dr/McLeod's Way & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-005
DATE: Tue, Sep 12, 2023

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



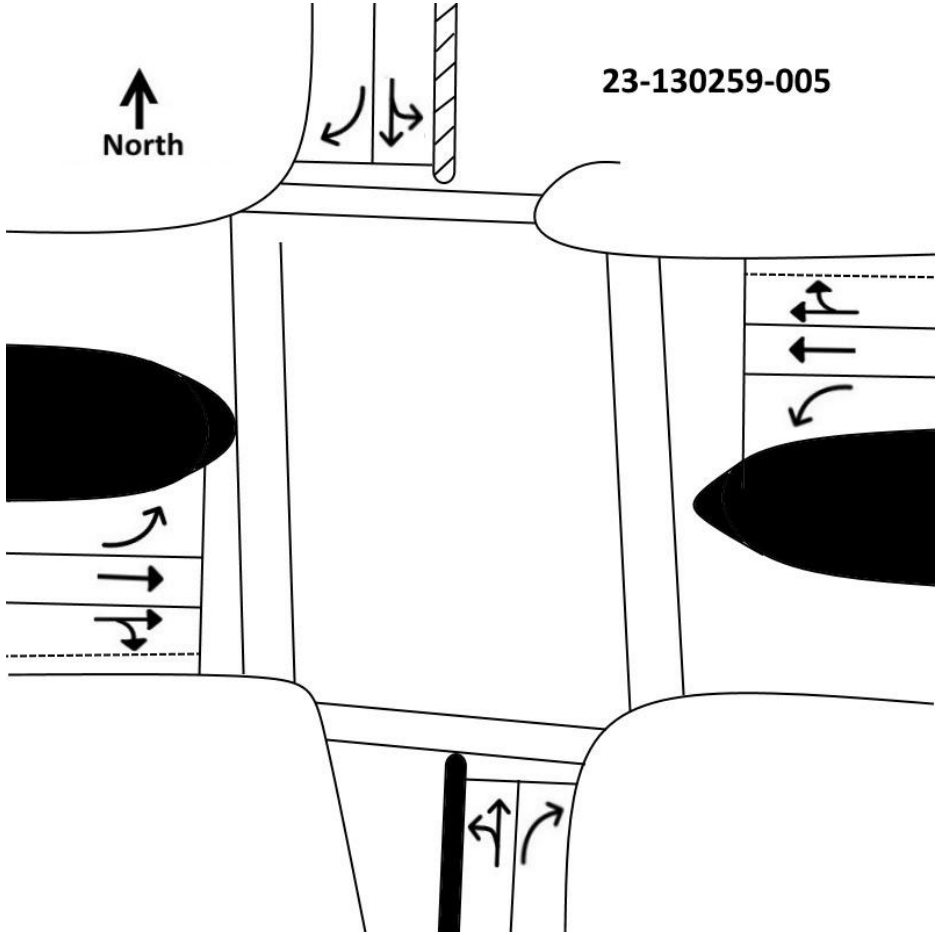
15-Min Count Period Beginning At	Bear Springs Dr/McLeod's Way Northbound					Bear Springs Dr/McLeod's Way Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	3	0	3	0		23	1	5	0		18	347	5	0		4	294	10	17		730	3194
4:15 PM	6	0	6	0		22	0	14	0		19	357	1	0		3	331	20	14		793	3360
4:30 PM	0	3	3	0		31	0	14	0		19	312	3	1		1	369	12	15		783	3490
4:45 PM	0	3	7	0		21	1	11	0		17	390	4	0		4	399	17	14		888	3618
5:00 PM	3	1	4	0		30	0	8	0		19	414	0	0		3	376	23	15		896	3635
5:15 PM	1	1	10	0		24	3	9	0		23	420	5	0		6	385	26	10		923	2739
5:30 PM	7	0	4	0		45	0	11	0		25	427	3	1		4	343	26	15		911	1816
5:45 PM	0	1	2	0		43	1	8	0		19	391	6	2		4	366	42	20		905	905
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	28	4	40	0		180	12	44	0		100	1708	24	8		24	1540	168	80		**3960**	
Heavy Trucks	0	0	0	0		4	0	0	0		4	12	0	0		0	76	8	4		**104**	
Pedestrians		0					16					8					4				**28**	
Bicycles	4	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		**4**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

N

N/S Street: **Bear Springs Dr/McLeod's Way**

Speed: **25 MPH**



E/W Street: **SR 434/SR 419**

Speed: **45 MPH**

Site Code: **23-130259-005**

Date: **09/12/2023**

Weather: **Sunny**

City: **Winter Springs**

County: **Seminole**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	1	2	3
SL/ST	00:34	-	00:20
NT/ST	-	00:30	00:16
EL/WL	00:18	-	-
ET/WT	01:58	02:20	02:14

Prepared by National Data & Surveying Services

Heritage Park St/Central Winds Dr & SR 434/SR 419

Peak Hour Turning Movement Count

ID: 23-130259-006
City: Winter Springs

Day: Tuesday
Date: 9/12/2023

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	3340	0	3697
PHF	0.90		0.97

SOUTHBOUND (Heritage Park St/Central Winds Dr)

	L	T	R	U	Total
AM	184	14	153	0	405
NOON	0	0	0	0	0
PM	141	6	94	0	398

EASTBOUND (SR 434/SR 419)

	L	T	R	U	Total
AM	1530	0	1449		
NOON	0	0	0	0	0
PM	200	0	210	0	410
	1099	0	1612	0	2711
	43	0	30	0	73

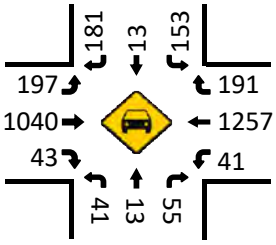
WESTBOUND (SR 434/SR 419)

	L	T	R	U	Total
PM	186	0	191	0	377
NOON	1286	0	1305	0	2591
AM	52	0	41	0	93
	0	0	0	0	0
	1762	0	1307		

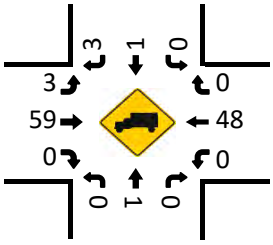
NORTHBOUND (Heritage Park St/Central Winds Dr)

	L	T	R	U	Total
PM	88	0	22	2	56
NOON	0	0	0	0	0
AM	98	0	41	14	55

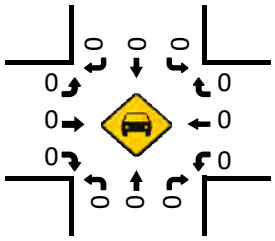
Cars (AM)



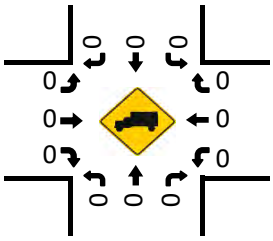
HT (AM)



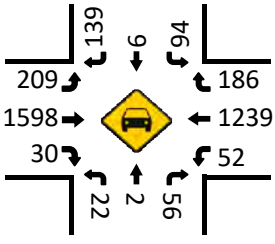
Cars (NOON)



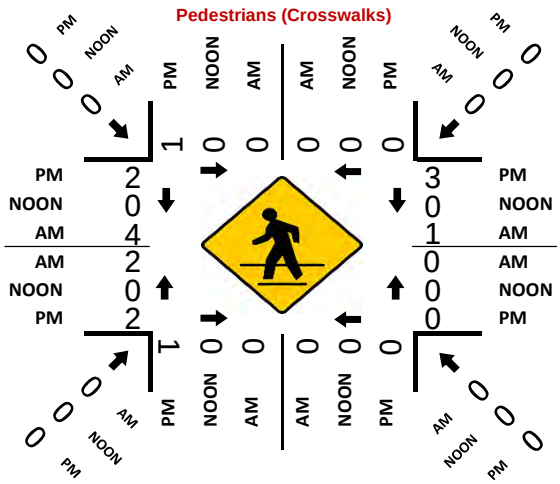
HT (NOON)



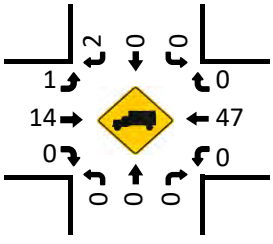
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)

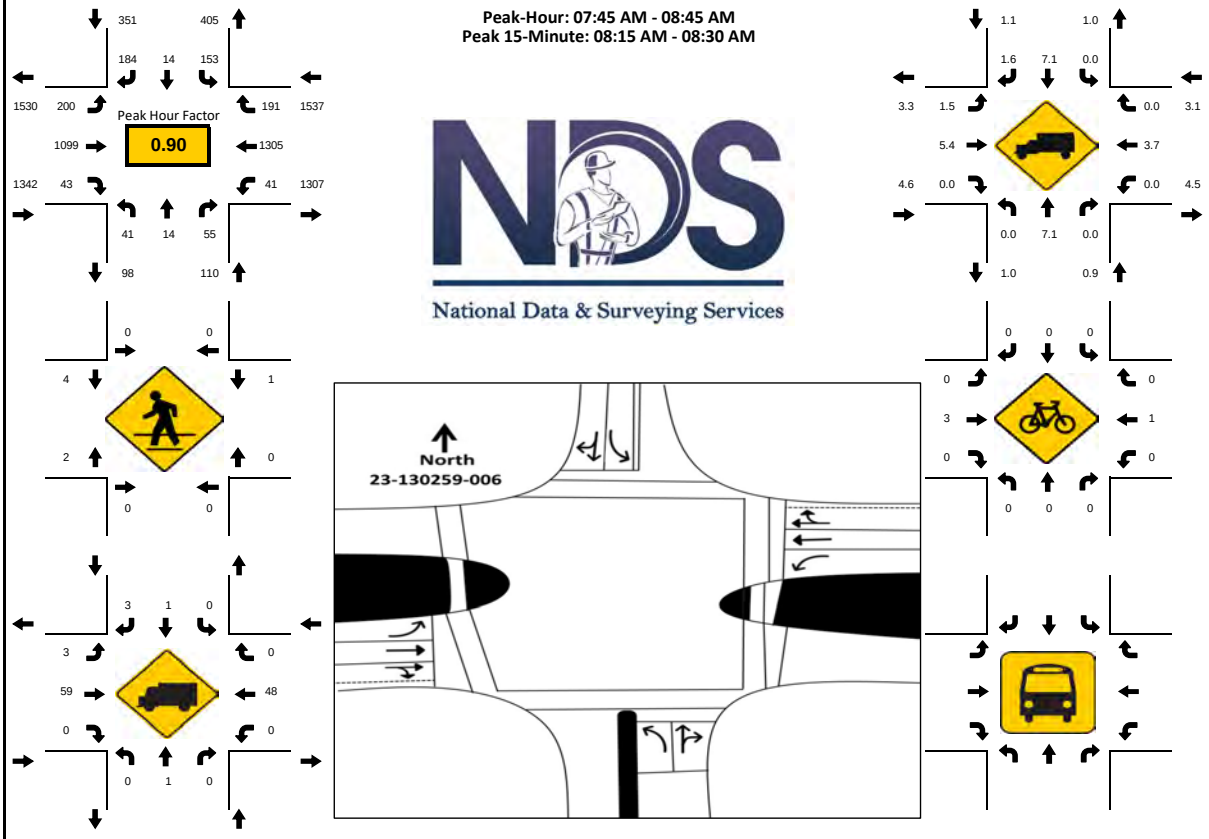


LOCATION: Heritage Park St/Central Winds Dr & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-006
DATE: Tue, Sep 12, 2023

Peak-Hour: 07:45 AM - 08:45 AM
Peak 15-Minute: 08:15 AM - 08:30 AM

Peak Hour Factor: **0.90**

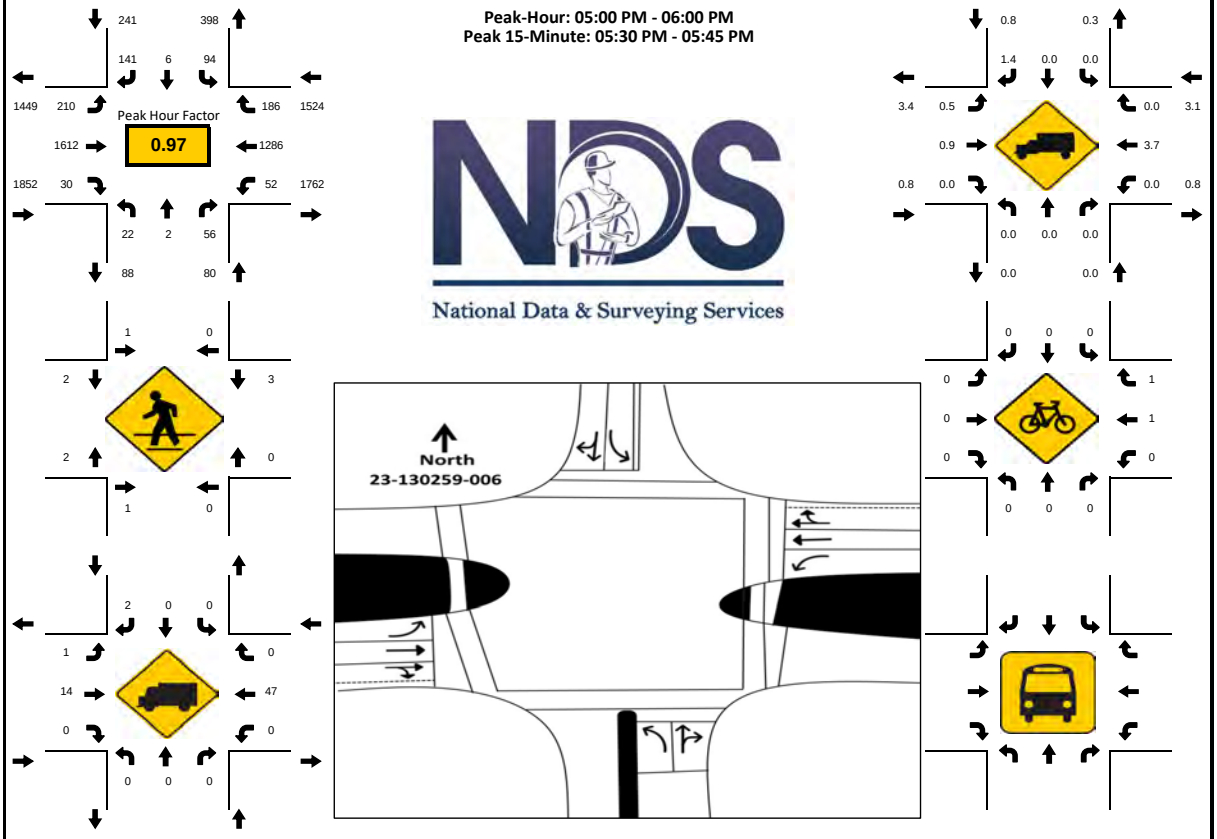


15-Min Count Period Beginning At	Heritage Park St/Central Winds D Northbound					Heritage Park St/Central Winds D Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	5	11	13	0		40	3	63	0		121	247	12	0		3	217	83	0		818	3175
7:15 AM	7	0	10	0		52	1	111	0		33	233	5	0		3	357	29	0		841	3146
7:30 AM	7	0	6	0		11	0	15	0		33	275	3	0		3	378	22	0		753	3235
7:45 AM	11	2	11	0		12	4	27	0		31	252	7	0		12	358	36	0		763	3340
8:00 AM	12	6	12	0		18	2	38	0		55	250	8	0		12	334	42	0		789	3246
8:15 AM	10	5	17	0		59	5	55	0		76	320	18	0		7	287	71	0		930	2457
8:30 AM	8	1	15	0		64	3	64	0		38	277	10	0		10	326	42	0		858	1527
8:45 AM	7	0	13	0		47	6	26	0		15	259	8	0		7	270	10	1		669	669
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	48	24	68	0		256	20	256	0		304	1280	72	0		48	1432	284	0		**4092**	
Heavy Trucks	0	4	0	0		0	4	4	0		8	92	0	0		0	72	0	0		**184**	
Pedestrians		0					0					12					4				**16**	
Bicycles	0	0	0	0		0	0	0	0		0	8	0	0		0	4	0	0		**12**	
Buses																						
Stopped Buses																						

LOCATION: Heritage Park St/Central Winds Dr & SR 434/SR 419
CITY/STATE: Winter Springs, FL

PROJECT ID: 23-130259-006
DATE: Tue, Sep 12, 2023

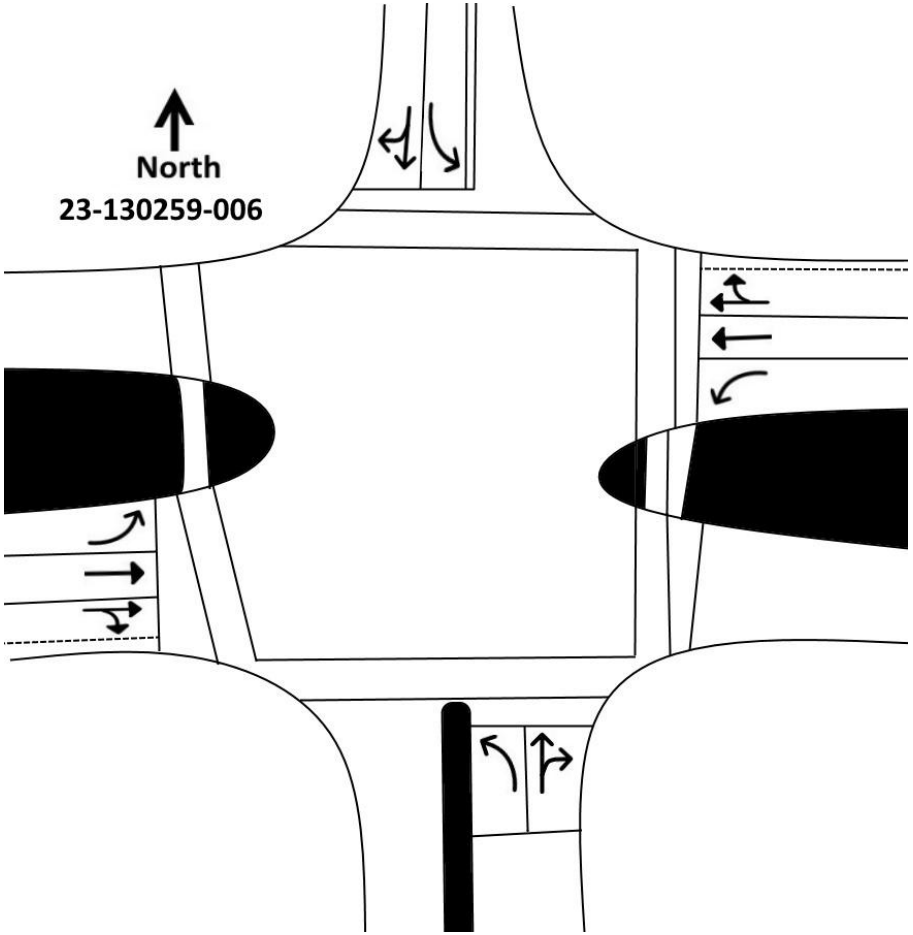
Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:30 PM - 05:45 PM



15-Min Count Period Beginning At	Heritage Park St/Central Winds D Northbound					Heritage Park St/Central Winds D Southbound					SR 434/SR 419 Eastbound					SR 434/SR 419 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	5	0	9	0		18	0	34	0		20	335	12	0		8	266	11	0		718	3167
4:15 PM	7	1	10	0		14	0	18	0		31	338	6	0		12	299	28	0		764	3373
4:30 PM	6	0	10	0		29	0	40	0		25	317	9	0		13	336	35	0		820	3486
4:45 PM	1	0	15	0		22	0	21	0		25	362	11	0		13	327	68	0		865	3623
5:00 PM	7	1	10	0		31	2	23	0		45	427	7	0		12	317	42	0		924	3697
5:15 PM	3	1	15	0		19	0	21	0		47	402	7	0		14	301	47	0		877	2773
5:30 PM	5	0	13	0		21	1	32	0		59	409	7	0		16	352	42	0		957	1896
5:45 PM	7	0	18	0		23	3	65	0		59	374	9	0		10	316	55	0		939	939
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	28	4	72	0		124	12	260	0		236	1708	36	0		64	1408	220	0		**4172**	
Heavy Trucks	0	0	0	0		0	0	8	0		4	20	0	0		0	76	0	0		**108**	
Pedestrians		4					4					8					12				**28**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	4	4	0		**8**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

N/S Street: **Heritage Park St/Central Winds Dr** | Speed: **N/A**



E/W Street: **SR 434/SR 419** | Speed: **XX**

Site Code: **23-130259-006**

Date: **09/12/2023**

Weather: **Sunny**

City: **Winter Springs**

County: **Seminole**

Count Times: **07:00 - 09:00**

16:00 - 18:00

Control: **Signalized**

SIGNAL TIMING

PHASES	1	2	3
NT/ST	00:21	00:25	00:23
WL/WT	00:27	00:21	00:24
ET/WT	01:25	01:26	01:26
EL/ET	00:38	00:39	00:36

2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 7700 SEMINOLE COUNTYWIDE

MOCF: 0.93

WEEK	DATES	SF	PSCF
1	01/01/2022 - 01/01/2022	1.00	1.08
2	01/02/2022 - 01/08/2022	1.03	1.11
3	01/09/2022 - 01/15/2022	1.05	1.13
4	01/16/2022 - 01/22/2022	1.03	1.11
5	01/23/2022 - 01/29/2022	1.01	1.09
6	01/30/2022 - 02/05/2022	0.98	1.05
7	02/06/2022 - 02/12/2022	0.96	1.03
* 8	02/13/2022 - 02/19/2022	0.94	1.01
* 9	02/20/2022 - 02/26/2022	0.93	1.00
*10	02/27/2022 - 03/05/2022	0.93	1.00
*11	03/06/2022 - 03/12/2022	0.92	0.99
*12	03/13/2022 - 03/19/2022	0.91	0.98
*13	03/20/2022 - 03/26/2022	0.92	0.99
*14	03/27/2022 - 04/02/2022	0.92	0.99
*15	04/03/2022 - 04/09/2022	0.93	1.00
*16	04/10/2022 - 04/16/2022	0.93	1.00
*17	04/17/2022 - 04/23/2022	0.94	1.01
*18	04/24/2022 - 04/30/2022	0.94	1.01
*19	05/01/2022 - 05/07/2022	0.95	1.02
*20	05/08/2022 - 05/14/2022	0.95	1.02
21	05/15/2022 - 05/21/2022	0.96	1.03
22	05/22/2022 - 05/28/2022	0.97	1.04
23	05/29/2022 - 06/04/2022	0.98	1.05
24	06/05/2022 - 06/11/2022	0.99	1.06
25	06/12/2022 - 06/18/2022	1.00	1.08
26	06/19/2022 - 06/25/2022	1.00	1.08
27	06/26/2022 - 07/02/2022	1.00	1.08
28	07/03/2022 - 07/09/2022	0.99	1.06
29	07/10/2022 - 07/16/2022	0.99	1.06
30	07/17/2022 - 07/23/2022	0.99	1.06
31	07/24/2022 - 07/30/2022	0.98	1.05
32	07/31/2022 - 08/06/2022	0.98	1.05
33	08/07/2022 - 08/13/2022	0.97	1.04
34	08/14/2022 - 08/20/2022	0.97	1.04
35	08/21/2022 - 08/27/2022	0.99	1.06
36	08/28/2022 - 09/03/2022	1.01	1.09
37	09/04/2022 - 09/10/2022	1.02	1.10
38	09/11/2022 - 09/17/2022	1.04	1.12
39	09/18/2022 - 09/24/2022	1.10	1.18
40	09/25/2022 - 10/01/2022	1.16	1.25
41	10/02/2022 - 10/08/2022	1.22	1.31
42	10/09/2022 - 10/15/2022	1.28	1.38
43	10/16/2022 - 10/22/2022	1.23	1.32
44	10/23/2022 - 10/29/2022	1.18	1.27
45	10/30/2022 - 11/05/2022	1.14	1.23
46	11/06/2022 - 11/12/2022	1.09	1.17
47	11/13/2022 - 11/19/2022	1.04	1.12
48	11/20/2022 - 11/26/2022	1.03	1.11
49	11/27/2022 - 12/03/2022	1.02	1.10
50	12/04/2022 - 12/10/2022	1.01	1.09
51	12/11/2022 - 12/17/2022	1.00	1.08
52	12/18/2022 - 12/24/2022	1.03	1.11
53	12/25/2022 - 12/31/2022	1.05	1.13

* PEAK SEASON

Seminole County Traffic Engineering Timing Sheet
Intersection: Tuskawilla Rd @ (01) Trotwood Blvd

Name	Tuskawilla		Trotwood		Tuskawilla		Trotwood		Ex-Ped								Phase Mode	User		Free Action		254			
Direction	NL	ST	EL	WT	SL	NT	WL	ET	P9								Free Seq	1		Syn Green					
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	InSync			P2P Pattern				
Phase/OL	1	2	3	4	5	6	7	8	9	10	11		13	14	15	16	Comm ID	2580		Node #		7578		
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	OLP	OLP	OLP	OLP	Date	August 16, 2023		Done By		SCTE\JVidal		
	Phase Times																Alt Phase Times 1							
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Phase							
Min Green	6	15	6	8	6	15	6	8									Min Green							
Passage	3	4	3	3	3	4	3	3									Passage							
Max 1	20	45	30	20	20	45	20	30									Max 1							
Max 2	20	100	30	20	20	100	20	30									Max 2							
Yellow Clr	4.8	4.8	3.4	3.4	4.8	4.8	3.4	3.4	3	3							Yel Clr							
Red Clr	2	2	2.6	3.2	2	2	2.2	3.2									Red Clr							
Walk		7		7		7		7	7	7							Walk							
Ped Clear		24		30		21		26	255	255							Ped Clr							
Red Revert	3	3	3	3	3	3	3	3	3	3							Alt Phase Times 2							
Added Init																	Phase							
Max Initial																	Min Green							
Max 3 Limit																	Passage							
Max 3 Step																	Max 1							
Time B-4																	Max 2							
Cars B-4																	Yel Clr							
Time to																	Red Clr							
Reduce By																	Walk							
Min Gap																	Ped Clr							
	Phase Options																	Alt Phase Opt 1						
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Phase	1	2	3	4	5	6	7	8
Enable	✓	✓	✓	✓	✓	✓	✓	✓									Max 2								
Min Recall		✓				✓											Max Inhibit	✓	✓	✓	✓	✓	✓		✓
Max Recall																	Cnf Phase								
Ped Recall																		Alt Phase Opt 2						
Soft Recall																	Phase	1	2	3	4	5	6	7	8
Lock Call		✓				✓											Max 2								
Flash Ent				✓				✓									Max Inhibit		✓				✓		
Flash Exit		✓				✓											Cnf Phase								
Dual Entry		✓		✓		✓		✓	✓	✓								Alt Phase Opt 3						
Sim Gap		✓				✓											Phase								
Cond Serv																	Max2								
Reservice																	Max Inhibit								
Cnf Phase																	Cnf Phase								

	Type		Included Phase								Modifier Phase								FYA	Grn	Yel	Red
Overlap - A																						
Overlap - B																						
Overlap - C																						
Overlap - D																						
Overlap - E																						
Overlap - F																						
Overlap - G	NORMAL		1	2	3	4															3	
Overlap - H	NORMAL		1	2	3	4	9	10													3	
Overlap - I																						
Overlap - J																						
Overlap - K																						
Overlap - L																						
Overlap - M	Ped 1		2	10																	4.5	2
Overlap - N	Ped 1		4	10																	4.5	2
Overlap - O	Ped 1		6	9																	4.5	2
Overlap - P	Ped 1		8	9																	4.5	2

Coordination Splits 1-16																	
Split 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	38	17	19	17	37	17	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	40	15	19	17	39	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =100	16	50	15	19	19	47	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =100	17	49	15	19	17	49	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	40	15	19	17	39	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	18	34	17	21	19	33	17	21									
Seq =1		✓															
Mode		MAX				MAX											
Split 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	40	15	19	17	39	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	18	34	17	21	19	33	17	21									
Seq =1		✓															
Mode		MAX				MAX											
Split 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =90	16	40	15	19	17	39	15	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =85	16	35	15	19	17	34	15	19									
Seq =1		✓															
Mode		MAX				MAX											

Day Plans 1-8								
Sunday	1	2	3	4	5			
Hour		9	11	17	20			
P Min		30	30	30	30			
L Action	48	8	18	9	48			
A								
N Hour								
Min								
1 Action								
Monday	1	2	3	4	5	6	7	
Hour		6	10	12	15	19	21	
P Min		30		30	30		30	
L Action	48	1	2	3	4	5	48	
A								
N Hour								
Min								
2 Action								
Tuesday	1	2	3	4	5	6	7	
Hour		6	10	12	15	19	21	
P Min		30		30	30		30	
L Action	48	1	2	3	4	5	48	
A								
N Hour								
Min								
3 Action								
Wednesday	1	2	3	4	5	6	7	
Hour		6	10	12	15	19	21	
P Min		30		30	30		30	
L Action	48	1	2	3	4	5	48	
A								
N Hour								
Min								
4 Action								
Thursday	1	2	3	4	5	6	7	
Hour		6	10	12	15	19	21	
P Min		30		30	30		30	
L Action	48	1	2	3	4	5	48	
A								
N Hour								
Min								
5 Action								
Friday	1	2	3	4	5	6	7	
Hour		6	10	11	15	19	21	
P Min		30		30	30		30	
L Action	48	1	2	3	4	5	48	
A								
N Hour								
Min								
6 Action								
Saturday	1	2	3	4	5			
Hour		8	10	19	22			
P Min								
L Action	48	6	16	7	48			
A								
N Hour								
Min								
7 Action								
Hour								
P Min								
L Action								
A								
N Hour								
Min								
8 Action								

Coordination Splits 17-32																	Day Plans 9-16	
Split 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =85	16	35	15	19	17	34	15	19									N	Hour
Seq =1		✓																Min
Mode		MAX				MAX											9	Action
Split 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	10	Action
Split 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	11	Action
Split 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	12	Action
Split 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	13	Action
Split 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	14	Action
Split 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	15	Action
Split 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	16	Action

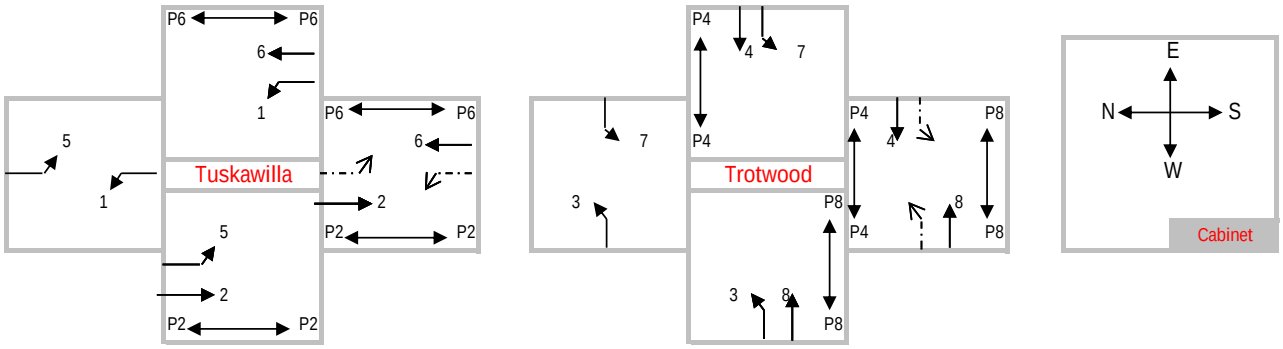
	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 1	90	38	1	1	2		1	1		12	22						✓									✓
Pattern - 2	90	68	2	1	2		1	1		12	22						✓									✓
Pattern - 3	100	12	3	1	2		1	1		12	22						✓									✓
Pattern - 4	100	19	4	1	2		1	1		12	22						✓									✓
Pattern - 5	90	42	5	1	2		1	1		12	22						✓									✓
Pattern - 6	90	42	6	1	2		1	1		12	22						✓									✓
Pattern - 7	90	42	7	1	2		1	1		12	22						✓									✓
Pattern - 8	90	42	8	1	2		1	1		12	22						✓									✓
Pattern - 9	90	42	9	1	2		1	1		12	22						✓									✓
Pattern - 10																										
Pattern - 11																										
Pattern - 12																										
Pattern - 13																										
Pattern - 14																										
Pattern - 15																										
Pattern - 16	85	42	16	1	2		1	1		12	22						✓									✓
Pattern - 17																										
Pattern - 18	85	42	18	1	2		1	1		12	22						✓									✓
Pattern - 19																										
Pattern - 20																										
Pattern - 21																										
Pattern - 22																										
Pattern - 23																										
Pattern - 24																										
Pattern - 25																										
Pattern - 26																										
Pattern - 27																										
Pattern - 28																										
Pattern - 29																										
Pattern - 30																										
Pattern - 31																										
Pattern - 32																										

	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 33																										
Pattern - 34																										
Pattern - 35																										
Pattern - 36																										
Pattern - 37																										
Pattern - 38																										
Pattern - 39																										
Pattern - 40																										
Pattern - 41																										
Pattern - 42																										
Pattern - 43																										
Pattern - 44																										
Pattern - 45																										
Pattern - 46																										
Pattern - 47																										
Pattern - 48																										

BIU-1	Call	Swt	Dly	Lck	Src	BIU-2	Call	Swt	Dly	Lck	Src	BIU-3	Call	Swt	Dly	Lck	Src	BIU-4	Call	Swt	Dly	Lck	Src
Detector 1	1	6				17						33						49					
Detector 2	2					18						34						50					
Detector 3	2					19						35						51					
Detector 4	2					20						36						52					
Detector 5	2					21						37						53					
Detector 6	3	8				22						38						54					
Detector 7	4		8			23						39						55					
Detector 8	5	2				24						40						56					
Detector 9	6					25						41						57					
Detector 10	6					26						42						58					
Detector 11	6					27						43						59					
Detector 12	6					28						44						60					
Detector 13	7	4				29						45						61					
Detector 14	8		8			30						46						62					
Detector 15						31						47						63					
Detector 16						32	3					48						64					

	Enbl	Track Phase				Grn	Track Overlap			Dwell Phase								Dwl	Dwell Overlap				Exit Phase			
Pre Run 1																										
Pre Run 2																										
Pre Run 3	ON									3	8								7	8			4	8		
Pre Run 4	ON									4	7								7	8			4	8		
Pre Run 5	ON									2	5								7	8			2	6		
Pre Run 6	ON									1	6								7	8			2	6		

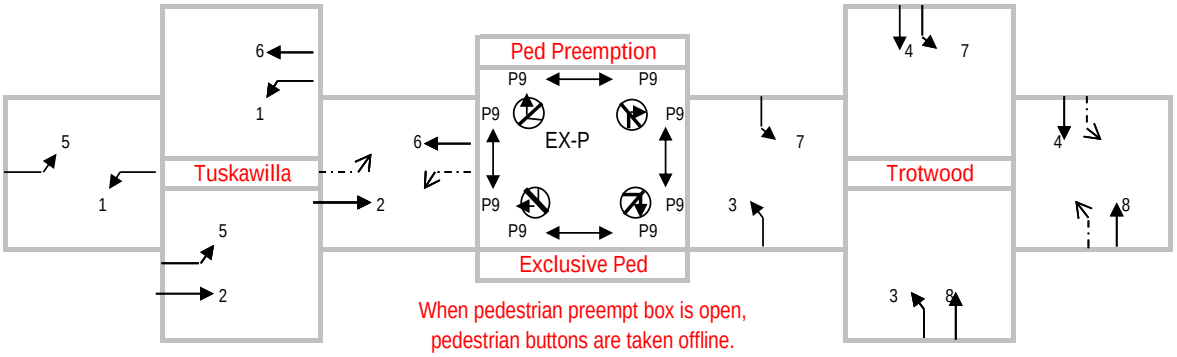
Intersection Notes	T.O.D Notes
Intersection set up with concurrent sides. All left turns are 5-sect. and Det. Switched. Intersection has Ped Pre-emption which brings up Ex-ped movement after ph 2&6. Combination of I/O logic and overlaps used for no right turn signs Ol G & H are used to reset the count downs for the ped crossings	Signal retimed March 2020. Pattern 48 used for normal Free operation. Ped Preemption uses 254. Ped button are taken offline when ped box door is opened. Signal runs coordination, preferred EXP operation is to keep box closed between actuations until EXP is needed every cycle, then leave door open.



Seg 1

Ring 1	1	2	3	4	9
Ring 2	5	6	7	8	10

Exlusive Ped Preemption Operation



When pedestrian preempt box is open, pedestrian buttons are taken offline.

Seminole County Traffic Engineering Timing Sheet
Intersection: SR 434 @ (36) Tuskawilla Rd

Name	SR 434		Tuskawilla		SR 434		Tuskawilla										Phase Mode	STD8	Free Action	254
Direction	WL	ET		ST	EL	WT		NT									Free Seq	9	Syn Green	
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	InSync		P2P Pattern	
Phase/OL	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	Comm ID	1365	Node #	2392
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	Date	February 7, 2023	Done By	SCTE\JVidal

Phase Times

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	6	15	6	6	6	15	6	6								
Passage	3	4	3	4	3	4	3	4								
Max 1	30	80	50	65	15	95	65	80								
Max 2	15	70	50	65	15	70	65	50								
Yellow Clr	4.9	4.9	4.8	3.4	4.9	4.9	3.4	4.8								
Red Clr	2.9	2.9	4.1	3.9	2.9	2.9	3.9	4.1								
Walk		7		7		7		7								
Ped Clear		33		40		21		41								
Red Revert	3	3	3	3	3	3	3	3								
Added Init																
Max Initial																
Max 3 Limit																
Max 3 Step																
Time B-4																
Cars B-4																
Time to																
Reduce By																
Min Gap																

Alt Phase Times 1

Phase			3	4			7	8
Min Green			6	6			6	6
Passage			6	6			6	6
Max 1			65	65			65	65
Max 2			65	65			65	65
Yel Clr			4.8	3.4			3.4	4.8
Red Clr			4.1	3.9			3.9	4.1
Walk				7				7
Ped Clr				40				41

Alt Phase Times 2

Phase								
Min Green								
Passage								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Phase Options

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable	✓	✓	✓	✓	✓	✓	✓	✓								
Min Recall		✓				✓										
Max Recall																
Ped Recall																
Soft Recall																
Lock Call	✓	✓		✓	✓	✓		✓								
Flash Ent			✓					✓								
Flash Exit		✓				✓										
Dual Entry		✓	✓	✓		✓	✓	✓								
Sim Gap		✓				✓										
Cond Serv																
Reservice																
Cnf Phase			7	8			3	4								

Alt Phase Opt 1

Phase	1	2	3	4	5	6	7	8
Max 2								
Max Inhibit	✓	✓	✓	✓	✓	✓	✓	✓
Cnf Phase			7	8			3	4

Alt Phase Opt 2

Phase	1	2	3	4	5	6	7	8
Max 2								
Max Inhibit		✓				✓		
Cnf Phase			7	8			3	4

Alt Phase Opt 3

Phase								
Max2								
Max Inhibit								
Cnf Phase								

	Type	Included Phase	Modifier Phase	FYA	Grn	Yel	Red
Overlap - A							
Overlap - B							
Overlap - C							
Overlap - D							
Overlap - E							
Overlap - F							
Overlap - G							
Overlap - H							
Overlap - I							
Overlap - J							
Overlap - K							
Overlap - L							
Overlap - M							
Overlap - N							
Overlap - O							
Overlap - P							

Coordination Splits 1-16																	
Split 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	29	66	57	28	18	77	28	57									
Seq =10		✓															
Mode		MIN				MIN											
Split 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	27	47	40	26	20	54	26	40									
Seq =9		✓															
Mode		MAX				MAX											
Split 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =170	26	78	37	29	18	86	29	37									
Seq =9		✓															
Mode		MAX				MAX											
Split 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	23	46	34	27	19	50	27	34									
Seq =10		✓															
Mode		MAX				MAX											
Split 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	23	40	28	19	18	45	19	28									
Seq =10		✓															
Mode		MAX				MAX											
Split 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	21	38	33	18	18	41	18	33									
Seq =6		✓															
Mode		MAX				MAX											
Split 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	23	40	28	19	18	45	19	28									
Seq =10		✓															
Mode		MAX				MAX											
Split 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	21	38	33	18	18	41	18	33									
Seq =6		✓															
Mode		MAX				MAX											
Split 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	23	45	78	34	20	48	34	78									
Seq =10		✓															
Mode		MIN				MIN											
Split 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	22	37	36	45	19	40	45	36									
Seq =9		✓															
Mode		MAX				MAX											
Split 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	26	38	33	33	18	46	33	33									
Seq =10		✓															
Mode		MAX				MAX											

Day Plans 1-8									
Sunday	1	2	3	4	5				
	Hour		9	10	18	19				
P	Min		30	30	30	30				
L	Action	99	8	18	9	99				
A										
N	Hour									
	Min									
1	Action									
Monday	1	2	3	4	5	6	7	8	
	Hour		6	6	7	7	9	14	14	
P	Min			45	10	30	30	15	45	
L	Action	99	1	11	21	1	3	13	3	
A		9	10	11						
N	Hour	15	19	21						
	Min	15								
2	Action	4	5	99						
Tuesday	1	2	3	4	5	6	7	8	
	Hour		6	6	7	7	9	14	14	
P	Min			45	10	30	30	15	45	
L	Action	99	1	11	21	1	3	13	3	
A		9	10	11						
N	Hour	15	19	21						
	Min	15								
3	Action	4	5	99						
Wednesday	1	2	3	4	5	6	7	8	
	Hour		6	6	7	7	9	13	13	
P	Min			45	10	30	30	15	45	
L	Action	99	1	11	21	1	3	13	3	
A		9	10	11						
N	Hour	15	19	21						
	Min	15								
4	Action	4	5	99						
Thursday	1	2	3	4	5	6	7	8	
	Hour		6	6	7	7	9	14	14	
P	Min			45	10	30	30	15	45	
L	Action	99	1	11	21	1	3	13	3	
A		9	10	11						
N	Hour	15	19	21						
	Min	15								
5	Action	4	5	99						
Friday	1	2	3	4	5	6	7	8	
	Hour		6	6	7	7	9	14	14	
P	Min			45	10	30	30	15	45	
L	Action	99	1	11	21	1	3	13	3	
A		9	10	11						
N	Hour	15	19	21						
	Min	15								
6	Action	4	5	99						
Saturday	1	2	3	4	5				
	Hour		8	9	17	20				
P	Min			30	30	30				
L	Action	99	6	16	7	99				
A										
N	Hour									
	Min									
7	Action									
	1	2	3	4	5	6	7	8	
	Hour		6	6	7	7	9	11	12	
P	Min			45	10	30	30	25	45	
L	Action	99	1	11	21	1	3	13	3	
A		9	10	11						
N	Hour	15	19	21						
	Min	15								
8	Action	4	5	99						

Coordination Splits 17-32																	Day Plans 9-16	
Split 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	25	92	40	33	20	97	33	40										Hour
Seq =6		✓															P	Min
Mode		MAX				MAX											L	Action
Split 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =130	26	38	33	33	18	46	33	33									N	Hour
Seq =10		✓																Min
Mode		MAX				MAX											9	Action
Split 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	25	92	40	33	20	97	33	40										Hour
Seq =9		✓															P	Min
Mode		MAX				MAX											L	Action
Split 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	10	Action
Split 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =180	23	46	55	56	23	46	55	56										Hour
Seq =10		✓															P	Min
Mode		MAX				MAX											L	Action
Split 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	11	Action
Split 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	12	Action
Split 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	13	Action
Split 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	14	Action
Split 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	15	Action
Split 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	16	Action

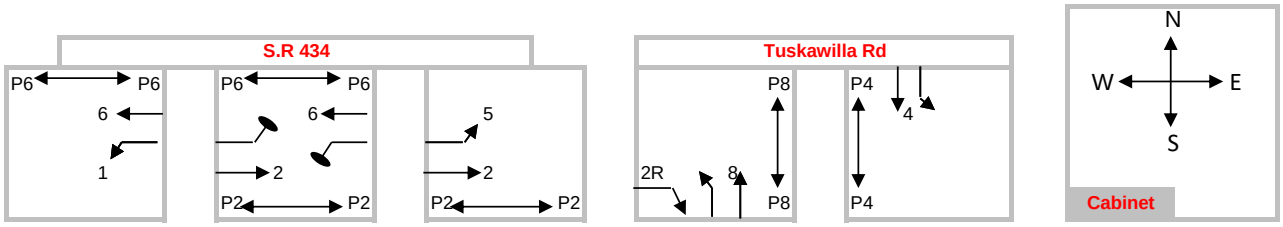
	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 1	180	1	1	10	2		1			12	22			10				✓								
Pattern - 2																										
Pattern - 3	140	13	3	9	2		1			12	22	1					✓	✓								
Pattern - 4	170	77	4	9	2		2			12	22					✓	✓	✓								
Pattern - 5	130	22	5	10	2		1			12	22						✓	✓								
Pattern - 6	110	64	6	10	2		1			12	22						✓	✓								
Pattern - 7	110	58	7	6	2		1			12	22						✓	✓								
Pattern - 8	110	64	8	10	2		1			12	22						✓	✓								
Pattern - 9	110	58	9	6	2		1			12	22						✓	✓								
Pattern - 10																										
Pattern - 11	180	1	11	10	2		1			12	22			10				✓								
Pattern - 12																										
Pattern - 13	140	10	13	9	2	1	2			12	22					✓	✓	✓								
Pattern - 14																										
Pattern - 15																										
Pattern - 16	130	8	16	10	2		2			12	22					✓	✓	✓								
Pattern - 17	190	141	17	6	2		1			12	22						✓	✓								
Pattern - 18	130	8	18	10	2		2			12	22					✓	✓	✓								
Pattern - 19	190	93	19	9	2		1			12	22						✓	✓								
Pattern - 20																										
Pattern - 21	180	1	21	10	2		1			12	22						✓	✓								
Pattern - 22																										
Pattern - 23																										
Pattern - 24																										
Pattern - 25																										
Pattern - 26																										
Pattern - 27																										
Pattern - 28																										
Pattern - 29																										
Pattern - 30																										
Pattern - 31																										
Pattern - 32																										

	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 33																										
Pattern - 34																										
Pattern - 35																										
Pattern - 36																										
Pattern - 37																										
Pattern - 38																										
Pattern - 39																										
Pattern - 40																										
Pattern - 41																										
Pattern - 42																										
Pattern - 43																										
Pattern - 44																										
Pattern - 45																										
Pattern - 46																										
Pattern - 47																										
Pattern - 48																										

BIU-1	Call	Swt	Dly	Lck	Src	BIU-2	Call	Swt	Dly	Lck	Src	BIU-3	Call	Swt	Dly	Lck	Src	BIU-4	Call	Swt	Dly	Lck	Src
Detector 1	1					17						33						49					
Detector 2	2					18						34						50					
Detector 3	2					19						35						51					
Detector 4	4					20						36						52					
Detector 5	4					21						37						53					
Detector 6	5					22						38						54					
Detector 7	6					23						39						55					
Detector 8	6					24						40						56					
Detector 9	6					25						41						57					
Detector 10	6					26						42						58					
Detector 11	8					27						43						59					
Detector 12	8					28						44						60					
Detector 13	8					29						45						61					
Detector 14						30						46						62					
Detector 15						31						47						63					
Detector 16						32						48						64					

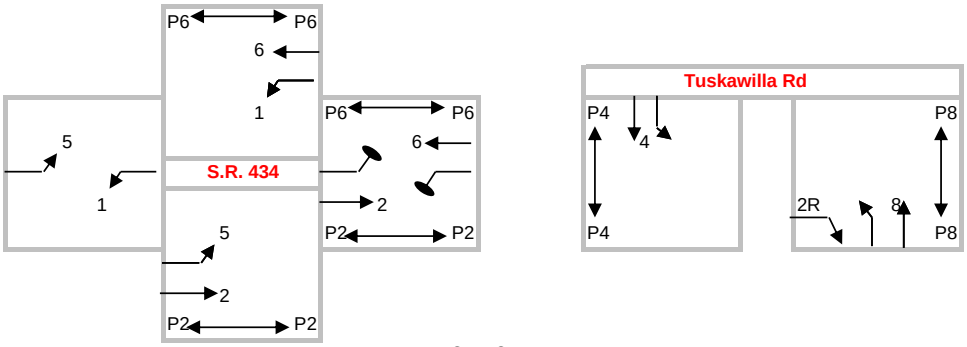
	Enbl	Track Phase				Grn	Track Overlap			Dwell Phase								Dwl	Dwell Overlap				Exit Phase			
Pre Run 1																										
Pre Run 2																										
Pre Run 3	ON									3	8												1	5		
Pre Run 4	ON									4	7												1	5		
Pre Run 5	ON									2	5												2	6		
Pre Run 6	ON									1	6												2	6		

Intersection Notes	T.O.D Notes
Intersection set as concurent sides. But operates as Q-Seq due to set up of controller (phases enabled and conflicting phases). Main street LT's changed to protected Jan 2018 per FDOT. 2R hardwired to Phase 8.	Intersection re-timed February 2020. Patterns 11,13 & 21 are used for High School rush. Alt Time Plan 1 to allow higher extend times to phase 4 for PM school rush time. Pattern 17 and 19 used for SR 417 diversion Route.



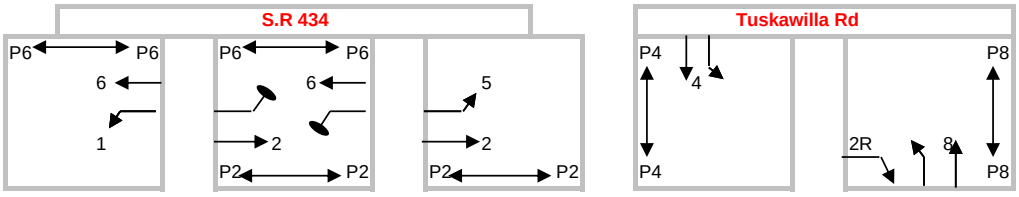
Seq 6

Ring 1	**1**	**2**	3	**4**
Ring 2	**6**	**5**	**8**	7



Seq 9

Ring 1	**1**	**2**	**4**	3
Ring 2	**5**	**6**	7	**8**



Seq 10

Ring 1	**1**	**2**	**4**	3
Ring 2	**6**	**5**	7	**8**

Seminole County Traffic Engineering Timing Sheet
Intersection: SR 434 @ (35) Bear Springs Dr

Name	SR 434		Bear Spgs		SR 434		Bear Spgs										Phase Mode	STD8			Free Action		254	
Direction	WL	ET		ST	EL	WT	SL	NT									Free Seq	1			Syn Green			
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	InSync				P2P Pattern			
Phase/OL	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	Comm ID	1360			Node #		12076	
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	Date	February 7, 2023			Done By		SCTE\JVidal	
	Phase Times																Alt Phase Times 1							
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Phase							
Min Green	6	15		8	6	15	6	8									Min Green							
Passage	3	5		3	3	5	3	3									Passage							
Max 1	30	120		25	30	110	20	20									Max 1							
Max 2	30	70		20	30	70	20	20									Max 2							
Yellow Clr	4.8	4.8		3.4	4.8	4.8	3.4	3.4									Yel Clr							
Red Clr	2.3	2		3.8	2.1	2	2.9	3.8									Red Clr							
Walk		7		7		7		7									Walk							
Ped Clear		19		32		19		31									Ped Clr							
Red Revert	3	3		3	3	3	3	3									Alt Phase Times 2							
Added Init																	Phase							
Max Initial																	Min Green							
Max 3 Limit																	Passage							
Max 3 Step																	Max 1							
Time B-4																	Max 2							
Cars B-4																	Yel Clr							
Time to																	Red Clr							
Reduce By																	Walk							
Min Gap																	Ped Clr							
	Phase Options																	Alt Phase Opt 1						
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Phase	1	2		4	5	6	7	8
Enable	✓	✓		✓	✓	✓	✓	✓									Max 2								
Min Recall		✓				✓											Max Inhibit	✓	✓		✓	✓	✓	✓	✓
Max Recall																	Cnf Phase								
Ped Recall																		Alt Phase Opt 2						
Soft Recall																	Phase	1	2		4	5	6	7	8
Lock Call	✓	✓			✓	✓											Max 2								
Flash Ent				✓				✓									Max Inhibit		✓				✓		
Flash Exit		✓				✓											Cnf Phase								
Dual Entry		✓		✓		✓	✓											Alt Phase Opt 3						
Sim Gap		✓				✓											Phase							
Cond Serv																	Max2							
Reservice																	Max Inhibit							
Cnf Phase																	Cnf Phase							

	Type	Included Phase	Modifier Phase	FYA	Grn	Yel	Red
Overlap - A							
Overlap - B							
Overlap - C							
Overlap - D							
Overlap - E							
Overlap - F							
Overlap - G							
Overlap - H							
Overlap - I							
Overlap - J							
Overlap - K							
Overlap - L							
Overlap - M							
Overlap - N							
Overlap - O							
Overlap - P							

Coordination Splits 1-16																	
Split 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	17	123		40	16	124	19	21									
Seq =1		✓															
Mode		MAX				MAX											
Split 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	18	85		37	19	84	18	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =170	19	116		35	24	111	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	19	72		39	18	73	16	23									
Seq =1		✓															
Mode		MAX				MAX											
Split 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	17	58		35	16	59	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	17	58		35	16	59	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	17	58		35	16	59	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	17	58		35	16	59	16	19									
Seq =1		✓															
Mode		MAX				MAX											
Split 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	17	76		37	16	77	18	19									
Seq =1		✓															
Mode		MAX				MAX											

Day Plans 1-8									
Sunday	1	2	3	4	5				
	Hour		9	10	18	19			
P	Min		30	30	30	30			
L	Action	254	8	18	9	254			
A									
N	Hour								
	Min								
1	Action								
Monday	1	2	3	4	5	6			
	Hour		6	9	15	19	21		
P	Min			30	15				
L	Action	254	1	3	4	5	254		
A									
N	Hour								
	Min								
2	Action								
Tuesday	1	2	3	4	5	6			
	Hour		6	9	15	19	21		
P	Min			30	15				
L	Action	254	1	3	4	5	254		
A									
N	Hour								
	Min								
3	Action								
Wednesday	1	2	3	4	5	6			
	Hour		6	9	15	19	21		
P	Min			30	15				
L	Action	254	1	3	4	5	254		
A									
N	Hour								
	Min								
4	Action								
Thursday	1	2	3	4	5	6			
	Hour		6	9	15	19	21		
P	Min			30	15				
L	Action	254	1	3	4	5	254		
A									
N	Hour								
	Min								
5	Action								
Friday	1	2	3	4	5	6			
	Hour		6	9	15	19	21		
P	Min			30	15				
L	Action	254	1	3	4	5	254		
A									
N	Hour								
	Min								
6	Action								
Saturday	1	2	3	4	5				
	Hour		8	9	17	20			
P	Min			30	30	30			
L	Action	254	6	16	7	254			
A									
N	Hour								
	Min								
7	Action								
	Hour								
P	Min								
L	Action								
A									
N	Hour								
	Min								
8	Action								

Coordination Splits 17-32																	Day Plans 9-16	
Split 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	20	131		39	26	125	20	19										Hour
Seq =1		✓															P	Min
Mode		MAX				MAX											L	Action
Split 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =130	17	76		37	16	77	18	19									N	Hour
Seq =1		✓																Min
Mode		MAX				MAX											9	Action
Split 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	20	131		39	26	125	20	19										Hour
Seq =1		✓															P	Min
Mode		MAX				MAX											L	Action
Split 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	10	Action
Split 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	11	Action
Split 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	12	Action
Split 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	13	Action
Split 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	14	Action
Split 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	15	Action
Split 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	16	Action

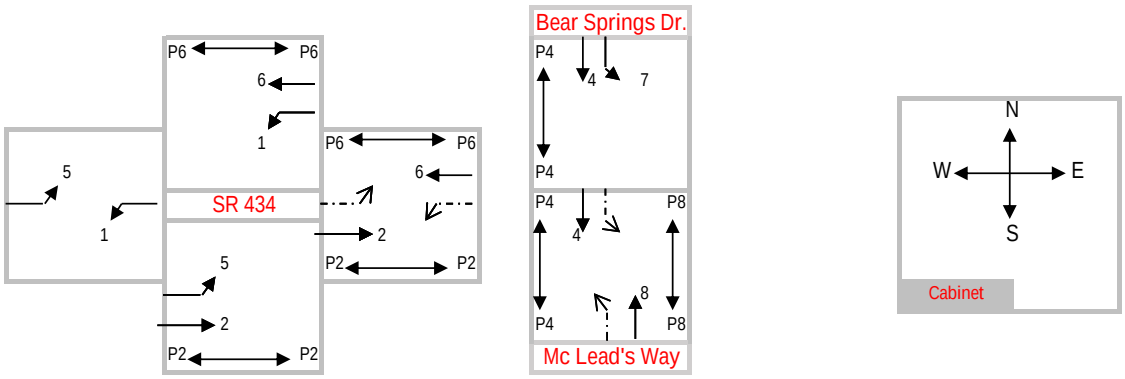
	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 1	180	20	1	1	2		1			12	22						✓	✓								
Pattern - 2																										
Pattern - 3	140	29	3	1	2		2			12	22					✓	✓	✓								
Pattern - 4	170	79	4	1	2		1			12	22						✓	✓								
Pattern - 5	130	11	5	1	2		1			12	22						✓	✓								
Pattern - 6	110	58	6	1	2		1			12	22						✓	✓								
Pattern - 7	110	52	7	1	2		1			12	22						✓	✓								
Pattern - 8	110	58	8	1	2		1			12	22						✓	✓								
Pattern - 9	110	52	9	1	2		1			12	22						✓	✓								
Pattern - 10																										
Pattern - 11																										
Pattern - 12																										
Pattern - 13																										
Pattern - 14																										
Pattern - 15																										
Pattern - 16	130	19	16	1	2		1			12	22						✓	✓								
Pattern - 17	190	155	17	1	2		1			12	22						✓	✓								
Pattern - 18	130	19	18	1	2		1			12	22						✓	✓								
Pattern - 19	190	138	19	1	2		1			12	22						✓	✓								
Pattern - 20																										
Pattern - 21																										
Pattern - 22																										
Pattern - 23																										
Pattern - 24																										
Pattern - 25																										
Pattern - 26																										
Pattern - 27																										
Pattern - 28																										
Pattern - 29																										
Pattern - 30																										
Pattern - 31																										
Pattern - 32																										

	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 33																										
Pattern - 34																										
Pattern - 35																										
Pattern - 36																										
Pattern - 37																										
Pattern - 38																										
Pattern - 39																										
Pattern - 40																										
Pattern - 41																										
Pattern - 42																										
Pattern - 43																										
Pattern - 44																										
Pattern - 45																										
Pattern - 46																										
Pattern - 47																										
Pattern - 48																										

BIU-1	Call	Swt	Dly	Lck	Src	BIU-2	Call	Swt	Dly	Lck	Src	BIU-3	Call	Swt	Dly	Lck	Src	BIU-4	Call	Swt	Dly	Lck	Src
Detector 1	1	6				17						33						49					
Detector 2	2					18						34						50					
Detector 3	2					19						35						51					
Detector 4	2					20						36						52					
Detector 5	2					21						37						53					
Detector 6	8					22						38						54					
Detector 7	4		8			23						39						55					
Detector 8	5	2				24						40						56					
Detector 9	6					25						41						57					
Detector 10	6					26						42						58					
Detector 11	6					27						43						59					
Detector 12	6					28						44						60					
Detector 13	7					29						45						61					
Detector 14	8		8			30						46						62					
Detector 15						31						47						63					
Detector 16						32						48						64					

	Enbl	Track Phase				Grn	Track Overlap			Dwell Phase								Dwl	Dwell Overlap				Exit Phase			
Pre Run 1																										
Pre Run 2																										
Pre Run 3	ON									8													4	8		
Pre Run 4	ON									4	7												4	8		
Pre Run 5	ON									2	5												2	6		
Pre Run 6	ON									1	6												2	6		

Intersection Notes	T.O.D Notes
Intersection set up with concurent sides. Phases 1 & 5 are 5_sec and use Det switching. Phase 7 extended with sourcing if no call on 8.	Intersection re-timed Feb 2020. Patterns 17 and 19 are used for SR 417 Diversion Routes.



Seq 1

Ring 1	1	2	3	4
Ring 2	5	6	7	8

Seminole County Traffic Engineering Timing Sheet
Intersection: SR 434 @ (34) Central Winds

Name	SR 434		Cntrl Wnds		SR 434		Cntrl Wnds										Phase Mode	STD8			Free Action		254	
Direction	WL	ET		ST	EL	WT		NT									Free Seq	1			Syn Green			
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	InSync				P2P Pattern			
Phase/OL	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	Comm ID	1355			Node #		10641	
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	Date	February 6, 2023			Done By		SCTE\JVidal	

Phase Times																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green	6	15		8	6	15		8								
Passage	4	5		5	5	5		4								
Max 1	20	120		35	45	85		35								
Max 2	20	70		35	20	70		20								
Yellow Clr	4.8	4.8		3.4	4.8	4.8		3.4								
Red Clr	2.8	2.8		2.9	2.8	2.8		2.9								
Walk		7		7		7		7								
Ped Clear		28		31		26		32								
Red Revert	3	3		3	3	3		3								
Added Init																
Max Initial																
Max 3 Limit																
Max 3 Step																
Time B-4																
Cars B-4																
Time to																
Reduce By																
Min Gap																

Alt Phase Times 1								
Phase				4	5			
Min Green				8	6			
Passage				10	7			
Max 1				80	50			
Max 2				80	50			
Yel Clr				3.4	4.8			
Red Clr				2.9	2.8			
Walk				7				
Ped Clr				31				

Alt Phase Times 2								
Phase								
Min Green								
Passage								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Phase Options																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable	✓	✓		✓	✓	✓		✓								
Min Recall		✓				✓										
Max Recall																
Ped Recall																
Soft Recall																
Lock Call	✓	✓		✓	✓	✓		✓								
Flash Ent				✓				✓								
Flash Exit		✓				✓										
Dual Entry		✓		✓		✓		✓								
Sim Gap		✓				✓										
Cond Serv																
Reservice																
Cnf Phase																

Alt Phase Opt 1								
Phase	1	2		4	5	6		8
Max 2								
Max Inhibit	✓	✓		✓	✓	✓		✓
Cnf Phase								

Alt Phase Opt 2								
Phase	1	2		4	5	6		8
Max 2								
Max Inhibit		✓				✓		
Cnf Phase								

Alt Phase Opt 3								
Phase								
Max2								
Max Inhibit								
Cnf Phase								

	Type	Included Phase	Modifier Phase	FYA	Grn	Yel	Red
Overlap - A							
Overlap - B							
Overlap - C							
Overlap - D							
Overlap - E							
Overlap - F							
Overlap - G							
Overlap - H							
Overlap - I							
Overlap - J							
Overlap - K							
Overlap - L							
Overlap - M							
Overlap - N							
Overlap - O							
Overlap - P							

Coordination Splits 1-16																	
Split 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	21	109		50	42	88		50									
Seq =3						✓											
Mode		MAX				MAX											
Split 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	17	96		27	31	82		27									
Seq =1		✓															
Mode		MAX				MAX											
Split 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =170	25	119		26	40	104		26									
Seq =2		✓															
Mode		MAX				MAX											
Split 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	17	68		45	20	65		45									
Seq =2		✓															
Mode		MAX				MAX											
Split 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	19	45		46	21	43		46									
Seq =2		✓															
Mode		MAX				MAX											
Split 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	20	44		46	19	45		46									
Seq =2		✓															
Mode		MAX				MAX											
Split 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	19	45		46	21	43		46									
Seq =2		✓															
Mode		MAX				MAX											
Split 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =110	20	44		46	19	45		46									
Seq =2		✓															
Mode		MAX				MAX											
Split 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =180	18	128		34	74	72		34									
Seq =3						✓											
Mode		MAX				MAX											
Split 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =140	25	55		60	30	50		60									
Seq =1		✓															
Mode		MAX				MAX											
Split 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =170	25	85		60	40	70		60									
Seq =2		✓															
Mode		MAX				MAX											
Split 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =_																	
Seq =_																	
Mode																	
Split 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Cycle =130	17	67		46	19	65		46									
Seq =3						✓											
Mode		MAX				MAX											

Day Plans 1-8									
Sunday	1	2	3	4	5				
Hour		9	10	18	19				
P Min		30	30	30	30				
L Action	254	8	18	9	254				
A									
N Hour									
Min									
1 Action									
Monday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	14	14	15	15	16	19	21	
Min	30	20	45		15				
2 Action	3	13	3	13	14	4	5	254	
Tuesday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	14	14	15	15	16	19	21	
Min	30	20	45		15				
3 Action	3	13	3	13	14	4	5	254	
Wednesday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	13	13	14	14	15	19	21	
Min	30	15	45		45	15			
4 Action	3	13	3	13	3	4	5	254	
Thursday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	14	14	15	15	16	19	21	
Min	30	20	45		15				
5 Action	3	13	3	13	14	4	5	254	
Friday	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	14	14	15	15	16	19	21	
Min	30	20	45		15				
6 Action	3	13	3	13	14	4	5	254	
Saturday	1	2	3	4	5				
Hour		8	9	17	20				
P Min			30	30	30				
L Action	254	6	16	7	254				
A									
N Hour									
Min									
7 Action									
	1	2	3	4	5	6	7	8	
Hour		6	6	7	7	8	8	9	
P Min			30	15	45		20		
L Action	254	1	11	21	1	11	21	1	
A	9	10	11	12	13	14	15	16	
N Hour	9	11	12	15	15	16	19	21	
Min	30		45		15				
8 Action	3	13	3	13	14	4	5		

Coordination Splits 17-32																	Day Plans 9-16	
Split 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	21	139		30	29	131		30										Hour
Seq =3						✓											P	Min
Mode		MAX				MAX											L	Action
Split 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =130	17	67		46	19	65		46									N	Hour
Seq =3						✓												Min
Mode		MAX				MAX											9	Action
Split 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =190	21	139		30	29	131		30										Hour
Seq =3						✓											P	Min
Mode		MAX				MAX											L	Action
Split 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	10	Action
Split 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =180	18	97		65	39	76		65										Hour
Seq =3						✓											P	Min
Mode		MAX				MAX											L	Action
Split 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	11	Action
Split 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	12	Action
Split 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	13	Action
Split 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	14	Action
Split 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	15	Action
Split 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Cycle =_																		Hour
Seq =_																	P	Min
Mode																	L	Action
Split 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	A	
Cycle =_																	N	Hour
Seq =_																		Min
Mode																	16	Action

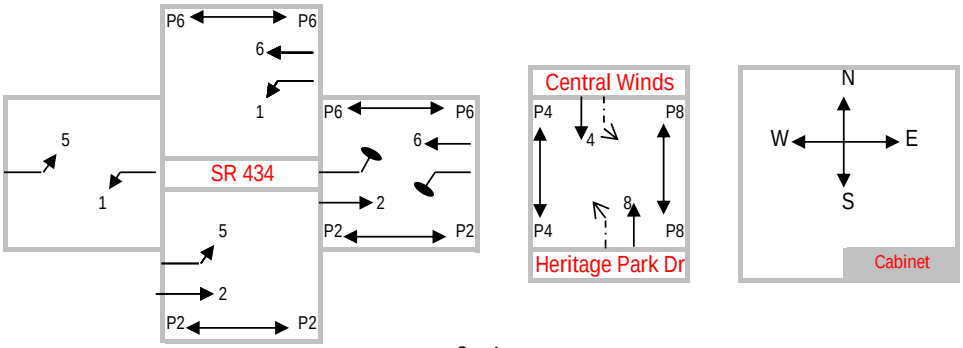
	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 1	180	35	1	3	6		1			12	22						✓	✓								
Pattern - 2																										
Pattern - 3	140	77	3	1	2		1			12	22						✓	✓								
Pattern - 4	170	37	4	2	2		1			12	22						✓	✓								
Pattern - 5	130	90	5	2	2		1			12	22						✓	✓								
Pattern - 6	110	13	6	2	2		2			12	22					✓	✓	✓								
Pattern - 7	110	1	7	2	2		2			12	22					✓	✓	✓								
Pattern - 8	110	13	8	2	2		2			12	22					✓	✓	✓								
Pattern - 9	110	1	9	2	2		2			12	22					✓	✓	✓								
Pattern - 10																										
Pattern - 11	180	35	11	3	6	1	1			12	22						✓	✓								
Pattern - 12																										
Pattern - 13	140	77	13	1	2	1	1			12	22						✓	✓								
Pattern - 14	170	37	14	2	2	1	1			12	22						✓	✓								
Pattern - 15																										
Pattern - 16	130	17	16	3	6		2			12	22					✓	✓	✓								
Pattern - 17	190	146	17	3	6		1			12	22						✓	✓								
Pattern - 18	130	17	18	3	6		2			12	22					✓	✓	✓								
Pattern - 19	190	138	19	3	6		1			12	22						✓	✓								
Pattern - 20																										
Pattern - 21	180	35	21	3	6	1	1			12	22						✓	✓								
Pattern - 22																										
Pattern - 23																										
Pattern - 24																										
Pattern - 25																										
Pattern - 26																										
Pattern - 27																										
Pattern - 28																										
Pattern - 29																										
Pattern - 30																										
Pattern - 31																										
Pattern - 32																										

	Cycle	Offset	Split	Seq	Coord	Time	Opt	Det	CIR	Short	Long	No S	No S	Yield	Max 2	Float	R-Hld	Y-Inh	Off-1	Off-2	Off-3	Off-4	Off-5	Off-6	Off-7	Off-8
Pattern - 33																										
Pattern - 34																										
Pattern - 35																										
Pattern - 36																										
Pattern - 37																										
Pattern - 38																										
Pattern - 39																										
Pattern - 40																										
Pattern - 41																										
Pattern - 42																										
Pattern - 43																										
Pattern - 44																										
Pattern - 45																										
Pattern - 46																										
Pattern - 47																										
Pattern - 48																										

BIU-1	Call	Swt	Dly	Lck	Src	BIU-2	Call	Swt	Dly	Lck	Src	BIU-3	Call	Swt	Dly	Lck	Src	BIU-4	Call	Swt	Dly	Lck	Src
Detector 1	1					17						33						49					
Detector 2	2					18						34						50					
Detector 3	2					19						35						51					
Detector 4	2					20						36						52					
Detector 5	2					21						37						53					
Detector 6	8					22						38						54					
Detector 7	4		10			23						39						55					
Detector 8	5					24						40						56					
Detector 9	5					25						41						57					
Detector 10	6					26						42						58					
Detector 11	6					27						43						59					
Detector 12	6					28						44						60					
Detector 13	6					29						45						61					
Detector 14	4					30						46						62					
Detector 15	8		10			31						47						63					
Detector 16						32						48						64					

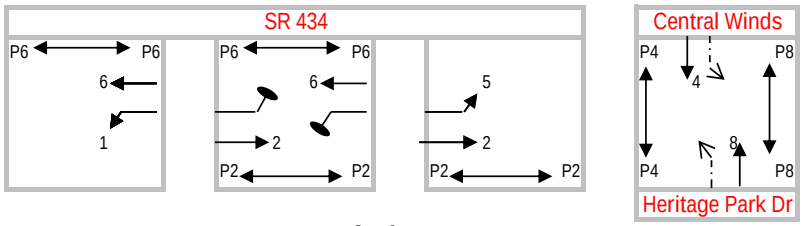
	Enbl	Track Phase				Grn	Track Overlap			Dwell Phase								Dwl	Dwell Overlap				Exit Phase			
Pre Run 1																										
Pre Run 2																										
Pre Run 3	ON									8													4	8		
Pre Run 4	ON									4													4	8		
Pre Run 5	ON									2	5												2	6		
Pre Run 6	ON									1	6												2	6		

Intersection Notes	T.O.D Notes
Intersection set up with concurent sides. Mainstreet LT's are Protected and lock detected. Protected LT's for main street added June 2018.	Patterns 11, 21, 13 & 14 used for schools rush time and use alt time table 1 with 10sec passage extension for phase 4 and 7sec for phase 5 for schools' rush hour traffic. Pattern 17 and 19 are used for SR 417 Diversion Routes. Day Plan 8 used for early dismissal from school at request of principals. Intersection re-timed Feb 2020.



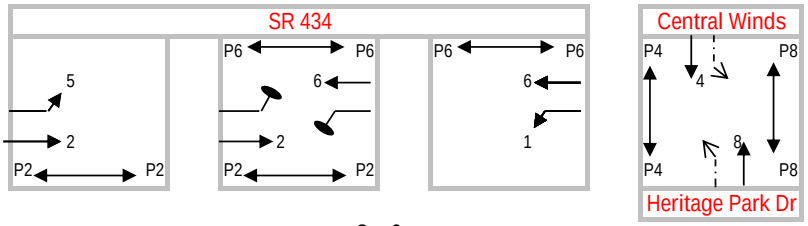
Seq 1

Ring 1	1	2	3	4
Ring 2	5	6	7	8



Seq 2

Ring 1	1	2	3	4
Ring 2	6	5	7	8



Seq 3

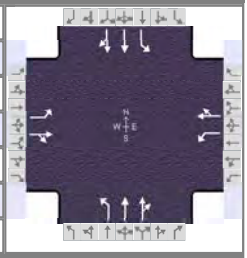
Ring 1	2	1	3	4
Ring 2	5	6	7	8

APPENDIX D

Existing HCS Capacity Worksheets

HCS Signalized Intersection Results Summary

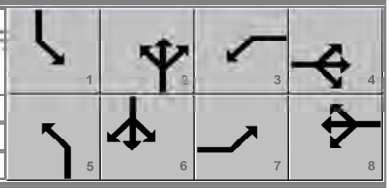
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.92
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskawilla Road & Trot…	File Name	1a Tuskawilla & Trotwood Existing AM Peak.xus		
Project Description	Existing AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	6	70	61	5	128	17	701	10	37	654	62

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.4	1.6	51.5	5.0	2.5	11.1
Yellow	4.8	0.0	4.8	3.4	0.0	3.4
Red	2.0	0.0	2.0	2.2	0.0	3.2



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	13.1	20.2	10.6	17.7	9.2	58.3	10.8	59.9
Change Period, ($Y+R_c$), s	6.0	6.6	5.6	6.6	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	4.3	4.6	4.3	4.6	4.1	0.0	4.1	0.0
Queue Clearance Time (g_s), s	7.4	6.6	5.2	10.9	2.5		3.0	
Green Extension Time (g_e), s	0.0	0.6	0.0	0.3	0.0	0.0	0.0	0.0
Phase Call Probability	0.96	1.00	0.84	1.00	0.40		0.67	
Max Out Probability	1.00	0.04	1.00	1.00	0.00		0.00	

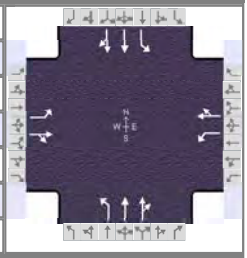
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	112	83		66	145		18	387	385	40	395	383
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1630		1810	1594		1810	1885	1876	1767	1856	1799
Queue Service Time (g_s), s	5.4	4.6		3.2	8.9		0.5	12.5	12.5	1.0	12.7	12.7
Cycle Queue Clearance Time (g_c), s	5.4	4.6		3.2	8.9		0.5	12.5	12.5	1.0	12.7	12.7
Green Ratio (*g/C*)	0.18	0.14		0.16	0.11		0.54	0.52	0.52	0.56	0.53	0.53
Capacity (*c*), veh/h	229	222		257	178		386	971	966	413	986	956
Volume-to-Capacity Ratio (*X*)	0.488	0.373		0.258	0.814		0.048	0.399	0.399	0.097	0.401	0.401
Back of Queue (*Q*), ft/ln (95 th percentile)	113.2	87.3		66.1	196.2		8.1	227.3	225	17.5	228.6	218.4
Back of Queue (*Q*), veh/ln (95 th percentile)	4.5	3.5		2.6	7.7		0.3	9.0	9.0	0.7	8.9	8.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	36.1	39.3		36.5	43.4		11.6	14.8	14.8	10.9	13.9	14.0
Incremental Delay (d_2), s/veh	1.6	1.0		0.5	15.9		0.1	1.2	1.2	0.1	1.2	1.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	37.7	40.4		37.1	59.3		11.7	16.0	16.0	11.0	15.2	15.2
Level of Service (LOS)	D	D		D	E		B	B	B	B	B	B
Approach Delay, s/veh / LOS	38.8	D		52.3	D		15.9	B		15.0	B	
Intersection Delay, s/veh / LOS	21.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	1.90	B	1.89	B
Bicycle LOS Score / LOS	0.81	A	0.84	A	1.14	A	1.16	A

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HCS Signalized Intersection Results Summary

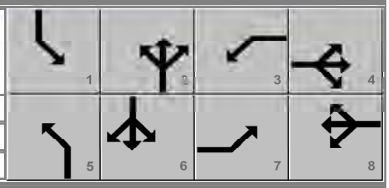
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskawilla Road & Trot…	File Name	1b Tuskawilla & Trotwood Existing PM Peak.xus		
Project Description	Existing PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	56	11	55	70	7	85	80	701	10	86	879	79

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.5	55.3	5.2	8.2	0.0	0.0	
Yellow	4.8	4.8	3.4	3.4	0.0	0.0	
Red	2.0	2.0	2.2	3.2	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.8	14.8	10.8	14.8	12.2	62.1	12.3	62.2
Change Period, (*Y+R c*), s	6.0	6.6	5.6	6.6	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	4.3	4.5	4.3	4.5	4.1	0.0	4.1	0.0
Queue Clearance Time (*g s*), s	4.9	6.0	5.6	7.8	3.9		4.1	
Green Extension Time (*g e*), s	0.0	0.4	0.1	0.4	0.2	0.0	0.2	0.0
Phase Call Probability	0.80	1.00	0.87	1.00	0.90		0.92	
Max Out Probability	1.00	0.02	1.00	0.05	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	58	69		73	96		83	371	369	90	506	492
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1652		1810	1616		1795	1841	1831	1795	1885	1830
Queue Service Time (*g s*), s	2.9	4.0		3.6	5.8		1.9	11.3	11.3	2.1	16.4	16.4
Cycle Queue Clearance Time (*g c*), s	2.9	4.0		3.6	5.8		1.9	11.3	11.3	2.1	16.4	16.4
Green Ratio (*g/C*)	0.13	0.08		0.13	0.08		0.61	0.55	0.55	0.61	0.55	0.55
Capacity (*c*), veh/h	188	135		196	132		380	1019	1013	490	1045	1014
Volume-to-Capacity Ratio (*X*)	0.310	0.510		0.373	0.727		0.219	0.364	0.365	0.183	0.485	0.485
Back of Queue (*Q*), ft/ln (95 th percentile)	62	79.5		76.6	118.9		31.2	206	198.9	33.2	276.2	268.4
Back of Queue (*Q*), veh/ln (95 th percentile)	2.4	3.2		3.1	4.7		1.2	8.0	8.0	1.3	11.0	10.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	39.3	44.0		39.3	44.8		10.0	12.5	12.5	8.8	13.6	13.6
Incremental Delay (*d 2*), s/veh	0.9	3.0		1.2	7.4		0.3	1.0	1.0	0.2	1.6	1.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	40.3	47.0		40.5	52.3		10.3	13.5	13.5	9.0	15.2	15.2
Level of Service (LOS)	D	D		D	D		B	B	B	A	B	B
Approach Delay, s/veh / LOS	43.9	D		47.2	D		13.2	B		14.7	B	
Intersection Delay, s/veh / LOS	18.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	0.70	A	0.77	A	1.17	A	1.38	A

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HCS Two-Way Stop-Control Report

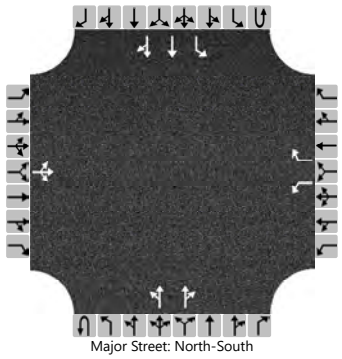
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/22/2023
Analysis Year	2023
Time Analyzed	Existing AM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	Tuskawilla & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd/Milky Way
North/South Street	Tuskawilla Road
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	0	1	0	0	2	0	0	1	2	0
Configuration			LTR			L		R		LT		TR		L	T	TR
Volume (veh/h)		0	0	1		44		14		0	753	57	8	10	695	2
Percent Heavy Vehicles (%)		0	0	0		5		0		0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5		6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.60		6.90		4.10			6.40	4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.55		3.30		2.20			2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1			46		15		0				19		
Capacity, c (veh/h)			640			244		586		886				566		
v/c Ratio			0.00			0.19		0.02		0.00				0.03		
95% Queue Length, Q_{95} (veh)			0.0			0.7		0.1		0.0				0.1		
Control Delay (s/veh)			10.6			23.1		11.3		9.1	0.0			11.6		
Level of Service (LOS)			B			C		B		A	A			B		
Approach Delay (s/veh)	10.6				20.2				0.0				0.3			
Approach LOS	B				C				A				A			

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HCS Two-Way Stop-Control Report

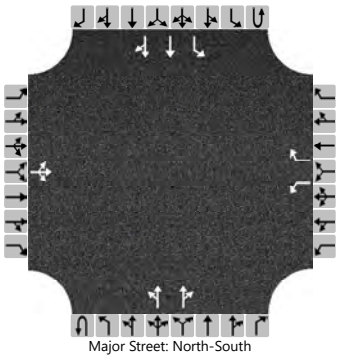
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/22/2023
Analysis Year	2023
Time Analyzed	Existing PM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	Tuskawilla & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd/Milky Way
North/South Street	Tuskawilla Road
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	0	1	0	0	2	0	0	1	2	0
Configuration			LTR			L		R		LT		TR		L	T	TR
Volume (veh/h)		0	0	1		30		4		0	861	85	24	19	1006	0
Percent Heavy Vehicles (%)		0	0	0		3		0		0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5		6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.56		6.90		4.10			6.40	4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.53		3.30		2.20			2.50	2.20		

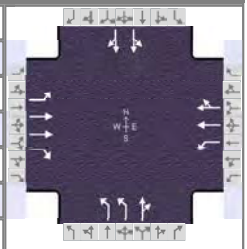
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1			31		4		0				44		
Capacity, c (veh/h)			507			183		531		678				450		
v/c Ratio			0.00			0.17		0.01		0.00				0.10		
95% Queue Length, Q_{95} (veh)			0.0			0.6		0.0		0.0				0.3		
Control Delay (s/veh)			12.1			28.6		11.8		10.3	0.0			13.9		
Level of Service (LOS)			B			D		B		B	A			B		
Approach Delay (s/veh)	12.1				26.6				0.0				0.6			
Approach LOS	B				D				A				A			

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HCS Signalized Intersection Results Summary

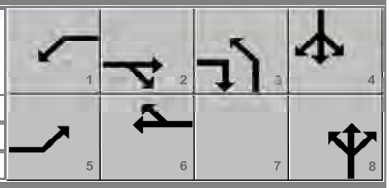
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.96
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskaawilla Road & SR…	File Name	3a Tuskawilla & SR 434 Existing AM Peak.xus		
Project Description	Existing AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	893	400	163	1145	6	621	58	167	46	43	29

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	3.3	55.5	7.2	30.9	0.0	
Yellow	4.9	4.9	4.9	4.8	4.8	0.0	
Red	2.9	2.9	2.9	4.1	4.1	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	3.0	2.0	4.0		10.0		12.0
Phase Duration, s	12.6	63.3	23.7	74.5		39.8		16.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1		4.0
Queue Clearance Time (g_s), s	5.2		15.5			27.5		7.0
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0		3.4		0.3
Phase Call Probability	0.80		1.00			1.00		0.99
Max Out Probability	0.00		0.00			0.04		0.00

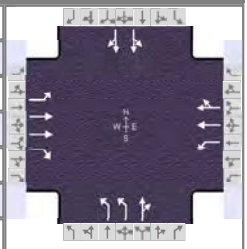
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	41	930	417	170	600	599	647	234		65		58
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1738	1560	1767	1841	1837	1743	1650		1832		1738
Queue Service Time (g_s), s	3.2	32.0	20.6	13.5	36.9	36.9	25.5	18.6		5.0		4.7
Cycle Queue Clearance Time (g_c), s	3.2	32.0	20.6	13.5	36.9	36.9	25.5	18.6		5.0		4.7
Green Ratio (*g/C*)	0.03	0.39	0.60	0.11	0.47	0.47	0.22	0.22		0.05		0.05
Capacity (*c*), veh/h	61	1350	943	197	858	857	754	357		92		87
Volume-to-Capacity Ratio (*X*)	0.668	0.689	0.442	0.862	0.699	0.699	0.857	0.656		0.704		0.667
Back of Queue (*Q*), ft/ln (95 th percentile)	74.2	514.3	302.4	274.6	607.6	588.4	429.2	312.4		114.1		101.7
Back of Queue (*Q*), veh/ln (95 th percentile)	3.0	19.8	11.7	10.7	23.5	23.5	17.0	12.3		4.6		4.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00
Uniform Delay (d_1), s/veh	68.3	36.5	15.2	62.5	30.2	30.2	53.9	51.2		66.9		66.7
Incremental Delay (d_2), s/veh	11.9	2.9	1.5	10.6	4.7	4.7	5.0	2.1		9.4		8.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Control Delay (*d*), s/veh	80.2	39.4	16.7	73.0	34.9	34.9	58.9	53.2		76.3		75.2
Level of Service (LOS)	F	D	B	E	C	C	E	D		E		E
Approach Delay, s/veh / LOS	33.8	C		39.7	D		57.4	E		75.7	E	
Intersection Delay, s/veh / LOS	42.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	1.92	B	2.33	B	2.46	B
Bicycle LOS Score / LOS	1.63	B	1.62	B	1.94	B	0.59	A

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HCS Signalized Intersection Results Summary

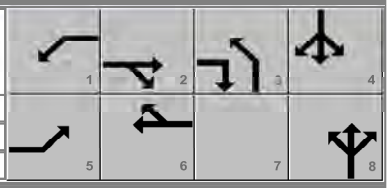
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.98
Urban Street	Tuskawilla Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Tuskaawilla Road & SR…	File Name	3b Tuskawilla & SR 434 Existing PM Peak.xus		
Project Description	Existing PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	1089	692	192	1115	28	626	115	136	87	110	30

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.1	2.9	72.8	14.1	37.8	0.0
Yellow	4.9	4.9	4.9	4.8	4.8	0.0
Red	2.9	2.9	2.9	4.1	4.1	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	3.0	2.0	4.0		10.0		12.0
Phase Duration, s	18.9	80.6	29.7	91.4		46.7		23.0
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.0		4.0
Queue Clearance Time (g_s), s	11.1		21.4			34.2		13.8
Green Extension Time (g_e), s	0.2	0.0	0.5	0.0		3.6		0.3
Phase Call Probability	0.99		1.00			1.00		1.00
Max Out Probability	0.00		0.00			0.03		0.41

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	91	1111	706	196	586	581	639	256		122		110
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1598	1795	1856	1839	1730	1718		1833		1809
Queue Service Time (g_s), s	9.1	48.1	55.0	19.4	44.5	44.5	32.2	24.9		11.8		10.7
Cycle Queue Clearance Time (g_c), s	9.1	48.1	55.0	19.4	44.5	44.5	32.2	24.9		11.8		10.7
Green Ratio (*g/C*)	0.06	0.40	0.61	0.12	0.46	0.46	0.21	0.21		0.08		0.08
Capacity (*c*), veh/h	110	1452	982	218	861	854	726	361		144		142
Volume-to-Capacity Ratio (*X*)	0.824	0.765	0.719	0.898	0.680	0.680	0.880	0.710		0.846		0.776
Back of Queue (*Q*), ft/ln (95 th percentile)	205.3	744.8	722.3	376.1	726.8	705.8	535	417.1		263.7		233.3
Back of Queue (*Q*), veh/ln (95 th percentile)	8.1	29.6	28.7	14.9	28.4	28.2	21.1	16.6		10.5		9.3
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00
Uniform Delay (d_1), s/veh	83.5	46.2	24.0	78.0	37.7	37.7	68.9	66.0		81.9		81.4
Incremental Delay (d_2), s/veh	14.1	3.9	4.5	15.0	4.3	4.3	6.7	2.7		21.6		12.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Control Delay (*d*), s/veh	97.5	50.1	28.5	93.0	42.0	42.1	75.6	68.7		103.5		94.3
Level of Service (LOS)	F	D	C	F	D	D	E	E		F		F
Approach Delay, s/veh / LOS	44.4	D		49.4	D		73.6	E		99.1	F	
Intersection Delay, s/veh / LOS	54.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	1.93	B	2.34	B	2.47	B
Bicycle LOS Score / LOS	2.06	B	1.61	B	1.96	B	0.68	A

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HCS Two-Way Stop-Control Report

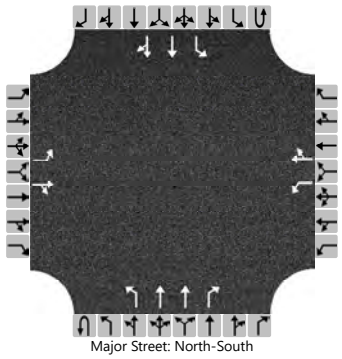
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/22/2023
Analysis Year	2023
Time Analyzed	Existing AM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	SR 434 & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd
North/South Street	SR 434
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	0
Configuration		L		TR		L		TR		L	T	R		L	T	TR
Volume (veh/h)		2	3	70		139	9	81	1	35	1166	74	6	74	1018	7
Percent Heavy Vehicles (%)		0	0	1		0	0	1	0	3			0	1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9	6.4	4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.92		7.50	6.50	6.92	6.40	4.16			6.40	4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3	2.5	2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.31		3.50	4.00	3.31	2.50	2.23			2.50	2.21		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2		74		142		92		37				82		
Capacity, c (veh/h)		95		415		104		336		630				490		
v/c Ratio		0.02		0.18		1.36		0.27		0.06				0.17		
95% Queue Length, Q_{95} (veh)		0.1		0.6		10.0		1.1		0.2				0.6		
Control Delay (s/veh)		43.5		15.6		286.7		19.7		11.1				13.8		
Level of Service (LOS)		E		C		F		C		B				B		
Approach Delay (s/veh)	16.3				181.8				0.3				1.0			
Approach LOS	C				F				A				A			

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HCS Two-Way Stop-Control Report

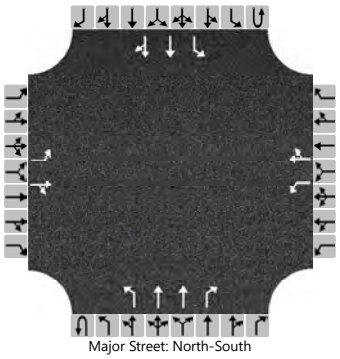
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	9/22/2023
Analysis Year	2023
Time Analyzed	Existing PM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	SR 434 & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd
North/South Street	SR 434
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		1	1	0	0	1	2	1	0	1	2	0
Configuration		L		TR		L		TR		L	T	R		L	T	TR
Volume (veh/h)		10	10	99		73	4	53	0	44	1260	111	31	86	1220	18
Percent Heavy Vehicles (%)		0	0	1		0	0	0	0	2			0	2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.92		7.50	6.50	6.90		4.14			6.40	4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.31		3.50	4.00	3.30		2.22			2.50	2.22		

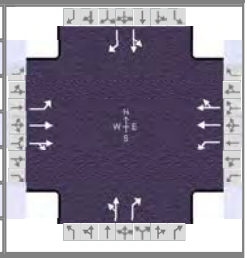
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10		111		74		58		45				119		
Capacity, c (veh/h)		55		219		57		286		546				346		
v/c Ratio		0.18		0.51		1.30		0.20		0.08				0.35		
95% Queue Length, Q_{95} (veh)		0.6		2.6		6.5		0.7		0.3				1.5		
Control Delay (s/veh)		84.2		37.3		338.8		20.8		12.2				20.8		
Level of Service (LOS)		F		E		F		C		B				C		
Approach Delay (s/veh)	41.2				199.4				0.4				1.8			
Approach LOS	E				F				A				A			

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HCS Signalized Intersection Results Summary

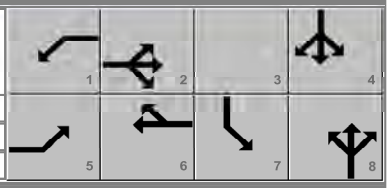
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.92
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Bear Springs/…	File Name	5a SR 434 & Bear Springs Existing AM Peak.xus		
Project Description	Existing AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	27	1252	2	29	1621	86	19	1	18	72	1	43

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	0.2	105.6	8.6	0.0	0.0
Yellow	4.9	0.0	4.9	4.8	0.0	0.0
Red	2.9	0.0	2.9	4.1	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8	7	4
Case Number	1.1	4.0	2.0	4.0		7.3	0.0	13.2
Phase Duration, s	11.9	113.4	12.1	113.5		17.5	0.0	17.5
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9	4.0	8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1	0.0	4.1
Queue Clearance Time (g_s), s	2.6		4.5			4.0		8.2
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0		0.5	0.0	0.5
Phase Call Probability	0.69		0.71			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

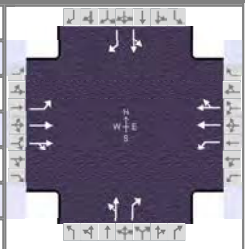
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	29	682	681	32	929	926		22	20		79	47
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1739	1841	1840	1810	1856	1822		1462	1547		1449	1547
Queue Service Time (g_s), s	0.6	22.0	22.0	2.5	37.4	38.5		0.0	1.7		6.0	4.2
Cycle Queue Clearance Time (g_c), s	0.6	22.0	22.0	2.5	37.4	38.5		2.0	1.7		6.2	4.2
Green Ratio (*g/C*)	0.77	0.74	0.74	0.03	0.74	0.74		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	211	1359	1358	54	1372	1347		137	94		138	94
Volume-to-Capacity Ratio (*X*)	0.139	0.502	0.502	0.581	0.677	0.687		0.158	0.209		0.576	0.499
Back of Queue (*Q*), ft/ln (95 th percentile)	12.8	323.5	323.4	56.9	505.4	500.1		34.4	32.6		131.7	81
Back of Queue (*Q*), veh/ln (95 th percentile)	0.5	12.5	12.5	2.3	19.7	20.0		1.4	1.3		5.3	3.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Uniform Delay (d_1), s/veh	10.4	7.8	7.8	68.5	9.7	9.9		64.0	63.9		66.8	65.1
Incremental Delay (d_2), s/veh	0.3	1.3	1.3	9.5	2.7	2.9		0.5	1.1		3.8	4.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	10.7	9.1	9.1	78.0	12.4	12.8		64.6	65.0		70.5	69.2
Level of Service (LOS)	B	A	A	E	B	B		E	E		E	E
Approach Delay, s/veh / LOS	9.1	A		13.7	B		64.8	E		70.0	E	
Intersection Delay, s/veh / LOS	14.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	1.86	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.64	B	2.04	B	0.56	A	0.70	A

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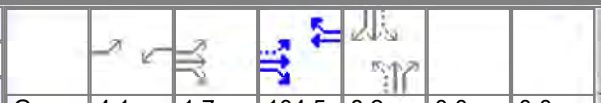
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.98
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Bear Springs/…	File Name	5b SR 434 & Bear Springs Existing PM Peak.xus		
Project Description	Existing PM Peak Hour				

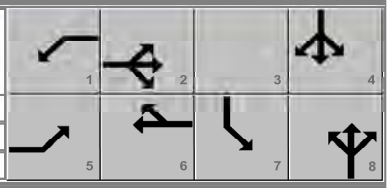


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	1718	15	29	1529	122	11	3	21	72	1	37

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.1	1.7	104.5	8.2	0.0	0.0
Yellow	4.9	0.0	4.9	4.8	0.0	0.0
Red	2.9	0.0	2.9	4.1	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8	7	4
Case Number	1.1	4.0	2.0	4.0		7.3	0.0	13.2
Phase Duration, s	13.7	114.0	11.9	112.3		17.1	0.0	17.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9	4.0	8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1	0.0	4.1
Queue Clearance Time (g_s), s	3.8		4.3			3.9		7.8
Green Extension Time (g_e), s	0.3	0.0	0.1	0.0		0.4	0.0	0.4
Phase Call Probability	0.98		0.69			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

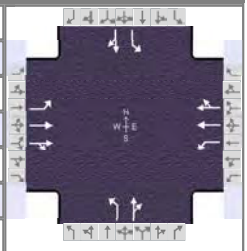
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	94	885	884	30	848	837		14	21		74	38
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1850	1810	1856	1807		1543	1547		1447	1547
Queue Service Time (g_s), s	1.8	33.5	33.7	2.3	32.4	33.2		0.0	1.9		5.8	3.4
Cycle Queue Clearance Time (g_c), s	1.8	33.5	33.7	2.3	32.4	33.2		1.1	1.9		5.8	3.4
Green Ratio (*g/C*)	0.77	0.74	0.74	0.03	0.73	0.73		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	267	1378	1374	52	1356	1320		133	88		133	88
Volume-to-Capacity Ratio (*X*)	0.351	0.642	0.643	0.564	0.625	0.634		0.107	0.242		0.561	0.427
Back of Queue (*Q*), ft/ln (95 th percentile)	39	457.8	462.7	53.3	451.3	442.5		22.5	36.1		6.1	65.1
Back of Queue (*Q*), veh/ln (95 th percentile)	1.5	17.9	17.9	2.1	17.6	17.7		0.9	1.4		0.2	2.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Uniform Delay (d_1), s/veh	9.7	9.1	9.1	68.5	9.6	9.7		64.1	64.5		67.0	65.2
Incremental Delay (d_2), s/veh	0.8	2.3	2.3	9.1	2.2	2.3		0.4	1.4		3.7	3.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	10.4	11.4	11.4	77.7	11.7	12.0		64.4	65.9		70.7	68.4
Level of Service (LOS)	B	B	B	E	B	B		E	E		E	E
Approach Delay, s/veh / LOS	11.3	B		13.0	B		65.3	E		69.9	E	
Intersection Delay, s/veh / LOS	14.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	1.86	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	2.02	B	1.90	B	0.55	A	0.67	A

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HCS Signalized Intersection Results Summary

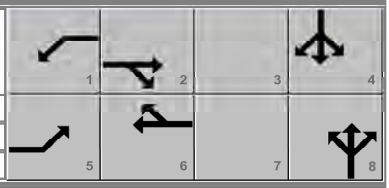
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.90
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Heritage Park…	File Name	6a SR 434 & Heritage Park Existing AM Peak.xus		
Project Description	Existing AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	208	1143	45	43	1357	199	43	15	57	159	15	191

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.2	11.5	94.8	35.2	0.0	0.0	
Yellow	4.9	4.9	4.9	4.8	0.0	0.0	
Red	2.9	2.9	2.9	4.1	0.0	0.0	



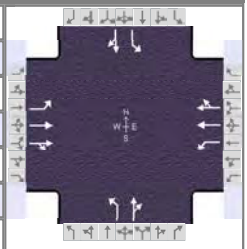
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	4.0	2.0	4.0		6.0		6.0
Phase Duration, s	33.3	121.9	14.0	102.6		44.1		44.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.2		4.2
Queue Clearance Time (g_s), s	24.8		6.7			34.0		32.7
Green Extension Time (g_e), s	0.6	0.0	0.1	0.0		1.2		1.4
Phase Call Probability	1.00		0.91			1.00		1.00
Max Out Probability	0.00		0.00			0.35		0.22

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	231	664	656	48	872	857	48	80		177	229	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1826	1801	1810	1841	1759	1170	1598		1339	1565	
Queue Service Time (g_s), s	22.8	37.6	37.7	4.7	76.7	80.8	7.2	7.6		23.1	24.8	
Cycle Queue Clearance Time (g_c), s	22.8	37.6	37.7	4.7	76.7	80.8	32.0	7.6		30.7	24.8	
Green Ratio (*g/C*)	0.14	0.63	0.63	0.03	0.53	0.53	0.20	0.20		0.20	0.20	
Capacity (*c*), veh/h	254	1158	1142	62	970	927	108	313		246	306	
Volume-to-Capacity Ratio (*X*)	0.910	0.573	0.574	0.772	0.900	0.924	0.442	0.256		0.719	0.748	
Back of Queue (*Q*), ft/ln (95 th percentile)	434.4	588	578.5	112.7	1206.8	1194.8	101.3	146.2		327.7	409.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	17.2	22.6	22.4	4.5	46.8	47.8	4.1	5.6		13.1	15.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	76.1	18.9	19.0	86.2	38.3	39.3	83.2	61.3		74.3	68.2	
Incremental Delay (d_2), s/veh	17.1	2.1	2.1	18.1	12.9	16.1	2.8	0.4		6.9	7.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	93.2	21.0	21.1	104.3	51.2	55.4	86.1	61.7		81.2	75.4	
Level of Service (LOS)	F	C	C	F	D	E	F	E		F	E	
Approach Delay, s/veh / LOS	31.8	C		54.7	D		70.8	E		77.9	E	
Intersection Delay, s/veh / LOS	48.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	1.92	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.77	B	1.95	B	0.70	A	1.16	A

HCS Signalized Intersection Results Summary

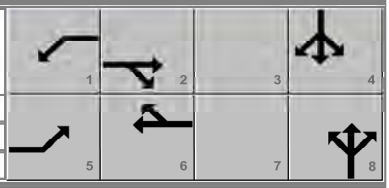
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Sep 22, 2023	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.97
Urban Street	SR 434	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	SR 434 & Heritage Park…	File Name	6b SR 434 & Heritage Park Existing PM Peak.xus		
Project Description	Existing PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	218	1676	31	54	1337	199	23	2	58	98	6	147

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.1	10.0	107.1	23.5	0.0	0.0	
Yellow	4.9	4.9	4.9	4.8	0.0	0.0	
Red	2.9	2.9	2.9	4.1	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	4.0	2.0	4.0		6.0		6.0
Phase Duration, s	32.7	132.7	14.9	114.9		32.4		32.4
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.2		4.2
Queue Clearance Time (g_s), s	24.2		7.5			22.3		21.2
Green Extension Time (g_e), s	0.7	0.0	0.1	0.0		1.1		1.2
Phase Call Probability	1.00		0.94			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	225	881	879	56	803	781	24	62		101	158	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1873	1810	1870	1786	1248	1618		1362	1607	
Queue Service Time (g_s), s	22.2	48.4	48.8	5.5	54.9	56.7	3.4	6.2		13.0	17.0	
Cycle Queue Clearance Time (g_c), s	22.2	48.4	48.8	5.5	54.9	56.7	20.3	6.2		19.2	17.0	
Green Ratio (*g/C*)	0.14	0.69	0.69	0.04	0.59	0.59	0.13	0.13		0.13	0.13	
Capacity (*c*), veh/h	249	1307	1298	72	1112	1062	86	212		172	211	
Volume-to-Capacity Ratio (*X*)	0.904	0.674	0.677	0.776	0.722	0.735	0.275	0.292		0.588	0.749	
Back of Queue (*Q*), ft/ln (95 th percentile)	412.8	704.2	722.3	129.3	837.1	817.2	50.3	117.5		206	295.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	16.4	27.9	28.0	5.2	33.0	32.7	2.0	4.7		8.2	11.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	76.4	15.9	16.0	85.6	25.9	26.3	85.1	70.7		79.3	75.4	
Incremental Delay (d_2), s/veh	11.6	2.8	2.8	16.2	4.1	4.5	1.7	0.8		3.2	5.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	88.0	18.7	18.8	101.8	30.0	30.8	86.8	71.4		82.5	80.6	
Level of Service (LOS)	F	B	B	F	C	C	F	E		F	F	
Approach Delay, s/veh / LOS	26.6	C		32.8	C		75.7	E		81.3	F	
Intersection Delay, s/veh / LOS	33.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.88	B	1.91	B	2.33	B	2.33	B
Bicycle LOS Score / LOS	2.12	B	1.84	B	0.63	A	0.91	A

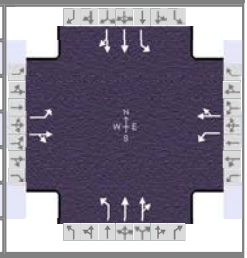
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APPENDIX E

Projected HCS Capacity Worksheets

HCS Signalized Intersection Results Summary

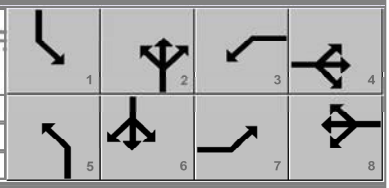
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 13, 2024	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.92
Urban Street	Tuskawilla Road	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Tuskawilla Road & Trot…	File Name	1a Tuskawilla & Trotwood Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	103	6	70	61	5	128	17	789	10	37	732	62

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.4	1.6	51.5	5.0	2.5	11.1
Yellow	4.8	0.0	4.8	3.4	0.0	3.4
Red	2.0	0.0	2.0	2.2	0.0	3.2



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	13.1	20.2	10.6	17.7	9.2	58.3	10.8	59.9
Change Period, ($Y+R_c$), s	6.0	6.6	5.6	6.6	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	4.3	4.6	4.3	4.6	4.1	0.0	4.1	0.0
Queue Clearance Time (g_s), s	7.4	6.6	5.2	10.9	2.5		3.0	
Green Extension Time (g_e), s	0.0	0.6	0.0	0.3	0.0	0.0	0.0	0.0
Phase Call Probability	0.96	1.00	0.84	1.00	0.40		0.67	
Max Out Probability	1.00	0.04	1.00	1.00	0.00		0.00	

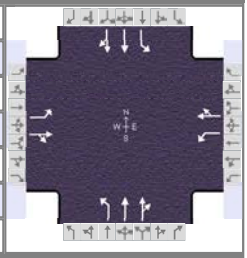
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	112	83		66	145		18	435	433	40	438	426
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1630		1810	1594		1810	1885	1877	1767	1856	1804
Queue Service Time (g_s), s	5.4	4.6		3.2	8.9		0.5	14.6	14.6	1.0	14.5	14.5
Cycle Queue Clearance Time (g_c), s	5.4	4.6		3.2	8.9		0.5	14.6	14.6	1.0	14.5	14.5
Green Ratio (*g/C*)	0.18	0.14		0.16	0.11		0.54	0.52	0.52	0.56	0.53	0.53
Capacity (*c*), veh/h	229	222		257	178		354	971	967	377	986	959
Volume-to-Capacity Ratio (*X*)	0.488	0.373		0.258	0.814		0.052	0.448	0.448	0.107	0.444	0.444
Back of Queue (*Q*), ft/ln (95 th percentile)	113.2	87.3		66.1	196.2		8.2	256.5	254	17.6	254.3	243.3
Back of Queue (*Q*), veh/ln (95 th percentile)	4.5	3.5		2.6	7.7		0.3	10.2	10.2	0.7	9.9	9.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	36.1	39.3		36.5	43.4		11.9	15.3	15.3	11.2	14.4	14.4
Incremental Delay (d_2), s/veh	1.6	1.0		0.5	15.9		0.1	1.5	1.5	0.1	1.4	1.5
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	37.7	40.4		37.1	59.3		11.9	16.8	16.8	11.4	15.8	15.9
Level of Service (LOS)	D	D		D	E		B	B	B	B	B	B
Approach Delay, s/veh / LOS	38.8	D		52.3	D		16.7	B		15.6	B	
Intersection Delay, s/veh / LOS	21.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	2.30	B	1.90	B	1.89	B
Bicycle LOS Score / LOS	0.81	A	0.84	A	1.22	A	1.23	A

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HCS Signalized Intersection Results Summary

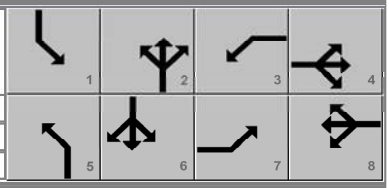
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 13, 2024	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Tuskawilla Road	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Tuskawilla Road & Trot…	File Name	1b Tuskawilla & Trotwood Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	56	11	55	70	7	85	80	784	10	86	964	79

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.5	55.3	5.2	8.2	0.0	0.0						
Yellow	4.8	4.8	3.4	3.4	0.0	0.0						
Red	2.0	2.0	2.2	3.2	0.0	0.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.8	14.8	10.8	14.8	12.2	62.1	12.3	62.2
Change Period, (*Y+R c*), s	6.0	6.6	5.6	6.6	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	4.3	4.5	4.3	4.5	4.1	0.0	4.1	0.0
Queue Clearance Time (*g s*), s	4.9	6.0	5.6	7.8	3.9		4.1	
Green Extension Time (*g e*), s	0.0	0.4	0.1	0.4	0.2	0.0	0.2	0.0
Phase Call Probability	0.80	1.00	0.87	1.00	0.90		0.92	
Max Out Probability	1.00	0.02	1.00	0.05	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	58	69		73	96		83	414	413	90	551	536
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1652		1810	1616		1795	1841	1832	1795	1885	1834
Queue Service Time (*g s*), s	2.9	4.0		3.6	5.8		1.9	13.0	13.0	2.1	18.4	18.4
Cycle Queue Clearance Time (*g c*), s	2.9	4.0		3.6	5.8		1.9	13.0	13.0	2.1	18.4	18.4
Green Ratio (*g/C*)	0.13	0.08		0.13	0.08		0.61	0.55	0.55	0.61	0.55	0.55
Capacity (*c*), veh/h	188	135		196	132		352	1019	1014	454	1045	1017
Volume-to-Capacity Ratio (*X*)	0.310	0.510		0.373	0.727		0.236	0.407	0.407	0.197	0.527	0.527
Back of Queue (*Q*), ft/ln (95 th percentile)	62	79.5		76.6	118.9		31.3	230.2	222.8	33.3	305	296.5
Back of Queue (*Q*), veh/ln (95 th percentile)	2.4	3.2		3.1	4.7		1.2	8.9	8.9	1.3	12.1	11.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	39.3	44.0		39.3	44.8		10.5	12.9	12.9	9.0	14.0	14.0
Incremental Delay (*d 2*), s/veh	0.9	3.0		1.2	7.4		0.3	1.2	1.2	0.2	1.9	2.0
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	40.3	47.0		40.5	52.3		10.9	14.1	14.1	9.3	15.9	16.0
Level of Service (LOS)	D	D		D	D		B	B	B	A	B	B
Approach Delay, s/veh / LOS	43.9	D		47.2	D		13.8	B		15.4	B	
Intersection Delay, s/veh / LOS	18.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.89	B	1.89	B
Bicycle LOS Score / LOS	0.70	A	0.77	A	1.24	A	1.46	A

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HCS Two-Way Stop-Control Report

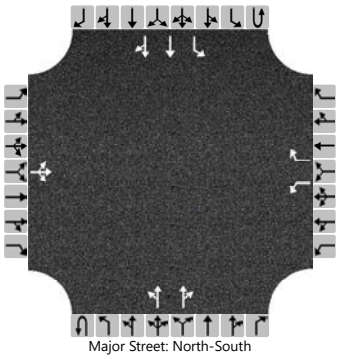
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	06/13/2024
Analysis Year	2024
Time Analyzed	Projected AM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	Tuskawilla & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd/Milky Way
North/South Street	Tuskawilla Road
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	0	1	0	0	2	0	0	1	2	0
Configuration			LTR			L		R		LT		TR		L	T	TR
Volume (veh/h)		0	0	1		117		14		0	816	90	8	29	707	2
Percent Heavy Vehicles (%)		0	0	0		5		0		0			0	0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized						No										
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5		6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.60		6.90		4.10			6.40	4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.55		3.30		2.20			2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1			122		15		0				39		
Capacity, c (veh/h)			634			213		544		877				598		
v/c Ratio			0.00			0.57		0.03		0.00				0.06		
95% Queue Length, Q_{95} (veh)			0.0			3.2		0.1		0.0				0.2		
Control Delay (s/veh)			10.7			42.5		11.8		9.1	0.0			11.4		
Level of Service (LOS)			B			E		B		A	A			B		
Approach Delay (s/veh)		10.7				39.2				0.0				0.6		
Approach LOS		B				E				A				A		

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HCS Two-Way Stop-Control Report

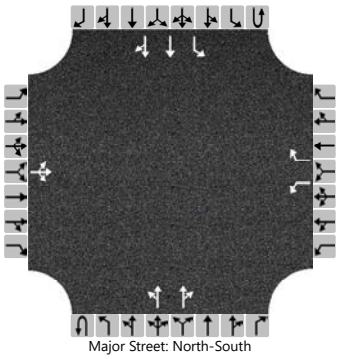
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	06/13/2024
Analysis Year	2024
Time Analyzed	Projected PM Peak
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Spring TPD # 5824

Site Information

Intersection	Tuskawilla & Michael Blake
Jurisdiction	Seminole County
East/West Street	Michale Blake Blvd/Milky Way
North/South Street	Tuskawilla Road
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	0	1	0	0	2	0	0	1	2	0
Configuration			LTR			L		R		LT		TR		L	T	TR
Volume (veh/h)		0	0	1		86		4		0	939	98	24	37	1033	0
Percent Heavy Vehicles (%)		0	0	0		3		0		0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5		6.9		4.1			6.4	4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.56		6.90		4.10			6.40	4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5		3.3		2.2			2.5	2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.53		3.30		2.20			2.50	2.20		

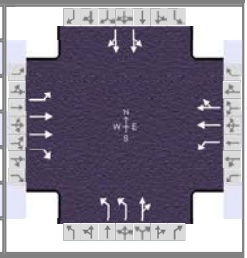
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1			88		4		0				62		
Capacity, c (veh/h)			501			161		499		668				456		
v/c Ratio			0.00			0.55		0.01		0.00				0.14		
95% Queue Length, Q_{95} (veh)			0.0			2.8		0.0		0.0				0.5		
Control Delay (s/veh)			12.2			51.4		12.3		10.4	0.0			14.1		
Level of Service (LOS)			B			F		B		B	A			B		
Approach Delay (s/veh)	12.2				49.6				0.0				0.8			
Approach LOS	B				E				A				A			

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HCS Signalized Intersection Results Summary

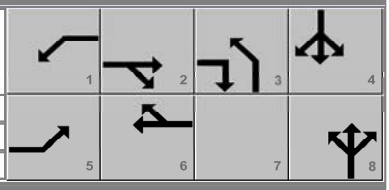
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 13, 2024	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.96
Urban Street	Tuskawilla Road	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Tuskaawilla Road & SR…	File Name	3a Tuskawilla & SR 434 Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	951	419	183	1176	6	689	60	170	48	43	29

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	5.0	50.9	7.3	33.8	0.0
Yellow	4.9	4.9	4.9	4.8	4.8	0.0
Red	2.9	2.9	2.9	4.1	4.1	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	3.0	2.0	4.0		10.0		12.0
Phase Duration, s	12.6	58.7	25.4	71.5		42.7		16.2
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1		4.0
Queue Clearance Time (g_s), s	5.2		17.2			30.3		7.1
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0		3.5		0.3
Phase Call Probability	0.80		1.00			1.00		0.99
Max Out Probability	0.00		0.00			0.11		0.00

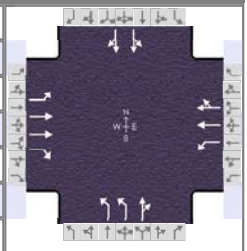
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	41	991	436	191	616	615	718	240		66		59
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1738	1560	1767	1841	1837	1743	1651		1830		1740
Queue Service Time (g_s), s	3.2	36.7	22.6	15.2	39.9	39.9	28.3	18.5		5.1		4.8
Cycle Queue Clearance Time (g_c), s	3.2	36.7	22.6	15.2	39.9	39.9	28.3	18.5		5.1		4.8
Green Ratio (*g/C*)	0.03	0.36	0.59	0.12	0.45	0.45	0.24	0.24		0.05		0.05
Capacity (*c*), veh/h	61	1238	924	217	820	818	825	390		93		89
Volume-to-Capacity Ratio (*X*)	0.668	0.800	0.472	0.877	0.751	0.752	0.870	0.614		0.707		0.668
Back of Queue (*Q*), ft/ln (95 th percentile)	74.2	592.5	329.1	304.8	660.2	638.9	471.1	310.2		115.9		103.4
Back of Queue (*Q*), veh/ln (95 th percentile)	3.0	22.8	12.8	11.9	25.6	25.6	18.7	12.2		4.6		4.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00
Uniform Delay (d_1), s/veh	68.3	41.5	16.5	61.6	33.0	33.1	52.5	48.8		66.8		66.7
Incremental Delay (d_2), s/veh	11.9	5.5	1.7	12.4	6.3	6.3	6.4	1.6		9.4		8.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Control Delay (*d*), s/veh	80.2	47.0	18.2	74.0	39.3	39.3	58.9	50.3		76.2		75.0
Level of Service (LOS)	F	D	B	E	D	D	E	D		E		E
Approach Delay, s/veh / LOS	39.3	D		44.0	D		56.7	E		75.7	E	
Intersection Delay, s/veh / LOS	46.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	1.92	B	2.33	B	2.46	B
Bicycle LOS Score / LOS	1.70	B	1.66	B	2.07	B	0.59	A

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HCS Signalized Intersection Results Summary

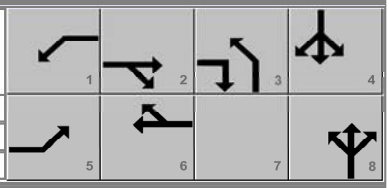
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 13, 2024	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.98
Urban Street	Tuskawilla Road	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Tuskaawilla Road & SR…	File Name	3b Tuskawilla & SR 434 Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	1144	725	211	1149	28	708	117	139	89	110	30

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.1	4.8	66.6	14.2	42.1	0.0
Yellow	4.9	4.9	4.9	4.8	4.8	0.0
Red	2.9	2.9	2.9	4.1	4.1	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	3.0	2.0	4.0		10.0		12.0
Phase Duration, s	18.9	74.4	31.5	87.0		51.0		23.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.0		4.0
Queue Clearance Time (g_s), s	11.1		23.3			38.4		13.9
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0		3.7		0.3
Phase Call Probability	0.99		1.00			1.00		1.00
Max Out Probability	0.00		0.04			0.10		0.44

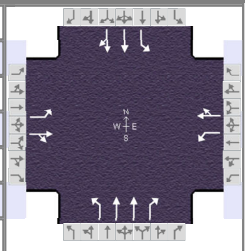
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	91	1167	740	215	603	598	722	261		123		111
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1598	1795	1856	1840	1730	1717		1832		1810
Queue Service Time (g_s), s	9.1	54.7	61.5	21.3	48.5	48.6	36.4	24.7		11.9		10.8
Cycle Queue Clearance Time (g_c), s	9.1	54.7	61.5	21.3	48.5	48.6	36.4	24.7		11.9		10.8
Green Ratio (*g/C*)	0.06	0.37	0.60	0.13	0.44	0.44	0.23	0.23		0.08		0.08
Capacity (*c*), veh/h	110	1327	964	237	816	809	809	402		145		143
Volume-to-Capacity Ratio (*X*)	0.827	0.879	0.767	0.910	0.739	0.739	0.893	0.650		0.847		0.776
Back of Queue (*Q*), ft/ln (95 th percentile)	205.6	859.1	805.8	423.7	796.2	772.4	598.3	412.2		266		235.1
Back of Queue (*Q*), veh/ln (95 th percentile)	8.1	34.1	32.0	16.8	31.1	30.9	23.6	16.4		10.6		9.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00
Uniform Delay (d_1), s/veh	83.5	53.0	26.3	77.1	41.8	41.8	66.8	62.3		81.8		81.3
Incremental Delay (d_2), s/veh	14.3	8.5	5.8	23.6	5.9	6.0	8.6	2.0		22.0		13.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Control Delay (*d*), s/veh	97.8	61.5	32.2	100.7	47.7	47.8	75.4	64.3		103.8		94.4
Level of Service (LOS)	F	E	C	F	D	D	E	E		F		F
Approach Delay, s/veh / LOS	52.3	D		55.8	E		72.4	E		99.4	F	
Intersection Delay, s/veh / LOS	60.0						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.30	B	1.93	B	2.34	B	2.47	B
Bicycle LOS Score / LOS	2.14	B	1.66	B	2.11	B	0.68	A

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HCS Signalized Intersection Results Summary

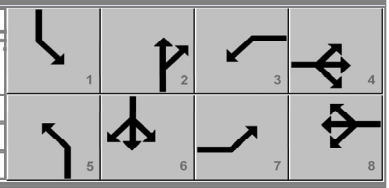
General Information				Intersection Information	
Agency	Winter Springs			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 27, 2024	Area Type	Other
Jurisdiction	Winter Springs	Time Period	AM Peak Hour	PHF	0.95
Urban Street	SR 434	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	SR 434 & Michael Blake…	File Name	4a SR 434 & Michael Blake Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	2	3	88	139	9	81	85	1212	74	85	1085	7

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.7	1.9	61.4	0.4	2.4	9.3
Yellow	4.8	0.0	4.8	4.8	4.8	4.8
Red	3.0	0.0	3.0	3.0	3.0	3.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	2.0	3.0	1.1	4.0
Phase Duration, s	8.2	17.1	18.4	27.2	15.4	71.1	13.5	69.2
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Max Allow Headway (*MAH*), s	3.0	3.2	3.0	3.2	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s	2.1	9.0	10.6	8.2	7.8		4.8	
Green Extension Time (g_e), s	0.0	0.3	0.0	0.4	0.1	0.0	0.1	0.0
Phase Call Probability	0.07	1.00	0.99	1.00	0.95		0.95	
Max Out Probability	0.00	0.00	1.00	0.00	0.00		0.00	

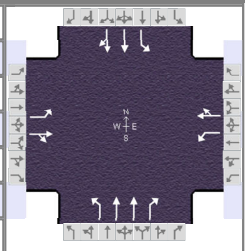
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	2	96		146	95		89	1276	78	89	575	574
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1618		1810	1635		1810	1809	1610	1810	1900	1896
Queue Service Time (g_s), s	0.1	7.0		8.6	6.2		5.8	30.9	2.9	2.8	25.5	25.5
Cycle Queue Clearance Time (g_c), s	0.1	7.0		8.6	6.2		5.8	30.9	2.9	2.8	25.5	25.5
Green Ratio (*g/C*)	0.08	0.08		0.18	0.16		0.06	0.53	0.53	0.56	0.51	0.51
Capacity (*c*), veh/h	168	125		245	265		114	1907	849	257	972	970
Volume-to-Capacity Ratio (*X*)	0.013	0.767		0.598	0.358		0.785	0.669	0.092	0.348	0.592	0.592
Back of Queue (*Q*), ft/ln (95 th percentile)	2.6	130.4		175	111.4		123.4	457.8	47.2	47.9	417.2	416.5
Back of Queue (*Q*), veh/ln (95 th percentile)	0.1	5.2		7.0	4.5		4.9	18.3	1.9	1.9	16.7	16.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	50.8	54.3		44.1	44.7		55.4	20.7	14.1	17.3	20.5	20.5
Incremental Delay (d_2), s/veh	0.0	3.7		1.7	0.3		4.4	1.9	0.2	0.3	2.6	2.7
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	50.8	58.0		45.8	45.0		59.9	22.6	14.3	17.6	23.2	23.2
Level of Service (LOS)	D	E		D	D		E	C	B	B	C	C
Approach Delay, s/veh / LOS	57.9	E		45.5	D		24.5	C		22.8	C	
Intersection Delay, s/veh / LOS	26.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.31	B	1.90	B	1.90	B
Bicycle LOS Score / LOS	0.65	A	0.89	A	1.68	B	1.51	B

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HCS Signalized Intersection Results Summary

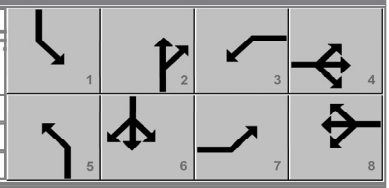
General Information				Intersection Information	
Agency	Winter Springs			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 27, 2024	Area Type	Other
Jurisdiction	Winter Springs	Time Period	PM Peak Hour	PHF	0.95
Urban Street	SR 434	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	SR 434 & Michael Blake…	File Name	4b SR 434 & Michael Blake Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	10	117	73	4	53	87	1306	111	124	1289	18

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.1	1.7	63.1	1.8	4.3	12.0
Yellow	4.8	0.0	4.8	4.8	0.0	4.8
Red	3.0	0.0	3.0	3.0	0.0	3.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	2.0	3.0	1.1	4.0
Phase Duration, s	9.6	19.8	13.9	24.0	15.5	72.5	13.9	70.9
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Max Allow Headway (*MAH*), s	3.0	3.2	3.0	3.2	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s	2.6	11.7	6.5	6.0	8.0		6.0	
Green Extension Time (g_e), s	0.0	0.3	0.0	0.4	0.1	0.0	0.2	0.0
Phase Call Probability	0.30	1.00	0.92	1.00	0.95		0.99	
Max Out Probability	0.00	0.00	0.02	0.00	0.00		0.00	

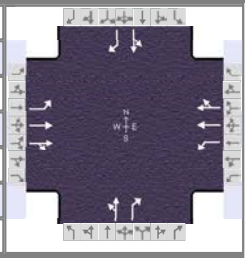
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	11	134		77	60		92	1375	117	131	689	686
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1630		1810	1628		1810	1809	1610	1810	1900	1891
Queue Service Time (g_s), s	0.6	9.7		4.5	4.0		6.0	33.9	4.3	4.0	32.4	32.5
Cycle Queue Clearance Time (g_c), s	0.6	9.7		4.5	4.0		6.0	33.9	4.3	4.0	32.4	32.5
Green Ratio (*g/C*)	0.11	0.10		0.15	0.14		0.06	0.54	0.54	0.58	0.53	0.53
Capacity (*c*), veh/h	204	162		176	220		116	1951	868	248	998	994
Volume-to-Capacity Ratio (*X*)	0.052	0.823		0.437	0.272		0.787	0.705	0.135	0.527	0.690	0.691
Back of Queue (*Q*), ft/ln (95 th percentile)	12.5	181.4		90.7	71.5		126.2	493.2	70.2	68.7	514.2	512.6
Back of Queue (*Q*), veh/ln (95 th percentile)	0.5	7.3		3.6	2.9		5.0	19.7	2.8	2.7	20.6	20.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	47.3	53.0		45.7	46.6		55.3	20.5	13.7	18.9	21.2	21.2
Incremental Delay (d_2), s/veh	0.0	3.9		0.6	0.2		4.4	2.2	0.3	0.6	3.9	3.9
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	47.4	56.9		46.3	46.8		59.7	22.7	14.1	19.5	25.1	25.1
Level of Service (LOS)	D	E		D	D		E	C	B	B	C	C
Approach Delay, s/veh / LOS	56.2	E		46.5	D		24.2	C		24.6	C	
Intersection Delay, s/veh / LOS	26.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.31	B	1.90	B	1.90	B
Bicycle LOS Score / LOS	0.73	A	0.71	A	1.79	B	1.73	B

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HCS Signalized Intersection Results Summary

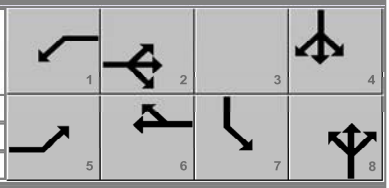
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 13, 2024	Area Type	Other
Jurisdiction	Seminole County	Time Period	AM Peak Hour	PHF	0.92
Urban Street	SR 434	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	SR 434 & Bear Springs/…	File Name	5a SR 434 & Bear Springs Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	27	1329	2	29	1696	86	19	1	18	72	1	43

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.1	0.2	105.6	8.6	0.0	0.0
Yellow	4.9	0.0	4.9	4.8	0.0	0.0
Red	2.9	0.0	2.9	4.1	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8	7	4
Case Number	1.1	4.0	2.0	4.0		7.3	0.0	13.2
Phase Duration, s	11.9	113.4	12.1	113.5		17.5	0.0	17.5
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9	4.0	8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1	0.0	4.1
Queue Clearance Time (g_s), s	2.6		4.5			4.0		8.2
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0		0.5	0.0	0.5
Phase Call Probability	0.69		0.71			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

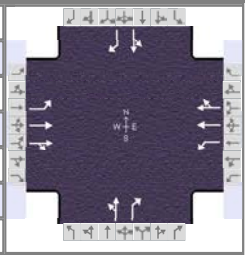
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	29	724	723	32	969	968		22	20		79	47
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1739	1841	1840	1810	1856	1824		1462	1547		1449	1547
Queue Service Time (g_s), s	0.6	24.2	24.2	2.5	40.7	42.2		0.0	1.7		6.0	4.2
Cycle Queue Clearance Time (g_c), s	0.6	24.2	24.2	2.5	40.7	42.2		2.0	1.7		6.2	4.2
Green Ratio (*g/C*)	0.77	0.74	0.74	0.03	0.74	0.74		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	197	1359	1358	54	1372	1348		137	94		138	94
Volume-to-Capacity Ratio (*X*)	0.149	0.532	0.533	0.581	0.706	0.718		0.158	0.209		0.576	0.499
Back of Queue (*Q*), ft/ln (95 th percentile)	14.6	350.1	350	56.9	544.2	542.3		34.4	32.6		131.7	81
Back of Queue (*Q*), veh/ln (95 th percentile)	0.6	13.6	13.6	2.3	21.3	21.7		1.4	1.3		5.3	3.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Uniform Delay (d_1), s/veh	11.8	8.1	8.1	68.5	10.2	10.4		64.0	63.9		66.8	65.1
Incremental Delay (d_2), s/veh	0.3	1.5	1.5	9.5	3.1	3.3		0.5	1.1		3.8	4.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	12.1	9.6	9.6	78.0	13.2	13.7		64.6	65.0		70.5	69.2
Level of Service (LOS)	B	A	A	E	B	B		E	E		E	E
Approach Delay, s/veh / LOS	9.6	A		14.5	B		64.8	E		70.0	E	
Intersection Delay, s/veh / LOS	15.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	1.86	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.71	B	2.11	B	0.56	A	0.70	A

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HCS Signalized Intersection Results Summary

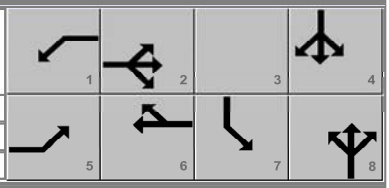
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 13, 2024	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.98
Urban Street	SR 434	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	SR 434 & Bear Springs/…	File Name	5b SR 434 & Bear Springs Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	1790	15	44	1598	122	11	3	21	72	1	37

Signal Information			
Cycle, s	143.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.0	0.9	104.5	8.2	0.0	0.0
Yellow	4.9	0.0	4.9	4.8	0.0	0.0
Red	2.9	0.0	2.9	4.1	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8	7	4
Case Number	1.1	4.0	2.0	4.0		7.3	0.0	13.2
Phase Duration, s	13.7	113.1	12.8	112.3		17.1	0.0	17.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9	4.0	8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.1	0.0	4.1
Queue Clearance Time (g_s), s	3.8		5.5			3.9		7.8
Green Extension Time (g_e), s	0.3	0.0	0.1	0.0		0.4	0.0	0.4
Phase Call Probability	0.98		0.83			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

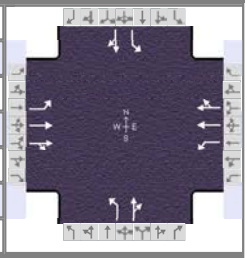
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	94	921	921	45	882	874		14	21		74	38
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1856	1850	1810	1856	1809		1543	1547		1447	1547
Queue Service Time (g_s), s	1.8	37.1	37.3	3.5	34.9	36.0		0.0	1.9		5.8	3.4
Cycle Queue Clearance Time (g_c), s	1.8	37.1	37.3	3.5	34.9	36.0		1.1	1.9		5.8	3.4
Green Ratio (*g/C*)	0.77	0.74	0.74	0.03	0.73	0.73		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	253	1367	1363	63	1356	1322		133	88		133	88
Volume-to-Capacity Ratio (*X*)	0.372	0.674	0.676	0.711	0.650	0.661		0.107	0.242		0.561	0.427
Back of Queue (*Q*), ft/ln (95 th percentile)	45.5	504.7	509.5	82.9	482.2	474.1		22.5	36.1		6.1	65.1
Back of Queue (*Q*), veh/ln (95 th percentile)	1.8	19.7	19.7	3.3	18.8	19.0		0.9	1.4		0.2	2.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Uniform Delay (d_1), s/veh	10.9	9.8	9.9	68.3	9.9	10.0		64.1	64.5		67.0	65.2
Incremental Delay (d_2), s/veh	0.9	2.7	2.7	13.7	2.4	2.6		0.4	1.4		3.7	3.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	11.8	12.5	12.6	82.0	12.3	12.6		64.4	65.9		70.7	68.4
Level of Service (LOS)	B	B	B	F	B	B		E	E		E	E
Approach Delay, s/veh / LOS	12.5	B		14.2	B		65.3	E		69.9	E	
Intersection Delay, s/veh / LOS	15.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	1.86	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	2.08	B	1.97	B	0.55	A	0.67	A

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HCS Signalized Intersection Results Summary

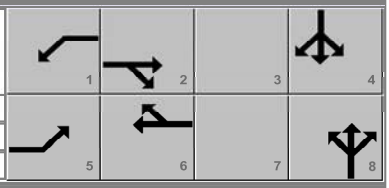
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 13, 2024	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.90
Urban Street	SR 434	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	SR 434 & Heritage Park…	File Name	6a SR 434 & Heritage Park Projected AM Peak.xus		
Project Description	Projected AM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	208	1216	45	43	1429	199	43	15	57	159	15	191

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.2	11.5	94.8	35.2	0.0	0.0
Yellow	4.9	4.9	4.9	4.8	0.0	0.0
Red	2.9	2.9	2.9	4.1	0.0	0.0



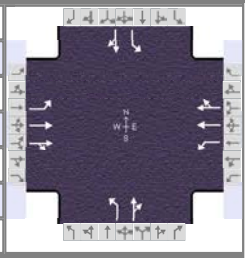
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	4.0	2.0	4.0		6.0		6.0
Phase Duration, s	33.3	121.9	14.0	102.6		44.1		44.1
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.2		4.2
Queue Clearance Time (g_s), s	24.8		6.7			34.0		32.7
Green Extension Time (g_e), s	0.6	0.0	0.1	0.0		1.2		1.4
Phase Call Probability	1.00		0.91			1.00		1.00
Max Out Probability	0.00		0.00			0.35		0.22

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	231	704	697	48	910	899	48	80		177	229	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1826	1803	1810	1841	1763	1170	1598		1339	1565	
Queue Service Time (g_s), s	22.8	41.3	41.5	4.7	83.2	88.7	7.2	7.6		23.1	24.8	
Cycle Queue Clearance Time (g_c), s	22.8	41.3	41.5	4.7	83.2	88.7	32.0	7.6		30.7	24.8	
Green Ratio (*g/C*)	0.14	0.63	0.63	0.03	0.53	0.53	0.20	0.20		0.20	0.20	
Capacity (*c*), veh/h	254	1158	1143	62	970	929	108	313		246	306	
Volume-to-Capacity Ratio (*X*)	0.910	0.608	0.610	0.772	0.938	0.968	0.442	0.256		0.719	0.748	
Back of Queue (*Q*), ft/ln (95 th percentile)	434.4	637.9	629	112.7	1323.7	1337.5	101.3	146.2		327.7	409.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	17.2	24.5	24.4	4.5	51.3	53.5	4.1	5.6		13.1	15.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	76.1	19.6	19.6	86.2	39.8	41.1	83.2	61.3		74.3	68.2	
Incremental Delay (d_2), s/veh	17.1	2.4	2.4	18.1	17.3	22.8	2.8	0.4		6.9	7.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	93.2	22.0	22.1	104.3	57.2	63.9	86.1	61.7		81.2	75.4	
Level of Service (LOS)	F	C	C	F	E	E	F	E		F	E	
Approach Delay, s/veh / LOS	32.1	C		61.7	E		70.8	E		77.9	E	
Intersection Delay, s/veh / LOS	51.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	1.92	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.83	B	2.02	B	0.70	A	1.16	A

HCS Signalized Intersection Results Summary

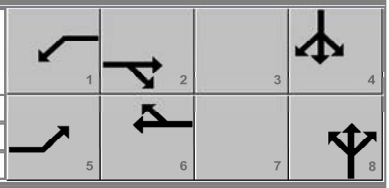
General Information				Intersection Information	
Agency	Seminole County			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	Jun 13, 2024	Area Type	Other
Jurisdiction	Seminole County	Time Period	PM Peak Hour	PHF	0.97
Urban Street	SR 434	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	SR 434 & Heritage Park…	File Name	6b SR 434 & Heritage Park Projected PM Peak.xus		
Project Description	Projected PM Peak Hour				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	218	1744	31	54	1403	199	23	2	58	98	6	147

Signal Information			
Cycle, s	180.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.1	10.0	107.1	23.5	0.0	0.0
Yellow	4.9	4.9	4.9	4.8	0.0	0.0
Red	2.9	2.9	2.9	4.1	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	2.0	4.0	2.0	4.0		6.0		6.0
Phase Duration, s	32.7	132.7	14.9	114.9		32.4		32.4
Change Period, ($Y+R_c$), s	7.8	7.8	7.8	7.8		8.9		8.9
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0		4.2		4.2
Queue Clearance Time (g_s), s	24.2		7.5			22.3		21.2
Green Extension Time (g_e), s	0.7	0.0	0.1	0.0		1.1		1.2
Phase Call Probability	1.00		0.94			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	225	916	914	56	835	816	24	62		101	158	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1873	1810	1870	1789	1248	1618		1362	1607	
Queue Service Time (g_s), s	22.2	52.1	52.6	5.5	58.9	61.2	3.4	6.2		13.0	17.0	
Cycle Queue Clearance Time (g_c), s	22.2	52.1	52.6	5.5	58.9	61.2	20.3	6.2		19.2	17.0	
Green Ratio (*g/C*)	0.14	0.69	0.69	0.04	0.59	0.59	0.13	0.13		0.13	0.13	
Capacity (*c*), veh/h	249	1307	1299	72	1112	1064	86	212		172	211	
Volume-to-Capacity Ratio (*X*)	0.904	0.701	0.704	0.776	0.751	0.767	0.275	0.292		0.588	0.749	
Back of Queue (*Q*), ft/ln (95 th percentile)	412.8	752.7	773.4	129.3	893.9	879.2	50.3	117.5		206	295.2	
Back of Queue (*Q*), veh/ln (95 th percentile)	16.4	29.9	30.0	5.2	35.2	35.2	2.0	4.7		8.2	11.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	76.4	16.5	16.5	85.6	26.7	27.2	85.1	70.7		79.3	75.4	
Incremental Delay (d_2), s/veh	11.6	3.1	3.2	16.2	4.7	5.3	1.7	0.8		3.2	5.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	88.0	19.6	19.8	101.8	31.4	32.5	86.8	71.4		82.5	80.6	
Level of Service (LOS)	F	B	B	F	C	C	F	E		F	F	
Approach Delay, s/veh / LOS	27.2	C		34.3	C		75.7	E		81.3	F	
Intersection Delay, s/veh / LOS	34.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.88	B	1.91	B	2.33	B	2.33	B
Bicycle LOS Score / LOS	2.18	B	1.90	B	0.63	A	0.91	A

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HCS Two-Way Stop-Control Report

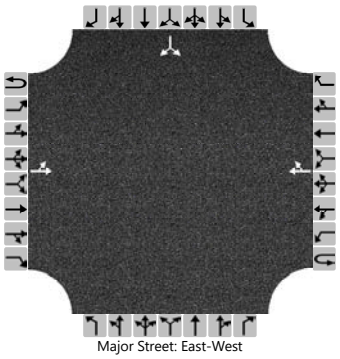
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	06/13/2024
Analysis Year	2024
Time Analyzed	Projected AM Peak
Intersection Orientation	East-West
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	Michael Blake & South D/W
Jurisdiction	Seminole County
East/West Street	Michael Blake Blvd
North/South Street	South Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		58	61				53	54						24		78
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		63													111	
Capacity, c (veh/h)		1485													887	
v/c Ratio		0.04													0.12	
95% Queue Length, Q_{95} (veh)		0.1													0.4	
Control Delay (s/veh)		7.5	0.3												9.6	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)		3.8												9.6		
Approach LOS		A												A		

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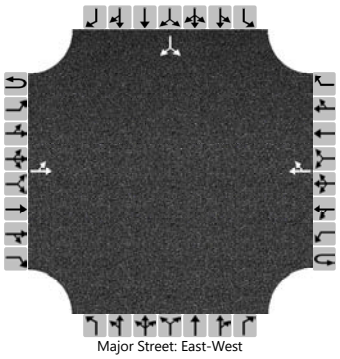
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	06/13/2024
Analysis Year	2024
Time Analyzed	Projected PM Peak
Intersection Orientation	East-West
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	Michael Blake & South D/W
Jurisdiction	Seminole County
East/West Street	Michael Blake Blvd
North/South Street	South Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		41	94				31	46						28		59
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		45													95	
Capacity, c (veh/h)		1526													896	
v/c Ratio		0.03													0.11	
95% Queue Length, Q_{95} (veh)		0.1													0.4	
Control Delay (s/veh)		7.4	0.2												9.5	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	2.4												9.5			
Approach LOS	A												A			

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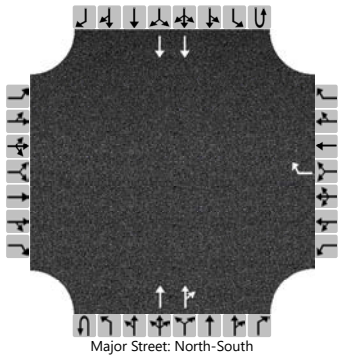
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	06/13/2024
Analysis Year	2024
Time Analyzed	Projected AM Peak Hour
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	Tuskawilla & West D/W
Jurisdiction	Seminole County
East/West Street	West Side Driveway
North/South Street	Tuskawilla Road
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	0	0	0	2	0
Configuration								R			T	TR			T	
Volume (veh/h)								101			741	97			626	
Percent Heavy Vehicles (%)								0								
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.90								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.30								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								110								
Capacity, c (veh/h)								557								
v/c Ratio								0.20								
95% Queue Length, Q_{95} (veh)								0.7								
Control Delay (s/veh)								13.0								
Level of Service (LOS)								B								
Approach Delay (s/veh)						13.0										
Approach LOS						B										

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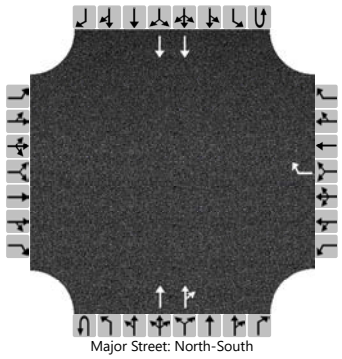
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	06/13/2024
Analysis Year	2024
Time Analyzed	Projected PM Peak Hour
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	Tuskawilla & West D/W
Jurisdiction	Seminole County
East/West Street	West Side Driveway
North/South Street	Tuskawilla Road
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	0	0	0	2	0
Configuration								R			T	TR			T	
Volume (veh/h)								111			922	102			1103	
Percent Heavy Vehicles (%)								0								
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.90								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.30								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								121								
Capacity, c (veh/h)								479								
v/c Ratio								0.25								
95% Queue Length, Q_{95} (veh)								1.0								
Control Delay (s/veh)								15.0								
Level of Service (LOS)								C								
Approach Delay (s/veh)						15.0										
Approach LOS						C										

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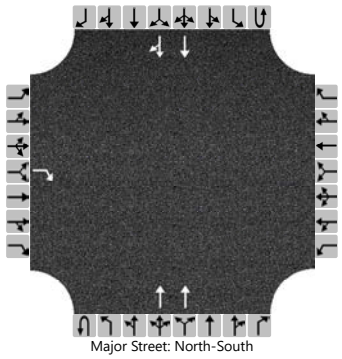
General Information

Analyst	TPD/jd
Agency/Co.	Seminole County
Date Performed	06/13/2024
Analysis Year	2024
Time Analyzed	Projected AM Peak Hour
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	SR 434 & East D/W
Jurisdiction	Seminole County
East/West Street	East Side Driveway
North/South Street	SR 434
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration				R							T				T	TR
Volume (veh/h)				137							1365				1050	157
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.90												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				149												
Capacity, c (veh/h)				413												
v/c Ratio				0.36												
95% Queue Length, Q_{95} (veh)				1.6												
Control Delay (s/veh)				18.6												
Level of Service (LOS)				C												
Approach Delay (s/veh)		18.6														
Approach LOS		C														

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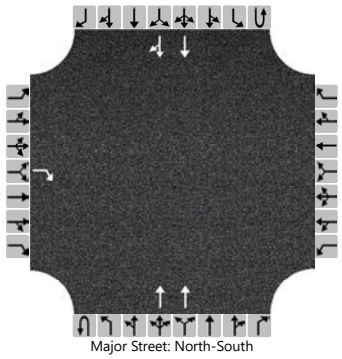
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Agency/Co.	Seminole County
Date Performed	06/13/2024
Analysis Year	2024
Time Analyzed	Projected PM Peak Hour
Intersection Orientation	North-South
Project Description	Ace Hardware Winter Springs TPD# 5824

Site Information

Intersection	SR 434 & East D/W
Jurisdiction	Seminole County
East/West Street	East Side Driveway
North/South Street	SR 434
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	2	0	0	0	2	0
Configuration				R							T				T	TR
Volume (veh/h)				131							1388				1259	149
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.9												
Critical Headway (sec)				6.90												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				142												
Capacity, c (veh/h)				350												
v/c Ratio				0.41												
95% Queue Length, Q_{95} (veh)				1.9												
Control Delay (s/veh)				22.1												
Level of Service (LOS)				C												
Approach Delay (s/veh)		22.1														
Approach LOS		C														

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NATIVE GEOSCIENCE

Phase I Environmental Site Assessment

Sutton Crossings Property
Tuskawilla Road and Michael Blake Boulevard
Winter Springs, Seminole County, Florida
Native Geoscience Project No.: R0789.1

Prepared for:
EQX-HRP Winter Springs, LLC

Prepared by:
Native Geoscience, Inc.
Orlando, Florida

October 18, 2022

NATIVE GEOSCIENCE

October 18, 2022

Mr. Ryan Stahl
EQX-HRP Winter Springs, LLC
630 S. Maitland Avenue, Suite 100
Maitland, Florida 32751

Re: Phase I Environmental Site Assessment Report
Sutton Crossings Property
Winter Springs, Seminole County, Florida
Native Geoscience Project No.: R0789.1

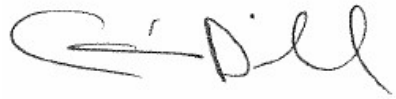
Dear Mr. Stahl:

Native Geoscience, Inc. (NGI) has completed a Phase I Environmental Site Assessment (ESA) for the above-referenced subject property. The subject property is located south of the intersection of State Road 434 and Tuskawilla Road and north of Michael Blake Boulevard in Winter Springs, Seminole County, Florida. The scope of services was conducted in general accordance with NGI Proposal No. P1794.1 dated September 16, 2022 and authorized by you.

The Phase I ESA was conducted in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E1527-13. The objective of the Phase I ESA was to evaluate the subject property for indications of recognized environmental conditions and to assist in satisfying All Appropriate Inquiries (AAI) standards and practices. The following report provides the scope, methods and conclusions of our assessment.

We appreciate the opportunity to be of service to you on this project and look forward to a continued relationship. Should you have any questions or concerns regarding this report, please feel free to call us at (407) 342-1443.

Sincerely,
Native Geoscience, Inc.



John C. Diehl, Jr.
Principal Geologist

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1.0 Executive Summary

Native Geoscience, Inc. (NGI) has completed a Phase I Environmental Site Assessment (ESA) for EQX-HRP Winter Springs, LLC on the subject property located south of the intersection of State Road 434 and Tuskawilla Road, and north of Michael Blake Boulevard in Winter Springs, Seminole County, Florida. The Phase I ESA was conducted in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E1527-13. The objective of the Phase I ESA was to evaluate the subject property for indications of recognized environmental conditions and to assist in satisfying All Appropriate Inquiries (AAI) standards and practices.

The subject property consists of three legal parcels totaling approximately 6.24 acres that are identified by the Seminole County Property Appraiser (SCPA) as Parcel Identification Numbers (PINs) 01-21-30-501-0000-0010 (parcel 1), 26-20-30-5AR-0A00-008D (parcel 2) and 26-20-30-5AR-0A00-008H (parcel 3). Parcel 1 is owned by Patti A. Schoen and is currently undeveloped and heavily wooded. Parcels 2 and 3 are owned by Schrimsher Land Fund and are also heavily wooded. We understand that the proposed roads and rights of way (ROW) separating the parcels are also included within the subject property.

Based on review of the Casselberry, Florida Quadrangle Map prepared by the U.S Geological Survey (USGS), the subject property has an elevation of approximately 45 feet above mean sea level (AMSL). The ground surface appears to slope downward to the east, toward Howell Creek which discharges into Lake Jessup to the north.

Based on our historical review, the subject property appeared to exist as undeveloped land with a railroad bed for the Seaboard Coast Line trending in a north-south direction in the eastern portion from prior to 1940 until present. Tuskawilla Road was apparent as a dirt road from prior to 1940 until circa 1957 when it appeared paved. Development of the surrounding area appeared to begin in the 1980's. The railroad line had appeared inactive since at least 1999.

The subject property was not identified in the regulatory database report.

The subject property is located in an area dominated by commercial and retail development. During the site visit, NGI observed the following land use on properties adjoining the subject property.

Adjoining Properties	
North Adjoining Property (NAP)	Exxon Mobil Gas Station and Carwash (1205 State Road 434)
South Adjoining Property (SAP)	[across Michael Blake Boulevard] followed by undeveloped land and The Savoy Gracious Retirement Living (80 Michael Blake Boulevard)
East Adjoining Property (EAP)	[Across State Road 434] Wendy's Restaurant (1218 E State Road 434) Starbucks (1220 E State Road 434) and undeveloped wooded areas.
West Adjoining Property (WAP)	[Across Tuskawilla Road] Lake Jesup Animal Hospital (190 Tuskawilla Road), Wooded Land and Stormwater pond for a commercial plaza.

The north adjoining property (Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786) was identified in the regulatory database report and is further discussed below.

Findings and Conclusions

NGI has completed a Phase I ESA in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E1527-13 at the subject property located south of the intersection of State Road 434 and Tuskawilla Road, and north of Michael Blake Boulevard in Winter Springs, Seminole County, Florida. Based solely on the records review, site visit and interviews conducted for this assessment, NGI has not identified Controlled Recognized Environmental Conditions or Historical Recognized Environmental Conditions for the subject property.

NGI identified the following Recognized Environmental Conditions for the subject property.

- The north adjoining property (**Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786**) was identified in the regulatory database report as a Leaking Underground Storage Tank (LUST), Underground Storage Tank (UST), Cleanup Site, and other associated listings. The facility address is 1205 E. State Road 434. According to available documentation, a Discharge Reporting Form (DRF) was filed on May 3, 1993, indicating an unknown amount of free product was found in a monitoring well at the site. A Site Assessment Report (SAR) was submitted July 30, 2013, by Shaw Environmental, Inc. No OVA responses were detected above 0 ppm and no laboratory soil samples contained concentrations above Soil Cleanup Target Levels (SCTLs). Groundwater concentrations above Groundwater Cleanup Target Levels (GCTLs) was not identified with the exception of benzene (4.8 ug/L) in MW-5. Lastly, Shaw measured the groundwater flow direction at the facility to be east to southeast on April 25 and July 15, 2013. This is generally cross-gradient relative to the subject property; however, it could flow through the northeast corner.

  A Supplemental Site Assessment Report was conducted by Montrose Environmental dated March 24, 2020. During the assessment, Montrose conducted 3 soil borings and collected 2 soil samples from each boring. In addition, Montrose installed two additional monitoring wells and sampled a total of 7 wells (including the two additional wells). According to the report, no soil or groundwater contamination was identified on the site and previously impacted MW-5 exhibited two consecutive clean rounds of groundwater sampling. Therefore, Montrose proposed that the site qualified for No Further Action and is awaiting response from the Florida Department of Environmental Protection (FDEP).

  Based on the documents reviewed, it appears that the north adjoining property is nearing a Site Rehabilitation Completion Order (SRCO) from the FDEP. However, due to the close proximity of the UST area and previously impacted monitoring well MW-5 to the subject property boundary (on the order of 30 to 50 feet), it is likely that petroleum-impacted groundwater has migrated onto the subject property from this facility. Therefore, this represents a Recognized Environmental Condition. It should be noted that the north adjoining facility is in a State-funded cleanup and assessment program (Petroleum Liability and Restoration Insurance Program – PLRIP). Therefore, petroleum-impacts to the subject property associated with the 1993 discharge would likely be the responsibility of the State.

- Historical aerial photographs and topographic maps indicate that a railroad track was present on the subject property in the past. Railroad tracks are frequently sources of contamination due to the presence of railroad ties generally treated with creosote as well as the long-term application

of hazardous materials (pesticides and herbicides) within the right of way during typical maintenance operations. These materials are known to accumulate in the soil over time. Furthermore, during an interview with the owner Mr. Michael Schrimsher, he stated that he was aware of soil contamination on the subject property. According to Mr. Schrimsher, "soil under the former CSX railroad was contaminated by creosote on wooden railroad ties and herbicide sprayed along railroad tracks." Therefore, it is our opinion that the former railroad track area represents a Recognized Environmental Condition.

NGI identified the following Business Environmental Risk for the subject property.

- **Town Center S.E.E.D.** and **Former Central Florida Drum Facility** were identified as Brownfields in the vicinity of the subject property. Brownfields are areas of economic blight, often due to known or perceived contamination or environmental issues. The presence of a Brownfield does not indicate the existence of contamination on any certain property, and the other databases searched provide sufficient data to evaluate the subject property and/or adjacent properties for site-specific concerns.

2.0 Introduction

In order to manage environmental risk, it is important for firms involved in the purchasing, leasing, and/or financing of properties to obtain a professional opinion regarding the potential for significant levels of contamination. Such contamination may occur in surface water bodies, soil, and/or groundwater, or within structures on a subject property. Activities carried out for this assessment are directed at providing EQX-HRP Winter Springs, LLC with a professional evaluation of the potential for environmental liabilities on the specific subject property using the methodology described in ASTM E1527-13.

2.1 Objective

NGI has conducted a Phase I ESA in general conformance with ASTM E1527-13. The objective of this Phase I ESA is to identify, to the extent feasible pursuant to the process prescribed by the ASTM standard, recognized environmental conditions (RECs) in connection with the property.

The Phase I ESA has four components:

1. Records Review,
2. Site Reconnaissance,
3. Interviews, and
4. Report preparation.

RECs are defined by ASTM as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under the conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not RECs.

The ASTM standard also discusses two variations of RECs – a Controlled Recognized Environmental Condition (CREC) and a Historical Recognized Environmental Condition (HREC). These types of RECs are further defined below.

A CREC is defined as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

An HREC is defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting

the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Lastly, the ASTM standard defines a Business Environmental Risk as a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.

2.2 Limiting Conditions and Data Gaps

The findings and conclusions presented in this report are based on procedures described in ASTM Practice E1527-13, inquiries with public agencies, available literature cited in this report, conditions noted at the time of our Phase I ESA, and our interpretation of the information obtained as part of this Phase I ESA. Our findings and conclusions are limited to the specific project and properties described in this report and by the accuracy and completeness of information provided by others.

An environmental site assessment cannot wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property within reasonable limits of time and cost.

In performing its services, NGI used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

No data gaps were identified during the Phase I ESA process, with the exception of the following:

- Historical resources were not readily available for 5-year-or-less intervals.

In our opinion, the identified data gap did not affect the environmental professional's ability to render opinions regarding conditions indicative of a release or threatened release.

2.3 Non-Scope Considerations

This assessment did not include non-scope items such as Asbestos-Containing Building Materials, Biological Agents, Cultural and Historic Resources, Ecological Resources, Endangered Species, Health and Safety, Indoor Air Quality unrelated to releases of hazardous substances or petroleum products into the environment, Industrial Hygiene, Lead-Based Paint, Lead in Drinking Water, Mold, Radon, and Regulatory Compliance.

2.4 Reliance

This report is for the exclusive use of EQX-HRP Winter Springs, LLC. No other warranty, expressed or implied, is made. NGI is not responsible for any claims, damages, or liability associated with any other third party's interpretation or reuse of this report without the express written authorization of NGI.

3.0 Site Description

3.1 Site Location, Description and Current Use

The subject property consists of three legal parcels totaling approximately 6.24 acres that are identified by the Seminole County Property Appraiser (SCPA) as Parcel Identification Numbers (PINs) 01-21-30-501-0000-0010 (parcel 1), 26-20-30-5AR-0A00-008D (parcel 2) and 26-20-30-5AR-0A00-008H (parcel 3). Parcel 1 is owned by Patti A. Schoen and is currently undeveloped and heavily wooded. Parcels 2 and 3 are owned by Schrimsher Land Fund and are also heavily wooded. We understand that the proposed roads and rights of way (ROW) separating the parcels are also included within the subject property.

The following figures are included for reference: Figure 1 (Site Location Plan), Figure 2 (Site Plan), and Figure 3 (Topographic Map).

3.1.1 Geology

The property is located in Seminole County within the Casselberry-Oviedo-Geneva-Chuluota Hills subdistrict of the Central Lake physiographic district. This area is characterized by variable relief with elevations ranging from 5 to 75 feet above mean sea level. These variations in elevation may be attributed to groundwater solution of carbonate lithology and subsequent subsidence due to karst development. The topography of the area is dominated by numerous, small, closed depressions some of which contain swamps or shallow ponds. The higher elevations can be attributed to ancient marine terraces, beach ridges and dunes. Within the Central Lake district, the uplifted limestones of the Floridan aquifer lie unconformably below surficial sands. This region, consisting of prairies, swamps, and lakes, is the principal recharge area of the Floridan aquifer.

The water table aquifer exists unconfined within surficial clastic sediments consisting of unconsolidated sands and semi-consolidated clayey sands. Water wells tapped into the water table aquifer are primarily used for domestic purposes. The intermediate aquifer is represented in the formations of the Hawthorn Group. This aquifer generally supplies water for irrigation wells.

The principal aquifer is the Floridan which begins at the top of the Ocala Group and is the source for all major municipal, irrigation, and domestic wells. It has a potentiometric surface of 30 to 40 feet above mean sea level in the area of the property. The aquifer is also connected to the surface waters through sinkhole lakes. These lakes provide a direct passage for surface water recharge of the Floridan aquifer.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Paolo-St. Lucie sands, Tavares-Millhopper complex and Pomelo fine sands. These soils range from moderately well to excessively drained with depth to groundwater generally ranging from 24 inches to more than 80 inches below natural grade.

3.1.2 Topography and Estimated Groundwater Flow Direction

Based on review of the Casselberry, Florida Quadrangle Map prepared by the U.S Geological Survey (USGS), the subject property has an elevation of approximately 45 feet above mean sea level (AMSL). The

ground surface appears to slope downward to the east, toward Howell Creek which discharges into Lake Jessup to the north. A copy of a recent topographic map is included in Figure 3.

We estimate the groundwater flow direction to be similar to the topographic slope of the site and surrounding area. Therefore, groundwater is likely flowing to the east, toward Howell Creek.

3.1.3 Flood Zone

Based on review of the National Flood Hazard Map (Community Panel Number 12117C 0160F, dated September 28, 2007) prepared by the Federal Emergency Response Agency (FEMA), the subject property is identified as Zone X (an area of minimal flood risk). A copy of the FEMA National Flood Hazard Map reviewed for this project is included in Appendix ii.

3.1.4 Wetlands

Based on review of the National Wetland Inventory map, it appears that wetlands are not present on the subject property. However, a wetland survey should be conducted by an experienced wetland ecologist in order to determine the actual presence and extent of wetlands on the subject property.

3.2 Subject Property Vicinity and Adjoining Properties

The subject property is located in an area dominated by commercial and retail development. During the site visit, NGI observed the following land use on properties adjoining the subject property.

Adjoining Properties	
North Adjoining Property (NAP)	Exxon Mobil Gas Station and Carwash (1205 State Road 434)
South Adjoining Property (SAP)	[across Michael Blake Boulevard] followed by undeveloped land and The Savoy Gracious Retirement Living (80 Michael Blake Boulevard)
East Adjoining Property (EAP)	[Across State Road 434] Wendy's Restaurant (1218 E State Road 434) Starbucks (1220 E State Road 434) and undeveloped wooded areas.
West Adjoining Property (WAP)	[Across Tuskawilla Road] Lake Jesup Animal Hospital (190 Tuskawilla Road), Wooded Land and Stormwater pond for a commercial plaza.

The north adjoining property (Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786) was identified in the regulatory database report and is further discussed in Section 5.0.

4.0 Historical Review

The objective of consulting historical sources is to develop a history of the previous uses of the subject property and adjoining properties in order to identify those uses that are likely to have led to recognized environmental conditions in connection with the property.

Based on our historical review, the subject property appeared to exist as undeveloped land with a railroad bed for the Seaboard Coast Line trending in a north-south direction in the eastern portion from prior to 1940 until present. Tuskawilla Road was apparent as a dirt road from prior to 1940 until circa 1957 when it appeared paved. Development of the surrounding area appeared to begin in the 1980's. The railroad line had appeared inactive since at least 1999.

4.1 Aerial Photographs

NGI obtained available aerial photographs of the subject property and surrounding areas from Environmental Data Resources (EDR) dated September 21, 2022 (included in Appendix ii). The following observations were noted to be visible on the subject property and adjoining properties during the aerial photograph review:

Date	Scale	Quality	Observations
1940	1"=500'	Moderate	**Subject Property:** Undeveloped native pastureland. A possible railroad is located on the east portion of the site. **NAP:** Undeveloped land followed by State Road 434. **SAP:** Undeveloped native pastureland with sporadic trees throughout. **EAP:** State Road 434 followed by undeveloped native pastureland. **WAP:** Tuskawilla Road (unpaved) followed by undeveloped native pastureland.
1948	1"=500'	Moderate	**Subject Property:** No significant changes. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Increased tree canopy.
1952	1"=500'	Moderate	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1957	1"=500'	Moderate	**Subject Property:** Increased tree canopy. **NAP:** No significant changes visible. **SAP:** Pastureland cleared, and structures are visible along Tuskawilla Road. **EAP:** No significant changes visible. **WAP:** Tuskawilla Road appears paved.

1969	1"=500'	Poor	**Subject Property:** No significant changes visible. **NAP:** Increased tree canopy. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1972	1"=500'	Poor	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1977	1"=500'	Poor	**Subject Property:** Increased tree canopy, covering majority of the site. **NAP:** Increased tree canopy, covering majority of the property. **SAP:** Additional structures appear along Tuskawilla Road. **EAP:** No significant changes visible. **WAP:** Increased tree canopy, covering majority of the property.
1980	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Residential structures appear beyond Tuskawilla Road.
1986	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Additional residential structures visible beyond Tuskawilla Road.
1993	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** Gas station visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1994	1"=500'	Moderate	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1999	1"=500'	Poor	**Subject Property:** No significant changes visible. **NAP:** State Road 434 widened. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.

2007	1"=500'	Moderate	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Newly constructed building located across Tuskawilla Road.
2010	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
2013	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
2017	1"=500'	Good	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** Property cleared and under construction across State Road 434. **WAP:** No significant changes visible.

No observations of environmental concern were made during our aerial photograph review with the exception of the gas station located on the north adjoining property.

4.2 Fire Insurance Maps

NGI reviewed the collection of Sanborn Fire insurance maps from EDR dated September 20, 2022. Sanborn map coverage was not available for the subject property and its vicinity.

A copy of the EDR's "Certified Sanborn® Map Report" is included in Appendix ii.

4.3 City Directories

NGI reviewed historical city directories obtained from EDR dated September 22, 2022, for past names and businesses that were listed for the subject property and adjoining properties. City Directories were reviewed for various years from 1940 through 2017. Since the subject property is not addressed, it was not listed in the city directories reviewed.

Below are the listings for the adjoining properties. Adjoining properties were not listed in City Directories prior to 1992.

Adjoining Property Addresses	
Year	**Listing**
1992	**NAP:** No Listings **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith (190 Tuskawilla Road)
1995	**NAP:** No Listings **SAP:** No Listings **EAP:** No Listings **WAP:** No Listings
2000	**NAP:** Mobile Orlando Jawad Incorporated (1205 E State Road 434) **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith; Lake Jesup Animal Hospital (190 Tuskawilla Road)
2005	**NAP:** Exxon Mobile Oil Corp (1205 E State Road 434) **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith DVM; Lake Jesup Animal Hospital (190 Tuskawilla Road)
2010	**NAP:** No Listings **SAP:** No Listings **EAP:** No Listings **WAP:** Lake Jesup Animal Hospital (190 Tuskawilla Road)
2014	**NAP:** Winter Springs Mobil (1205 E State Road 434) **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith DVM VET; Lake Jesup Animal Hospital (190 Tuskawilla Road)
2017	**NAP:** 7 Eleven; Mobil (1205 E State Road 434) **SAP:** No Listings **EAP:** No Listings **WAP:** Edward W Griffith DVM; Lake Jesup Animal Hospital (190 Tuskawilla Road)

No listings of environmental concern were identified during our city directory search with the exception of the gas station located on the north adjoining property (1205 E. State Road 434). This facility is further discussed in Section 5.0.

4.4 Historical Topographic Maps

NGI reviewed historical topographic maps obtained from EDR dated September 20, 2022 (included in Appendix ii). The following observations were noted to be depicted on the subject property and adjoining properties during the topographic map review:

Date	Observations
1962	**Subject Property:** Undeveloped pastureland and Atlantic Coast Railroad Line depicted. **NAP:** Undeveloped pastureland followed by State Road 434. **SAP:** Undeveloped pastureland, a structure, and Atlantic Coast Railroad Line depicted. **EAP:** Undeveloped pastureland depicted. **WAP:** Tuskawilla Road followed by undeveloped land depicted.
1970	**Subject Property:** No significant changes visible. Name of railroad appears as Seaboard Coast Line. **NAP:** No significant changes visible. **SAP:** More structures depicted. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1972	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
1980	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Residential roads and structures depicted across Tuskawilla Road.
1994	**Subject Property:** No significant changes visible. **NAP:** Likely gas station depicted. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** Additional structures depicted.
2012	**Subject Property:** No structures, railroads, or individual building footprints are depicted. **NAP:** No structures, railroads, or individual building footprints are depicted. **SAP:** No structures, railroads, or individual building footprints are depicted. **EAP:** No structures or individual building footprints are depicted. **WAP:** No structures or individual building footprints are depicted.
2015	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.
2018	**Subject Property:** No significant changes visible. **NAP:** No significant changes visible. **SAP:** No significant changes visible. **EAP:** No significant changes visible. **WAP:** No significant changes visible.

No observations of environmental concern were made during our topographic map review with the exception of the gas station located on the north adjoining property.

5.0 Records Review

5.1 Regulatory Report

NGI obtained regulatory database information pertaining to the subject property and surrounding area from Environmental Data Resources, Inc. (EDR) dated September 20, 2022. The EDR report is a compilation of records of facilities that are included on current federal and state environmental regulatory databases. The databases were searched based on the specified minimum search distances from the Site as established by ASTM Practice E1527-13. A copy of the EDR report is attached in Appendix iii.

We reviewed the EDR report to identify records that indicate known or potential recognized environmental conditions on the subject property and/or surrounding area and to evaluate the likelihood for those recognized environmental conditions to impact the subject property based on the information obtained in this Phase I ESA. Further discussion of specific listings is provided below.

5.1.1 Subject Property Listings

The subject property is not listed in the EDR regulatory report.

5.1.2 Adjoining Property Listings

The north adjoining property (**Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786**) was identified in the regulatory database report as a Leaking Underground Storage Tank (LUST), Underground Storage Tank (UST), Cleanup Site, and other associated listings. The facility address is 1205 E. State Road 434. According to available documentation, a Discharge Reporting Form (DRF) was filed on May 3, 1993, indicating an unknown amount of free product was found in a monitoring well at the site. A Site Assessment Report (SAR) was submitted July 30, 2013, by Shaw Environmental, Inc. No OVA responses were detected above 0 ppm and no laboratory soil samples contained concentrations above Soil Cleanup Target Levels (SCTLs). Groundwater concentrations above Groundwater Cleanup Target Levels (GCTLs) were not identified with the exception of benzene (4.8 ug/L) in MW-5. Lastly, Shaw measured the groundwater flow direction at the facility to be east to southeast on April 25 and July 15, 2013. This is generally cross to up-gradient relative to the subject property.

A Supplemental Site Assessment Report was conducted by Montrose Environmental (Montrose) dated March 24, 2020. During the assessment, Montrose conducted 3 soil borings and collected 2 soil samples from each boring. In addition, Montrose installed two additional monitoring wells and sampled a total of 7 wells (including the two additional wells). According to the report, no soil or groundwater contamination was identified on the site and previously impacted MW-5 exhibited two consecutive clean rounds of groundwater sampling. Therefore, Montrose proposed that the site qualified for No Further Action and is awaiting response from the Florida Department of Environmental Protection (FDEP).

Based on the documents reviewed, it appears that the north adjoining property is nearing a Site Rehabilitation Completion Order (SRCO) from the FDEP. However, due to the close proximity of the UST area and previously impacted monitoring well MW-5 to the subject property boundary (on the order of 30 to 50 feet), it is likely that petroleum-impacted groundwater has migrated onto the subject property

from this facility. Therefore, this represents a Recognized Environmental Condition. It should be noted that the north adjoining facility is in a State-funded cleanup and assessment program (Petroleum Liability and Restoration Insurance Program – PLRIP). Therefore, petroleum-impacts to the subject property associated with the 1993 discharge would likely be the responsibility of the State.

Portions of the above-referenced site assessment reports are included in Appendix ii.

5.1.3 Surrounding Area

We reviewed the EDR report for facilities located beyond adjoining properties that may indicate a release or likely release of hazardous substances and/or petroleum products that may impact the subject property.

Handy Way Food Store #3333, located at 170 Tuskawilla Road, approximately 375 feet northwest of the subject property is listed as a LUST and UST facility in the regulatory report. According to available documents, the facility originally utilized three 10,000-gallon steel USTs installed in May 1982. The tanks reportedly contained leaded gasoline, unleaded gasoline, and gasohol. The three USTs were moved and updated in 1990 and all tanks were converted to unleaded gasoline at that time. Widening of State Road 434 and Tuskawilla Road began in 1994 and portions of the Handy Way property in the northeast and southeast were acquired for the rights of way. In 1997, the USTs were moved to the southwest side of the property and reduced to two tanks containing unleaded gasoline. Prior to the 1990 tank update, a Discharge Notification Form and Early Detection Incentive (EDI) Program Notification Application was submitted indicating that odor or visible signs of contamination were present. However, the cause of the leak, the type of pollutant discharged, and the estimated number of gallons lost were unknown. The FDEP provided formal notification that the facility was eligible for state funding under the EDI Program on March 21, 1988. Since then, a number of assessments and source removal projects have been performed, including a Contamination Assessment Report prepared by Rust Environmental & Infrastructure Inc. dated July 12, 1996. The report documented petroleum contamination in soil and groundwater as well as the groundwater flow direction to vary from northerly to easterly.

Recently, a Remedial Action Interim Report was prepared by AECOM dated August 24, 2012. According to the report, no contaminated soil was found, and one out of eight monitoring wells contained an exceedance of Naphthalene above the FDEP Groundwater Cleanup Target Level. The facility then entered a Natural Attenuation Monitoring (NAM) Program. Quarterly groundwater sampling was conducted in October 2012 and January 2013. According to the NAM Quarterly Reports prepared by AECOM, none of the contaminants were found to exceed the GCTLs and the facility was recommended for No Further Action. The FDEP agreed with the findings and issued a Site Rehabilitation Completion Order (SRCO) on October 2, 2013.

Based on the cleanup status of the facility, the distance from the subject property, and the northerly to easterly groundwater flow direction (cross-gradient or away from the subject property), it is our opinion that this facility does not represent a Recognized Environmental Condition. A copy of the last NAM Quarterly Report and the SCRO are included in Appendix ii.

Town Center S.E.E.D. and **Former Central Florida Drum Facility** were identified as Brownfields in the vicinity of the subject property. Brownfields are areas of economic blight, often due to known or perceived

contamination or environmental issues. The presence of a Brownfield does not indicate the existence of contamination on any certain property, and the other databases searched provide sufficient data to evaluate the subject property and/or adjacent properties for site-specific concerns.

Based on factors that include regulatory status, distance from the Site, and/or location relative to the regional groundwater flow direction, as referenced in Section 3.1.2, no other facilities are identified in the EDR report that warrant further consideration as potential recognized environmental conditions.

5.1.4 Unmapped Sites

The EDR report identified one unmapped site due to poor or inadequate address information (Upright Recycling/Bruce G Beck). Further research indicates that the site is more than 2 miles from the subject property and beyond the ASTM search radius.

5.2 Additional Federal, State, and Local Environmental Records

5.2.1 Local Fire Department

NGI requested files from the Seminole County Fire Department relating to possible past releases of petroleum products or hazardous materials on the subject property. At the time this report was finalized, NGI had not received a response.

5.2.2 Local Health Agency

NGI reviewed available online sources and was unable to identify documentation for water wells or septic tanks on the subject property through the Seminole County Health Department.

5.2.3 Local Property Appraiser

According to records reviewed, the subject property consists of three legal parcels totaling approximately 6.24 acres that are identified by the Seminole County Property Appraiser (SCPA) as Parcel Identification Numbers (PINs) 01-21-30-501-0000-0010 (parcel 1), 26-20-30-5AR-0A00-008D (parcel 2) and 26-20-30-5AR-0A00-008H (parcel 3). Parcel 1 is owned by Patti A. Schoen and is currently undeveloped and heavily wooded. Parcels 2 and 3 are owned by Schrimsher Land Fund and are also heavily wooded. We understand that the proposed roads and rights of way (ROW) separating the parcels are also included within the subject property. Copies of the Property Record Cards are included in Appendix ii.

5.2.4 Local Building Department

NGI conducted a review of the City of Winter Springs Building Services Division online permitting system and found multiple building permits on site relating to site signs dated May 1, 1995 and May 5, 2004. It should be noted that three permits were associated with Parcel 3; however, they appear to be associated with the construction on the south adjoining property.

5.2.5 Local Planning Department

Review of the City of Winter Springs Zoning Map indicates that the subject property is zoned T-C for Town Center District.

5.2.6 State Environmental Agency

NGI was directed to FDEP's online document management system (OCULUS) for information regarding the facilities identified in the EDR regulatory database report.

5.2.7 State Oil and Gas Agency

Based on review of the Florida Geological Survey's Regional Oil & Gas Well Location Online Map, no oil or gas wells are located on or adjacent to the subject property.

6.0 Site Reconnaissance

Mr. Clinton Wilhelm conducted a site reconnaissance for NGI on October 11, 2022. At the time of the reconnaissance, the weather was sunny and warm. Photographs taken during our site visit are included in Appendix i.

6.1 General Characteristics of the Subject Property

The subject property is currently undeveloped and heavily wooded with an old railroad bed trending north-south in the eastern portion.

6.2 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on the subject property during our site reconnaissance.

6.3 Stained Soil, Pavement, or Corroded Surfaces

No stained soil, pavement, or corroded surfaces were observed on the subject property during our site reconnaissance.

6.4 Stressed Vegetation

No stressed vegetation was observed on the subject property during our site reconnaissance.

6.5 Odors

No odors indicative of the presence of petroleum products or hazardous materials were observed on the subject property during our site reconnaissance.

6.6 Hazardous Substances

No hazardous substances were observed on the subject property during our site reconnaissance.

6.7 Petroleum Products

No petroleum products were observed on the subject property during our site reconnaissance.

6.8 Storage Tanks

No storage tanks were observed on the subject property during our site reconnaissance.

6.9 Unidentified Drums and Containers

No unidentified drums and containers were observed on the subject property during our site reconnaissance.

6.10 Solid Waste Disposal

No solid waste was observed to be disposed of on-site during our site reconnaissance.

6.11 Wastewater Discharges

No wastewater discharges were observed on the subject property during our site reconnaissance.

6.12 Sewage Disposal System

No septic systems were observed on the property during our site reconnaissance.

6.13 Wells

No wells were observed on the subject property during our site reconnaissance.

6.14 Potable Water Supply

No indication of potable water supply was observed on the subject property during our site reconnaissance.

6.15 Heating and Cooling

No heating or cooling systems were observed on the subject property during our site reconnaissance.

6.16 Potential PCB-Containing Equipment

No potential PCB-containing equipment was observed on the subject property during our site reconnaissance.

7.0 User Provided Information

The purpose of this section is to describe tasks to be performed by the "User." The "User" as defined by ASTM Practice E1527-13, is "the party seeking to use ASTM Practice E1527-13 to complete an environmental site assessment of the property. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager."

As stated in 40 CFR 312 (the rule), the Brownfields Amendments provide important liability protections for Users who qualify as contiguous property owners, bona fide prospective purchasers, or innocent landowners. To meet the statutory requirements for any of these Landowner Liability Protections (LLPs), a User must meet certain threshold requirements and satisfy certain continuing obligations. To qualify as one of the three LLPs, the User must perform "all appropriate inquiries" (AAI) on or before the date on which the User acquired the Site. The rule defines AAI, which includes inquiries and activities performed by the User and an Environmental Professional (EP).

The rule allows (but does not mandate) the User performing AAI to conduct inquiries or activities that may include searches for environmental liens, assessments of any specialized knowledge on the part of the User, an assessment of commonly known or reasonably ascertainable information about the Site, and an assessment of the relationship of the purchase price to fair market value. However, if the User performing AAI conducts one or more of these inquiries and/or activities, the rule allows (but does not mandate) that the User may communicate information gathered from these inquiries and/or activities to their EP to identify a possible recognized environmental condition.

NGI provided a User Questionnaire to the Client as a means to communicate information gathered from these inquiries and/or activities to the EP. Mr. Ryan Stahl returned the completed questionnaire to NGI dated September 16, 2022, on behalf of EQX-HRP Winter Springs, LLC. User-supplied information is discussed in the following sections. A copy of the completed User Questionnaire is provided in Appendix ii.

7.1 Environmental Liens

An environmental lien is a charge, security, or encumbrance, upon title to the subject property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of environmental issues at the property.

The User was not aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law.

7.2 Activity and Use Limitations

Activity and Use Limitations (AULs) are legal or physical restrictions or limitations on the use of, or access to, a property to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and/or surface water on the property or to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. AULs, which may include institutional and/or

engineering controls, are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil, groundwater, and/or surface water on the property.

The User was aware of an AUL relating to city use restrictions. At this time no further information was provided.

7.3 Specialized Environmental Knowledge

Specialized environmental knowledge includes any information and/or experience related to the subject property or adjoining properties including, but not limited to, any obvious indicators that point to the presence or likely presence of environmental issues at the subject property.

The User has specialized knowledge of nearby properties associated with their development of the Winter Springs Marketplace located northwest of the subject property.

7.4 Valuation Reduction for Environmental Issues

Valuation reduction for environmental issues includes the relationship of the purchase price to the fair market value of the subject property.

According to the User, the purchase price being paid for this property reasonably reflects the fair market value of the property.

7.5 Commonly Known or Reasonably Ascertainable Information

Commonly known or reasonable ascertainable information includes information about the subject property that generally is known to the public within the community where the property is located and can be easily sought and found from individuals familiar with the property or from easily attainable public sources of information.

The User was not aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases.

7.6 Degree of Obviousness

The User must consider the degree of obviousness of the presence or likely presence of releases or threatened releases at the subject property and the ability to detect releases or threatened releases by appropriate investigation.

The User was not aware of any obvious indicators that point to the presence or likely presence of contamination at the subject property.

7.7 Previous Reports

NGI was not provided with previous reports for this assessment.

8.0 Interviews

8.1 Owner Interview

An interview questionnaire was completed by Ms. Patti Ann Schoen (the subject property owner) on September 17, 2020. On October 17, 2022, NGI received an email response from Ms. Kristin Banks with EQX-HRP Winter Springs, LLC stating that the Schoens confirmed the answers to the 2020 questionnaire were still accurate. Ms. Schoen stated that she has been involved with the property since December 7, 1971 as the owner. She stated that the property was gifted to her when she was 20 years old and has no prior knowledge of the property. She stated that she was not aware of any wells or septic systems on the property. She stated that she was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products. Lastly, Ms. Schoen stated that she was not aware of any current or past above or below ground storage tanks containing hazardous material or petroleum products on the property nor was she aware of any soil or groundwater contamination on the subject property.

An interview questionnaire was completed by Mr. Michael A. Schrimsher on behalf of Schrimsher Land Fund (the subject property owner) on October 12, 2022. Mr. Schrimsher stated that he has been involved with the property since 1985-1986 as the property manager. According to Mr. Schrimsher, the subject property has been occupied by vacant wooded land except for the former railroad track. He stated that he was not aware of any wells or septic systems on the property. He stated that he was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products. Mr. Schrimsher stated that he was not aware of any current or past above or below ground storage tanks containing hazardous material or petroleum products on the property. However, he was aware of soil contamination on the subject property. According to Mr. Schrimsher, “soil under the former CSX railroad was contaminated by creosote on wooden railroad ties and herbicide sprayed along railroad tracks.” Lastly, Mr. Schrimsher stated that he was not aware of cattle dipping vats on the subject property, but he was aware that there were cattle operations on the nearby Plante property.

Copies of the Owner Questionnaires and confirmation email are provided in Appendix ii.

8.2 Interviews with Others

No other interviews were conducted for this assessment.

9.0 Findings and Conclusions

NGI has completed a Phase I ESA in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E1527-13 at the subject property located south of the intersection of State Road 434 and Tuskawilla Road, and north of Michael Blake Boulevard in Winter Springs, Seminole County, Florida. Based solely on the records review, site visit and interviews conducted for this assessment, NGI has not identified Controlled Recognized Environmental Conditions or Historical Recognized Environmental Conditions for the subject property.

NGI identified the following Recognized Environmental Conditions for the subject property.

- The north adjoining property (**Exxon Mobil Gas Station, formerly 7-Eleven Store No. 34786**) was identified in the regulatory database report as a Leaking Underground Storage Tank (LUST), Underground Storage Tank (UST), Cleanup Site, and other associated listings. The facility address is 1205 E. State Road 434. According to available documentation, a Discharge Reporting Form (DRF) was filed on May 3, 1993, indicating an unknown amount of free product was found in a monitoring well at the site. A Site Assessment Report (SAR) was submitted July 30, 2013, by Shaw Environmental, Inc. No OVA responses were detected above 0 ppm and no laboratory soil samples contained concentrations above Soil Cleanup Target Levels (SCTLs). Groundwater concentrations above Groundwater Cleanup Target Levels (GCTLs) was not identified with the exception of benzene (4.8 ug/L) in MW-5. Lastly, Shaw measured the groundwater flow direction at the facility to be east to southeast on April 25 and July 15, 2013. This is generally cross-gradient relative to the subject property; however, it could flow through the northeast corner.

  A Supplemental Site Assessment Report was conducted by Montrose Environmental dated March 24, 2020. During the assessment, Montrose conducted 3 soil borings and collected 2 soil samples from each boring. In addition, Montrose installed two additional monitoring wells and sampled a total of 7 wells (including the two additional wells). According to the report, no soil or groundwater contamination was identified on the site and previously impacted MW-5 exhibited two consecutive clean rounds of groundwater sampling. Therefore, Montrose proposed that the site qualified for No Further Action and is awaiting response from the Florida Department of Environmental Protection (FDEP).

  Based on the documents reviewed, it appears that the north adjoining property is nearing a Site Rehabilitation Completion Order (SRCO) from the FDEP. However, due to the close proximity of the UST area and previously impacted monitoring well MW-5 to the subject property boundary (on the order of 30 to 50 feet), it is likely that petroleum-impacted groundwater has migrated onto the subject property from this facility. Therefore, this represents a Recognized Environmental Condition. It should be noted that the north adjoining facility is in a State-funded cleanup and assessment program (Petroleum Liability and Restoration Insurance Program – PLRIP). Therefore, petroleum-impacts to the subject property associated with the 1993 discharge would likely be the responsibility of the State.

- Historical aerial photographs and topographic maps indicate that a railroad track was present on the subject property in the past. Railroad tracks are frequently sources of contamination due to the presence of railroad ties generally treated with creosote as well as the long-term application

of hazardous materials (pesticides and herbicides) within the right of way during typical maintenance operations. These materials are known to accumulate in the soil over time. Furthermore, during an interview with the owner Mr. Michael Schrimsher, he stated that he was aware of soil contamination on the subject property. According to Mr. Schrimsher, "soil under the former CSX railroad was contaminated by creosote on wooden railroad ties and herbicide sprayed along railroad tracks." Therefore, it is our opinion that the former railroad track area represents a Recognized Environmental Condition.

NGI identified the following Business Environmental Risk for the subject property.

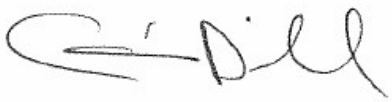
- **Town Center S.E.E.D.** and **Former Central Florida Drum Facility** were identified as Brownfields in the vicinity of the subject property. Brownfields are areas of economic blight, often due to known or perceived contamination or environmental issues. The presence of a Brownfield does not indicate the existence of contamination on any certain property, and the other databases searched provide sufficient data to evaluate the subject property and/or adjacent properties for site-specific concerns.

10.0 Environmental Professional Statement

The consultant(s) listed below declare that, to the best of their professional knowledge and belief, meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312 and have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. The all appropriate inquiries have been performed in conformance with the standards and practices set forth in 40 CFR Part 312.

We appreciate the opportunity to be of service to you on this project and look forward to a continued relationship. Should you have any questions or concerns regarding this report, please feel free to call us at (407) 342-1443.

Sincerely,
Native Geoscience, Inc.



John C. Diehl, Jr.
Principal Geologist

11.0 References

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Certified Sanborn® Map Report, September 20, 2022.

EDR, EDR Historical Topographic Map Report with QuadMatch™, September 20, 2022.

EDR, The EDR Aerial Photo Decade Package, September 21, 2022.

EDR, The EDR-City Directory Image Report, September 22, 2022.

EDR, The EDR Radius Map™ Report with GeoCheck®, September 20, 2022.

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, October 2022.

Florida Department of Environmental Protection, Map Direct Application (Groundwater Delineation Map). Available on-line at: https://ca.dep.state.fl.us/mapdirect/?focus=grndwtr_dl.

OCULUS Electronic Document Management System, FDEP Regulatory Files Review for Storage Tanks, Hazardous Waste, Solid Waste and Waste Cleanup Program Areas. Available on-line at: https://depedms.dep.state.fl.us/Oculus/servlet/login.

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, October 2022.

United States Geological Survey Topographic Map, 7.5-minute series Casselberry (NE), Florida, accessed via internet, October 2022.

Figures

Site Location Map



N
W E
S

0 0.25 0.5 Miles

Legend:

Approximate Subject Property Boundary

Notes:

Property boundary approximated from the Site Plan provided by The Client.

Project No: R0789.1

Date: 10/5/22

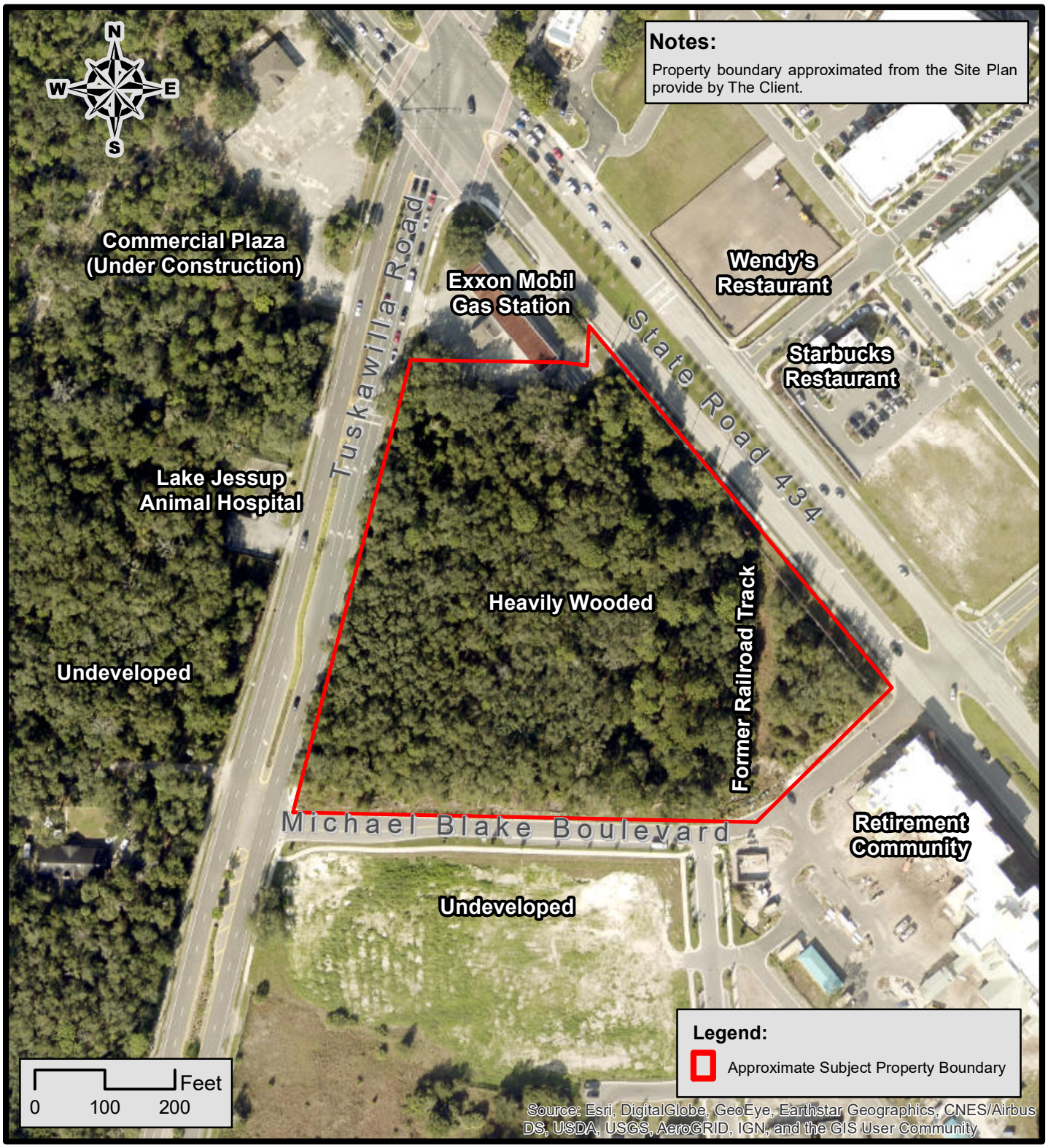
NATIVE GEOSCIENCE
2014 Edgewater Drive, #246
Orlando, Florida 32804
(407) 342-1443

Phase I Environmental Site Assessment

Sutton Crossings Property
Winter Springs, Seminole County, FL

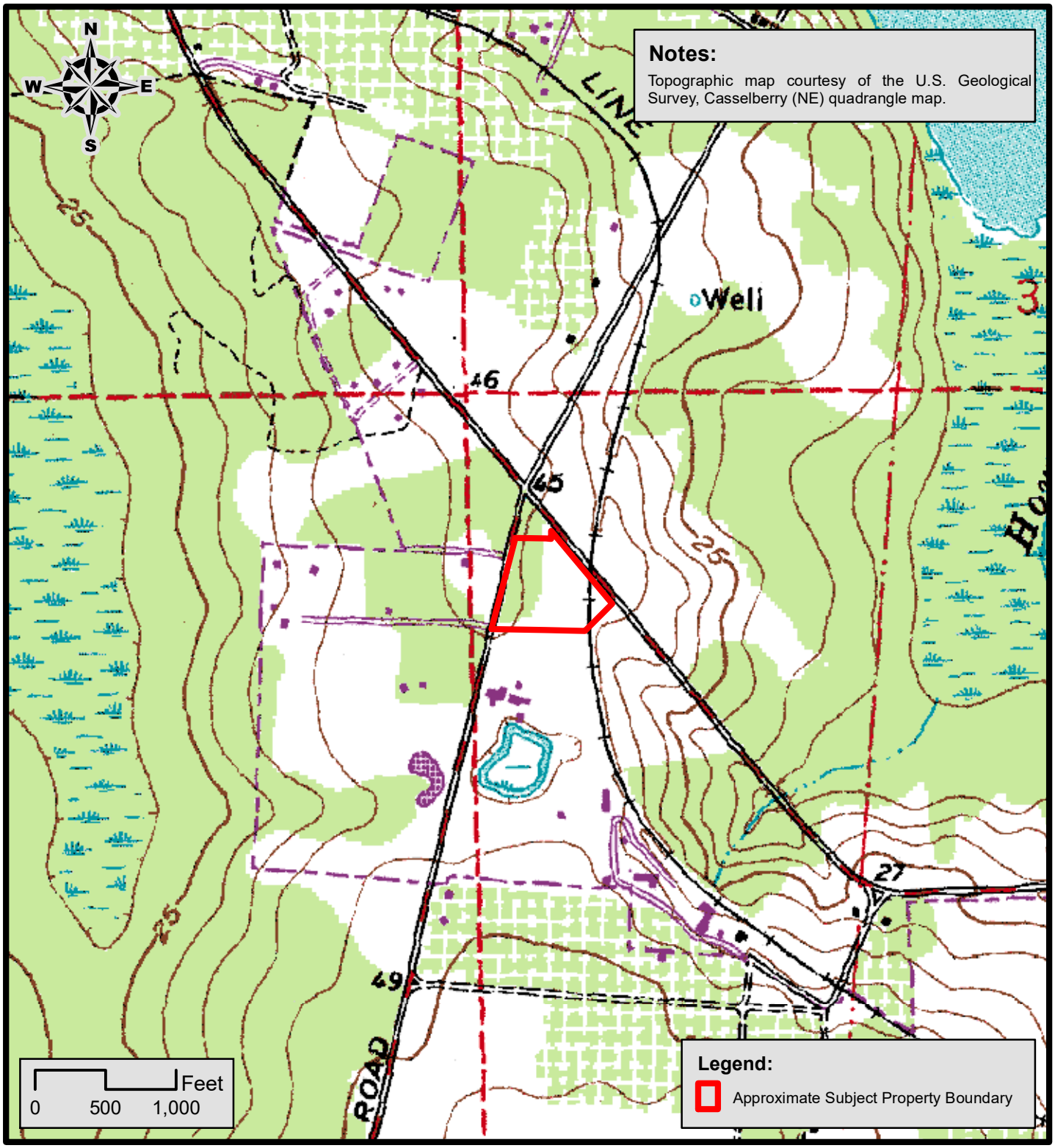
FIGURE: 1

Site Plan



Project No: R0789.1 **Date:** 10/5/22	NATIVE GEOSCIENCE 2014 Edgewater Drive, #246 Orlando, Florida 32804 (407) 342-1443	**Phase I Environmental Site Assessment** Sutton Crossings Property Winter Springs, Seminole County, FL	**FIGURE:** 2

Topographic Map



Project No: R0789.1 **Date:** 10/5/22	NATIVE GEOSCIENCE 2014 Edgewater Drive, #246 Orlando, Florida 32804 (407) 342-1443	**Phase I Environmental Site Assessment** Sutton Crossings Property Winter Springs, Seminole County, FL	**FIGURE:** 3

Appendix i



1. Typical view of the subject property.



2. Typical view of the subject property.



3. Exxon/Mobil Gas Station located on the north adjoining property.



4. View of Michael Blake Boulevard located on the south adjoining property.



5. Typical view of the multi-family senior residential development on the south adjoining property (across Michael Blake Boulevard).



6. View of the raised easement for possible historical train tracks along the eastern portion of the subject property.



7. Tuskawilla Road followed by Lake Jesup Animal Hospital and commercial shopping plaza to the west.



8. Tuskawilla Road followed by Milky Way residential street to the west.



9. View of State Road 434 followed by Starbucks located northeast of the subject property.



10. View of State Road 434 followed by multi-family residential development located east of the subject property.

Appendix ii

Sutton Crossing

Tuskawilla Rd & FL 434

Winter Springs, FL 32708

Inquiry Number: 7123398.8

September 21, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

09/21/22

Site Name:

Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708
EDR Inquiry # 7123398.8

Client Name:

Native Geoscience, Inc.
2014 Edgewater Drive #246
Orlando, FL 32804
Contact: Clinton Wilhelm

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2017	1"=500'	Flight Year: 2017	USDA/NAIP
2013	1"=500'	Flight Year: 2013	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2007	1"=500'	Flight Year: 2007	USDA/NAIP
1999	1"=500'	Acquisition Date: January 01, 1999	USGS/DOQQ
1994	1"=500'	Acquisition Date: March 11, 1994	USGS/DOQQ
1993	1"=500'	Flight Date: February 19, 1993	USGS
1986	1"=500'	Flight Date: January 06, 1986	USGS
1980	1"=500'	Flight Date: April 16, 1980	USGS
1977	1"=500'	Flight Date: November 27, 1977	USGS
1972	1"=500'	Flight Date: February 23, 1972	USDA
1969	1"=500'	Flight Date: October 14, 1969	USGS
1957	1"=500'	Flight Date: November 02, 1957	USGS
1952	1"=500'	Flight Date: March 17, 1952	USGS
1948	1"=500'	Flight Date: November 25, 1948	USDA
1940	1"=500'	Flight Date: January 01, 1940	USGS

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EDR


INQUIRY #: 7123398.8
YEAR: 2013
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EDR


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YEAR: 2010
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EDR


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YEAR: 2007
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EDR


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YEAR: 1999
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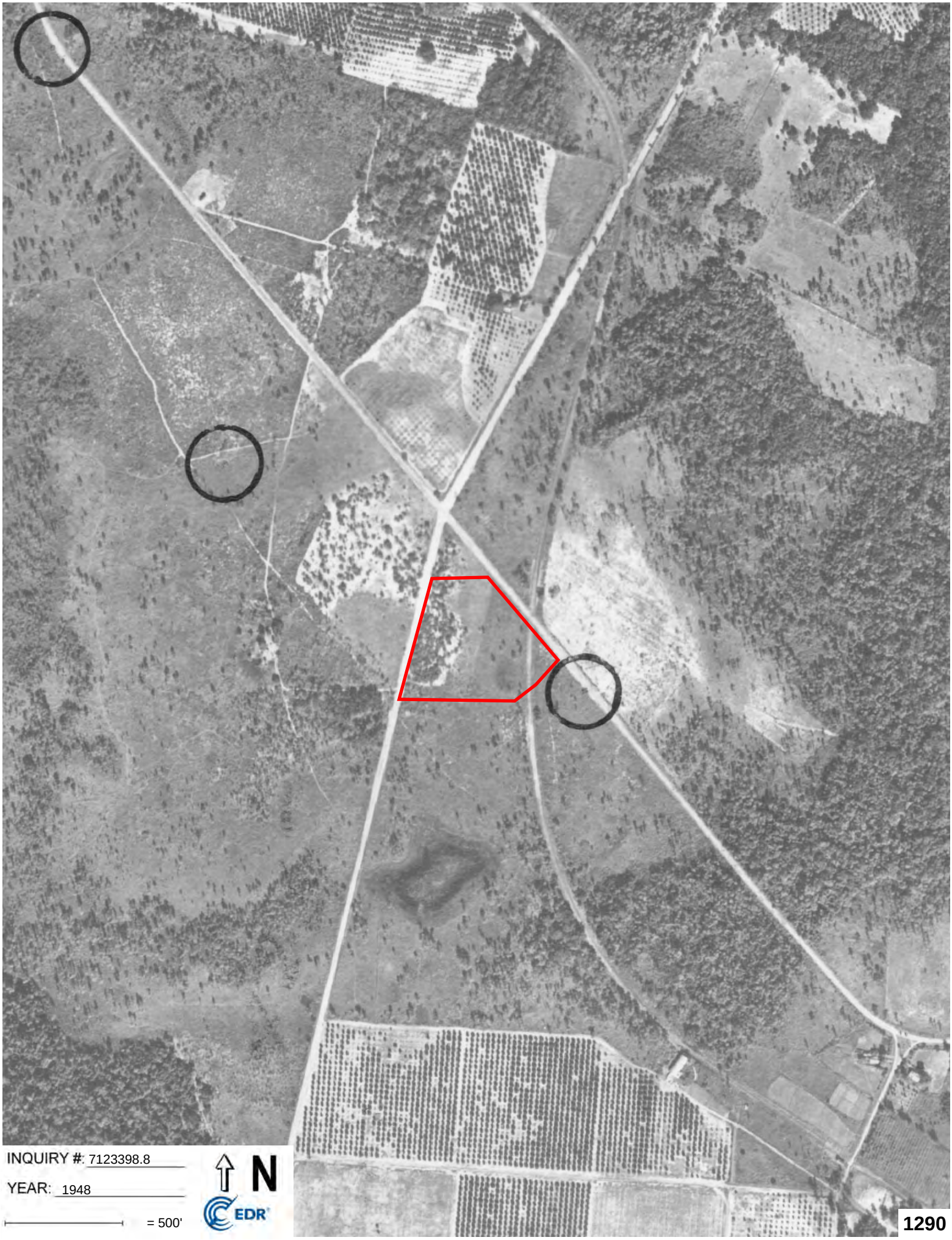
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EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.


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EDR


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YEAR: 1952
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EDR



INQUIRY #: 7123398.8

YEAR: 1948

= 500'

N

EDR

1290



INQUIRY #: 7123398.8

YEAR: 1940

= 500'

N

EDR

1291

Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708

Inquiry Number: 7123398.3
September 20, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

09/20/22

Site Name:

Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708
EDR Inquiry # 7123398.3

Client Name:

Native Geoscience, Inc.
2014 Edgewater Drive #246
Orlando, FL 32804
Contact: Clinton Wilhelm

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Certified Sanborn Results:

Certification # BBD2-4F18-8D3A

PO # R0789.1

Project R0789.1

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Sanborn® Library search results

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Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708

Inquiry Number: 7123398.5
September 22, 2022

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Executive Summary

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City Directory Images

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DESCRIPTION

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RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

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Year	Target Street	Cross Street	Source
2017	☑	☑	EDR Digital Archive
2014	☑	☑	EDR Digital Archive
2010	☑	☑	EDR Digital Archive
2005	☑	☑	EDR Digital Archive
2000	☑	☑	EDR Digital Archive
1995	☑	☑	EDR Digital Archive
1992	☑	☑	EDR Digital Archive
1986	☐	☐	Polk's City Directory
1981	☐	☐	Polk's City Directory
1978	☐	☐	Polk's City Directory
1974	☐	☐	Polk's City Directory
1968	☐	☐	Polk's City Directory
1964	☐	☐	Polk's City Directory
1960	☐	☐	Polk's City Directory
1955	☐	☐	Polk's City Directory
1950	☐	☐	Polk's City Directory
1945	☐	☐	Polk's City Directory
1940	☐	☐	Polk's City Directory

EXECUTIVE SUMMARY

Year	***Target Street***	***Cross Street***	***Source***

FINDINGS

TARGET PROPERTY STREET

Tuskawilla Rd & FL 434
Winter Springs, FL 32708

Year	*CD Image*	*Source*	
TUSCAWILLA RD			
1992	pg A38	EDR Digital Archive	
TUSKAWILLA RD			
2017	pg A6	EDR Digital Archive	
2014	pg A11	EDR Digital Archive	
2010	pg A17	EDR Digital Archive	
2005	pg A21	EDR Digital Archive	
2000	pg A25	EDR Digital Archive	
1995	pg A31	EDR Digital Archive	
1986	-	Polk's City Directory	Target and Adjoining not listed in Source
1981	-	Polk's City Directory	Target and Adjoining not listed in Source
1978	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1968	-	Polk's City Directory	Street not listed in Source
1964	-	Polk's City Directory	Street not listed in Source
1960	-	Polk's City Directory	Street not listed in Source
1955	-	Polk's City Directory	Street not listed in Source
1950	-	Polk's City Directory	Street not listed in Source
1945	-	Polk's City Directory	Street not listed in Source
1940	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
E STATE RD 434			
2010	pg. A12	EDR Digital Archive	
1992	pg. A32	EDR Digital Archive	
E STATE ROAD 434			
2017	pg. A2	EDR Digital Archive	
2014	pg. A7	EDR Digital Archive	
2010	pg. A13	EDR Digital Archive	
2005	pg. A18	EDR Digital Archive	
2000	pg. A22	EDR Digital Archive	
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1981	-	Polk's City Directory	Target and Adjoining not listed in Source
1978	-	Polk's City Directory	Target and Adjoining not listed in Source
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1968	-	Polk's City Directory	Target and Adjoining not listed in Source
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1960	-	Polk's City Directory	Target and Adjoining not listed in Source
1955	-	Polk's City Directory	Target and Adjoining not listed in Source
1950	-	Polk's City Directory	Target and Adjoining not listed in Source
1945	-	Polk's City Directory	Target and Adjoining not listed in Source
1940	-	Polk's City Directory	Target and Adjoining not listed in Source
MICHAEL BLAKE BLVD			
2017	pg. A4	EDR Digital Archive	
2014	pg. A9	EDR Digital Archive	
2010	-	EDR Digital Archive	Target and Adjoining not listed in Source
2005	-	EDR Digital Archive	Target and Adjoining not listed in Source
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source

FINDINGS

Year	CD Image	Source	
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1986	-	Polk's City Directory	Street not listed in Source
1981	-	Polk's City Directory	Street not listed in Source
1978	-	Polk's City Directory	Street not listed in Source
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1960	-	Polk's City Directory	Street not listed in Source
1955	-	Polk's City Directory	Street not listed in Source
1950	-	Polk's City Directory	Street not listed in Source
1945	-	Polk's City Directory	Street not listed in Source
1940	-	Polk's City Directory	Street not listed in Source

MILKY WAY

2017	pg. A5	EDR Digital Archive	
2014	pg. A10	EDR Digital Archive	
2010	pg. A16	EDR Digital Archive	
2005	pg. A20	EDR Digital Archive	
2000	pg. A24	EDR Digital Archive	
1995	pg. A26	EDR Digital Archive	
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1986	-	Polk's City Directory	Street not listed in Source
1981	-	Polk's City Directory	Street not listed in Source
1978	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1968	-	Polk's City Directory	Street not listed in Source
1964	-	Polk's City Directory	Street not listed in Source
1960	-	Polk's City Directory	Street not listed in Source
1955	-	Polk's City Directory	Street not listed in Source
1950	-	Polk's City Directory	Street not listed in Source
1945	-	Polk's City Directory	Street not listed in Source
1940	-	Polk's City Directory	Street not listed in Source

FINDINGS

Year	*CD Image*	*Source*

STATE ROAD 434 E

1995	pg. A27	EDR Digital Archive

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2017

110	1 2 3 EASY KEY LOCK REPAIR
	BANK OF AMERICA FINANCIAL CENTER
126	IRBLICH SCHOOLS
	RIVERA, ELAINE
200	CARE LOCKSMITH
	VICTORIOS II WINTER SPRINGS
268	CENTRAL FLORIDA BLOOD BANK
	ONEBLOOD
280	ALL CARPET SERVICES
	RIDERS ADVANTAGE
295	BRUSTERS REAL ICE CREAM
296	GERALD STRINGHAM & ASSOCIATES
	KEN MITCHELL & ASSOCIATES
351	AMANDA R JACOBSON ATTY
	ANDREW CHMELIR ATTY
	DEBRA L FERWERDA ATTY
	JACOBSON MCCLEAN CHMELIR & FERWERDA
	RANDY MCCLEAN ATTORNEY
370	RANGOLI SWEETS
380	ADVANCE AUTO PARTS
404	JOHNSON HALE INC DBA KID CITY USAWI
	KID CITY USA ENTERPRISES INC
408	NIEVES, ANGEL F
410	GUTIERREZ, EDGAR
414	MARTINEZ, CARLOS
418	GORSKI, WILLIAM W
422	NEWMAN, DEBORAH L
426	AFFORDABLE LEGAL CLINIC INC
	RAINBOW TRAVEL SERVICES INC
500	AMY STANBERRY ACUPUNCTURE
504	SOTO, EDWIN
506	SOPER PEREZ & ASSOC
521	MILLERS SCHOOL SUPPLIES
541	PAPA TONYS RESTAURANT
640	KINDER KAMPUS INC
650	LESKOWYAK, KAREN S
670	DESIGNER DENTAL STUDIO INC
	NATIONWIDE TERMITE & PEST CONTROL
680	ALLSTATE
	FCI STRUCTURAL ENGINEERS INC
701	STFEN INC
710	A BUDGET TREE SERVICE
	A BUDGET TREE SERVICE INC
780	CREATIVE INSPIRATION JOURNEY SCHOOL
	KEE WEE ENTERTAINMENT DISTRICT
820	SEMINOLE COUNTY PUBLIC SCHOOL
822	SEMINOLE COUNTY PUBLIC SCHOOL
825	ALL ABOUT PLUMBING
839	PHO, UYEN M
	WINTER SPRINGS BEAUTY SALON

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2017 (Cont'd)

845	THOMAS, FREDDIE
855	ANYTIME FITNESS
	RED CYPRESS BREWERY LLC
	SENOR TEQUILA
	TERRA HOMES
	UNIQUE SPRING NAILS
859	SALAMANDERS SPORTS GRILL
861	DUNKIN DONUTS
870	FULGHUM, GREGORY F
1000	CITY OF WINTER SPRINGS
1065	UNITED STATES GOVERNMENT
	WE BUY ORLANDO
1100	CHOICES IN LEARNING INC
1116	BUDGET TRUCK RENTAL
	CRUISE AMERICA
	CUSTOM RENTAL SERVICE
1122	DR DELHART COURTNEY
	MACDONALD FAMILY EYE CARE
1126	CITY OF WINTER SPRINGS
1134	EDWARD JONES FINANCIAL ADVISOR MI
1142	DR ROBERT BURKS DENTAL
	ROBERT R BURKS DDS PA
1160	PUBLIX
	REDBOX
1188	IHAIR
	IHAIR LLC
1196	SURGICAL SOLUTIONS
	WINTER SPRINGS DENTISTRY
1200	MCDONALDS
1205	7ELEVEN
	MOBIL
1491	1 AFTER DRINKING LOCKSMITH RESCUE
	ADVENTURE CYCLING
	CHINAWOK
	CLAXTON CLEANERS
	GONZALEZ, MARCELINO
	METRO CHURCH OF CHRIST
1501	DUNKIN DONUTS
1511	ALPHA EMC
	CLOSED CAPTION LATINA
	DATANAUTIX INC
	GEOSYNTEC CONSULTANTS
	PINNACLE PROPERTY MANAGEMENT
	SOUTHERN MARKETING ASSOCIATES
	UCF INCUBATORSEMINOLE COUNTY
	UVS JUNCTION

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MICHAEL BLAKE BLVD 2017

300	PERSONS, BRADLEY J
304	TALLURI, RAMABUJJAYYA
308	WECK, MIKE H
312	RAMOS, ANA
316	WRIGHT, SYLVIA
320	LONG, FRANCISCO J
324	WHITE, MICHAEL A
328	ROSEN, MARIE E
332	HINDSON, KELLY A
336	MORALES, RAFAEL
344	LUTH, JOSEPH
352	MOY, TIMOTHY E
356	VAUGHAN, THOMAS L
360	SARNA, CHRISTIAN J
368	LEGGE, DANA C
372	RUSH, HEATH D
384	CLOUTIER, DANIEL J
388	ARAGHY, HOMAIRA P
392	PARTON, ANGELA R
396	MCCABE, SEAN T
400	SCHROEFFEL, LESLIE A
404	RHOADS, MURPHY M
420	PECORARO, JOHN J
424	BAY, CRYSTAL A
428	HESS, LAURA B

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 2017

1258 MASON, JAMES F
1270 DIAZ, HECTOR A

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSKAWILLA RD 2017

100	SOILEAU, BRUCE J
105	BECKETT, RICHARD
109	ALJABER-MORENO, ANZAF
110	TUSKAWILLA ANIMAL HOSPITAL
113	MILLER, GEORGE A
121	MACCHIA, KATHY
125	OLSON, JIM A
130	ACTION CHURCH
	WINTER SPRINGS HIGH SCHOOL
137	BELTRAN, CORY N
141	AVERY, STEVEN M
145	LI, ZHIMIN
149	TAYLOR, CHRISTOPHER J
150	KINGSBURY, C
154	BENITEZ, MARITZA
	BUHOLTZ PROFESSIONAL ENGINEERING
	CHRISTOPHER, COLLEEN A
	ECKEL & ASSOCIATES INC
	EVANS, JAMES K
	PHILLIPS, AUSTIN
	RUPLEY, DAVID
	SINELNIKOVA, INNA
	STATE OF FLORIDA
	STONE, GREGORY K
	STUFFLET, SEAN
	THOMPSON, CELESTE O
156	BENNETT INSURANCE
	BIRCHELL INSURANCE
	RIPPLE ASSOCIATES
	WINTER SPRINGS TOWN CENTER
158	COVENANT AVIATION SECURITY
	PILACEK THOMAS J & ASSOCIATES
	SIAGON BOULVARD
160	AFLAC
	HUEY MAGOOS CHICKEN TENDERS
	THE ZOO HEALTH CLUB
	TIJUANA FLATS
170	1 ALPHA LOCK & KEY
	PINCH A PENNY POOL PATIO SPA
	PINCHAPENNY
190	EDWARD W GRIFFITH DVM
	LAKE JESUP ANIMAL HOSPITAL
300	LOFROOS, ROBERT W
550	SEMINOLE COUNTY PUBLIC SCHOOL
575	ST STEPHEN CATHOLIC CHURCH
600	SEMINOLE COUNTY PUBLIC SCHOOL

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2014

110	1 2 3 EASY KEY LOCK REPAIR
	BANK OF AMERICA
200	VICTORIOS II WINTER SPRINGS
268	CENTRAL FLORIDA BLOOD BANK
	CENTRAL FLORIDA BLOOD BANK A DIVISIO
280	ALL CARPET SERVICES
290	DRIVER LICENSE OFFICE
	STATE OF FLORIDA
295	BRUSTERS REAL ICE CREAM
296	GERALD STRINGHAM & ASSOCIATES
351	CHMELIR ANDREW ATTY
	FERWERDA DEBRA L ATTY
	JACOBSON AMANDA R ATTY
	JACOBSON MCCLEAN CHMELIR & FERWERDA
	MCCLEAN RANDY ATTY
404	JOHNSON HALE INC DBA KID CITY USAWI
406	CLOKE, JUSTIN
408	NIEVES, ANGEL A
410	GUTIERREZ, EDGAR
414	MARTINEZ, CARLOS
418	RODRIGUEZ, WILLIAM N
422	DUNCAN, ARTHUR O
426	AFFORDABLE LEGAL CLINIC
428	MENZEL, JOHN C
500	STANBERRY AMY ACUPUNCTURE PHYS
504	PINARD, TYNISHA
506	SOPER PEREZ & ASSOC
521	MATTIES DELECTABLE DESSERTS
	MILLERS SCHOOL SUPPLIES
541	PAPA TONYS RESTAURANT
551	QUICK KING FOOD STORE
640	KINDER KAMPUS INC
650	LESKOWYAK, KAREN S
670	DESIGNER DENTAL STUDIO INC
	NATIONWIDE TERMITE & PEST CONTROL
680	ALLSTATE
	FCI STRUCTURAL ENGINEERS INC
701	SEMINOLE COUNTY PUBLIC SCHOOL
710	A BUDGET TREE SERVICE
	A BUDGET TREE SERVICE INC
817	FIRST BAPTIST CHURCH
820	SEMINOLE COUNTY PUBLIC SCHOOL
	SEMINOLE COUNTY PUBLIC SCHOOLS
822	SEMINOLE COUNTY PUBLIC SCHOOL
825	OCCUPANT UNKNOWN,
835	WILLIAMSON, CHESTER M
839	PHO, UYEN M
	WINTER SPRINGS BEAUTY SALON
845	OCCUPANT UNKNOWN,
849	DELL, MARTHA

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2014 (Cont'd)

850	SEMINOLE COUNTY PUBLIC SCHOOL
851	TRUSTCO BANK
855	ANYTIME FITNESS
	SECURE TITLE
	SENOR TEQUILA
	STORYBOOK MOMENTS LEARNING ACADEMY
	TERRA HOMES
	UNIQUE SPRING NAILS AND
859	SALAMDERS SPORTS GRILL
870	FULGHUM, GREGORY F
900	OCCUPANT UNKNOWN,
916	ALPHA TECHNOLOGY USA CORP
1065	UNITED STATES GOVERNMENT
	WINTER SPRINGS POST OFFICE
1100	CHOICES IN LEARNING INC
1116	BUDGET TRUCK RENTAL WINTER SPRINGS
	CRUISE AMERICA
	CUSTOM RENTAL SERVICES
1122	ALL IN ONE DENISTRY 1
	MACDONALD FAMILY EYE CARE
1126	CITY OF WINTER SPRINGS
1134	EDWARD JONES FINANCIAL ADVISOR VA
1138	CENTURY 21
1142	BURKS ROBERT R DDS PA
1160	PUBLIX
1161	COLSON, C
1163	JOHNSON, NATHAN
1184	PCS METRO
1188	IHAIR LLC
1196	WINTER SPRINGS DENTISTRY
1200	MCDONALDS
1205	WINTER SPRINGS MOBIL
1491	ADVENTURE CYCLING
	CHINAWOK
	CLAXTON CLEANERS
	FASHION NAILS
	METRO CHURCH OF CHRIST
1495	BB&T
1501	BLIMPIE SALAD & SANDWICHES
	GODFATHERS PIZZA
1511	CENTERLINE HOMES
	DATANAUTIX INC
	NR ELECTRONICS LLC
	PINNACLE PROPERTY MANAGEMENT
	UCF INCUBATORSEMINOLE COUNTY
	UVS JUNCTION

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MICHAEL BLAKE BLVD 2014

300	PERSONS, BRADLEY J
304	TALLURI, RAM
308	WECK, MIKE H
316	HUNT, JENNIFER G
320	LONG, FRANCISCO J
336	MCCANN, MICHAEL R
344	LUTH, JOSEPH
352	MOY, TIMOTHY E
356	VAUGHAN, THOMAS L
360	MAGNUSSEN, KEVIN L
364	PALATKA, ELEANOR
368	LEGGE, DANA C
372	RUSH, HEATH D
380	SINCLAIR, HEATHER C
384	MARCUS, JOSHUA M
388	TATUM, PAUL V
392	PARTON, ANGELA R
396	OCCUPANT UNKNOWN,
400	SCHROEFFEL, LESLIE A
404	COX, CHRISTINE M
408	YUEN, BRENDA M

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 2014

1258 OCCUPANT UNKNOWN,
1270 DIAZ, HECTOR A
1296 CEDENO, JOSE G

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSKAWILLA RD 2014

100	SOILEAU, BRUCE J
105	BECKETT, RICHARD
109	CORREDOR, JOSE J
112	TAYLER, MALIA
113	TAYLER, MALIA
117	HANCOCK, WESLEY G
121	BAKER, ROBERT W
125	OLSON, JIM A
129	OCCUPANT UNKNOWN,
130	WINTER SPRINGS HIGH SCHOOL
133	PELLEGRINO, MICHAEL J
137	HANLEY, SALLY A
141	AVERY, STEVEN M
145	COLEMAN, ROBERT C
149	RAULERSON, APRIL E
150	KINGSBURY, C
154	CHAFFIN, CHRIS M
	HOENEMAN, RAYMOND W
	KINTNER, CHRISTOPHER S
	LIGHT, TODD A
	MUDLOCK, AMANDA M
	NETTLES, ANGEL D
	OSULLIVAN, TRACY A
	SPREEN, GEORGE
	STONE, GREGORY K
	THOMPSON, CELESTE O
156	BIRCHELL INSURANCE
	BOX OFFICE HAIR PRODUCTIONS
	DANIEL LONG AFLAC REGIONA
	RIPPLE ASSOCIATES
158	BANK OF AMERICA
	BANK OF AMERICA MORTGAGE
	COVENANT AVIATION SECURITY
	HERBA FAMILY CHIROPRACTIC
	MURPHYS PREMIUM PET FOOD MARKET
	SOUTH YORK
160	THE ZOO HEALTH CLUB
	TIJUANA FLATS
170	1 ALPHA LOCK & KEY
	PINCHAPENNY
190	GRIFFITH EDWARD W DVM VET
	LAKE JESUP ANIMAL HOSPITAL
290	LOFROOS, WILLIAM N
300	LOFROOS, ROBERT W
395	LIFE COMMUNITY CHURCH
415	INDIAN TRAILS MIDDLE SCHOOL
425	KEETH ELEMENTARY SCHOOL
550	SEMINOLE COUNTY PUBLIC SCHOOL
575	ST STEPHENS CATHOLIC CHURCH
600	SEMINOLE COUNTY PUBLIC SCHOOL

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE RD 434 2010

550 PAPA TONY ITALIAN RESTAURANT
2000 DMD RESIDENTIAL PROPERTIES

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2010

105	GDP DESIGN & CONSTRUCTION
110	BANK OF AMERICA
113	O MEI WSHU USA
200	VICTORIOS II WINTER SPRINGS
260	DINER SUN SHINE
268	FLORIDAS BLOOD CTR
290	AGGARWAL PENSION TRUST FUND
	HIGHWAY DEPT SAFETY
	MOTOR VEHICLE DEPTDRIVER LCNS
295	BRUSTERS REAL ICE CREAM
296	KEN MITCHELL & ASSOC
300	QUALITY MANUFACTURING SVC INC
310	DOLLAR GENERAL
320	LEONIES HOME STYLE COOKING
330	NATICES UNISEX SALON
351	JACOBSON MC CLEAN CHMELIR
	U S SVC
360	PUBLIC STORAGE
380	ADVANCE AUTO PARTS
406	CLARK, SAMUEL K
408	MORALES, JULIO
410	HARVEY, AUDREY T
412	FEKANY, MOUSSA
414	RIVERA, JOSE A
416	TELEPHONE MARKETING PROMOTIONS
418	BRAYMAN, MEGAN A
422	DUNCAN, ARTHUR O
424	ARTHUR DUNCAN ACCOUNTING SVC
426	AFFORDABLE LEGAL CLINIC INC
	BINFORD, THOMAS A
	RAINBOW TRAVEL SVC INC
428	MENZEL, JOHN C
500	STANBERRY AMY ACUPUNCTURE PHYS
506	SOPER PEREZ & ASSOC
521	SADKANE SCHOOL FOR DANCE & AKD
551	QUICK KING FOOD STORE
640	KINDER KAMPUS INC
650	LESKOWYAK, KAREN S
670	TROPICAL ILLUSION
680	FCI STRUCTUAL ENGRS
710	A BUDGET TREE SVC INC
	ORLANDO RV RENTALS
817	FIRST BAPTIST CHRWINTER SPG
820	SEMINOLE COUNTY PUBLIC SCHOOLS
822	SCHOOLS PUBLIC SEMINOLE COUNTY
825	HANNA, THOMAS C
835	WILLIAMSON, CHESTER M
839	NGUYEN, VINH V
	WINTER SPRINGS BEAUTY SALON
845	DELL, WILLIAM E

E STATE ROAD 434 2010 (Cont'd)

851	TRUSTCO BANK
855	AT&T STORE
	CURVES
	E TOUR & TRAVEL
	INSURANCE RECOVERY INTL INC
	SECURE TITLE
	SPRING NAIL & SPA
	UNITY SPIRITUAL LIFE CTR
	YEN YEN RESTAURANT
	YOUR HEALTH FOOD STORE
866	REGIONS BANK
870	FULGHUM, GREGORY F
900	OCCUPANT UNKNOWN,
1000	WINTER SPRINGS CITY SPORTS
	WINTER SPRINGS CITYCENTRAL
1065	US POST OFFICE
1116	CRUISE AMERICA RV
1122	COURTNEY DELHART L DDS
	DELHART, L
	MAC DONALD FAMILY EYE CARE
1126	WINTER SPRINGS BLDG INSPECTION
	WINTER SPRINGS CITY CLERK
	WINTER SPRINGS CITY COMMISSION
	WINTER SPRINGS CITY HALL
	WINTER SPRINGS CITY MANAGER
	WINTER SPRINGS CODE ENFRCMNT
	WINTER SPRINGS COMMUNITY DEV
	WINTER SPRINGS COMPUTER SVC
	WINTER SPRINGS FINANCE DEPT
	WINTER SPRINGS GARBAGE PICKUP
	WINTER SPRINGS GENERAL SVC
	WINTER SPRINGS PARKS & REC
	WINTER SPRINGS POLICE DEPT
1134	EDWARD JONES
1135	ALLEN DYER DOPPELT MILBRATH
1138	CENTURY 21
1142	BURKS ROBERT R DDS
1160	PUBLIX SUPER MARKET
1161	COLSON, C
1163	JOHNSON, NATHAN
1184	H&R BLOCK
1188	RACHEL NICOLES SALON INC
1196	WINTER SPRINGS DENTISTRY
1200	MC DONALDS
1491	ADVENTURE CYCLING
	CHINA WOK
	CONGRESSIONAL HOMES
	FASHION NAILS
	MERRY GO HOUND
	METRO CHURCH OF CHRIST

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2010 (Cont'd)

1491	MOTHER KIMS CLEANERS
1501	BLIMPIE SUBS & SALADS
	GODFATHERS PIZZA
	HESS EXPRESS
1511	CENTERLINE HOMES
	CLEARTALK TELECOM
	CYNTHIA BRENNAN RYAN ESQ
	MOSAIC WEALTH MANAGEMENT GROUP
	N R ELECTRONICS LLC
	PINNACLE PROPERTY MANAGEMENT
	UCF INCUBATOR
	VISTAWILLA OFFICE CTR

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 2010

1258 OCCUPANT UNKNOWN,
1270 DIAZ, HECTOR D
1296 MUNOZ, DANIEL O

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSKAWILLA RD 2010

100	SOILEAU, AIMEE E
130	WINTER SPRINGS HIGH SCHOOL
150	KINGSBURY, LAVERNE W
154	DAVIS, KYLE
156	BEEFOBRADYS
	BIJOUX JEWELERSORLANDO
	BIRCHELL INSURANCE
	BOX OFFICE HAIR PRODUCTIONS
	CYPRESS SEMICONDUCTOR
	PRIUM
158	COUNTRYWIDE BANK
	COVENANT AVIATION SECURITY LLC
	HERBA FAMILY CHIROPRACTIC
	HOLLYWOOD BISTRO
	JDC CONSTRUCTION MGMTFL
	MURPHEYS PREMIUM PET FOOD MKT
160	BARNIES COFFEE & TEA CO WINTER
	GIANCARLOS
	TIJUANA FLATS
170	PINCH A PENNY
190	LAKE JESUP ANIMAL HOSPITAL
290	LOFROOS, WILLIAM W
300	LOFROOS, ROBERT W
315	HIFLAVOR MEATS INC
395	LORD OF LIFE CHURCH OF GOD
415	INDIAN TRAILS MIDDLE SCHOOL
575	ST STEPHENS CATHOLIC CHURCH
600	KEETH ELEMENTARY SCHOOL

E STATE ROAD 434 2005

200	VICTORIOS II
264	DAYTONA MALL LLC
268	CENTRAL FLORIDA BLOOD BANK
276	MISSING CHILDREN CENTER INC
280	KRC EXOTIC BIRDS
290	DOLLAR DEALS
296	SWEET CELEBRATIONS
320	DELI ICIOUS
330	NATICES UNISEX SALON
350	SIR WALTERS PUB
351	ADAMS TRANSPORTATION INC
	FLORIDA OFFICE SERVICES
	JACOBSON MCCLEAN CHMELIR & FERWERDA
370	RANGOLI SWEETS OF FLORIDA INC
404	BRANNON, BROOKE A
406	CLARK, SAMUEL K
408	NIEVES, ANGEL A
410	HARVEY, AUDREY T
412	SMART, KIMBERLY C
414	MCKAY, R
416	TELEPHONE MARKETING PROMOTIONS INC
418	TROUNG, KHUONG N
420	NTS
422	DUNCAN, ARTHUR O
424	ARTHUR DUNCAN ACCOUNTING BOOKKEEPING
426	BINFORD, THOMAS A
	RAINBOW TRAVEL SERVICES INC
428	OCCUPANT UNKNOWN,
504	JACOBSON, BETH
506	CARNERO, OSCAR
541	TONY PAPA ITALIAN RESTAURANT
551	CUMBERLAND FARMS
640	KINDER KAMPUS INC
650	LESKOWYAK, KAREN S
680	EARTH ANGEL
780	ECKERD PHARMACY
810	MECO FLOORING INC
	MECONNAHEY, NANCY
817	FIRST BAPTIST CHURCH OF WINTER SPRIN
820	SCHOOL BOARDSEMINOLE CNTY
822	SEMINAR COUNTY PUBLIC SCHOOL TRANSPO
825	HANNA, NOREEN W
835	ROBERTS, ELEANOR B
839	WINTER SPRINGS BEAUTY SALON
	WINTER, SPRINGS
845	BATTEN, IRA
	CUSTOM CARPENTRY & ROOFING
	CUSTOM CARPENTRY & ROOFING INC
849	OCCUPANT UNKNOWN,
851	ALL RIGHT STUFF INC

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2005 (Cont'd)

855	JOHN MCCANN & ASSOC
	JOHN MCCANN & ASSOCS
865	DEZEEUW, MIKE
870	FULGHUM, GREGORY F
900	OCCUPANT UNKNOWN,
1000	FLORIDA STATE OF
1116	JAM 2 TAYLOR RENTAL
1122	DELHART L COURTNEY DDS
	MACDONALD FAMILY EYECARE
1126	CITY OF WINTER SPRINGS HUMAN RESOURC
1132	TRANSFORMATION TANNING & SKIN
1134	KUMON MATH & READING CENTER OF WINTE
1139	OCCUPANT UNKNOWN,
1142	BURKS ROBERT R DDS PA
1144	LESLIES SWIMMING POOL SUPPLIES
1151	GRUBBS EMERGENCY SERVICES LLC
1155	FRESENTIUS MEDICAL CENTER
1156	LESLIES POOLMART # 459
1160	PUBLIX SUPER MARKETS
1161	COUTERMARCH, SCOTT
1163	JOHNSON, NATHAN
1165	OCCUPANT UNKNOWN,
1175	ROBERTS, JENNY R
1181	OCCUPANT UNKNOWN,
1182	MARC BRASHEAR STATE FARM
	STATE FARM BANK / BRASHEAR MARC A
1188	NAILS BY LINDA
	RACHAEL NICOLES SALON
1192	SHAPEXPRESS
1196	JOHN H T NGUYEN DMD PA
1200	MCDONALDS RESTAURANTS OF FLORIDA
1205	EXXONMOBIL OIL CORP
	MOBIL OIL CORP
1491	FASHION NAILS
	KASH N KARRY
	LIJING CHINESE RESTAURANT
	MOTHER KIMS CLEANERS
	PET RESCUE & SUPPLY INC
	SEMINOLE TRAIL ANIMAL HOSPITAL
	WILLIAMS, PAUL
1501	AMERADA HESS
	GODFATHERS PIZZA

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 2005

1258 POWELL, PAMELA
1270 MUNIZ, LUIS A
RAUL CACHO LAWN SERVICE
1296 MUNOZ, JOSE R

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSKAWILLA RD 2005

100	SOILEAU, MARION J
130	SCHOOL BOARD OF SEMINOL CNT
	WINTER SPRINGS HIGH
150	KINGSBURY, LAVERNE W
158	CAPITAL GREEN LLC
160	ART AVENUE CRAFT STUDIO
	ARTS AVE CRAFT STUDIO
	BARNIES COFFEE & TEA CO
	CRISTIANOS LLC
	J RAYMOND CONSTRUCTION CORP
190	GRIFFITH EDWARD W DVM
	LAKE JESUP ANIMAL HOSPITAL
290	OCCUPANT UNKNOWN,
300	LOFROOS, ROBERT W
	ROBERT W LOFROOS
395	LORD OF LIFE FELLOWSHIP
	POP INC
415	INDIAN TRAILS MIDDLE SCHOOL
	SCHOOL BOARD OF SEMINOL CNT
575	SAINT STEPHEN CATHOLIC COMMUNITY

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2000

105	STATE FARM INSURANCE COMPANIES
140	WING HABILATATION CENTER INCORPORATED
160	MICKEY DS LOUNGE
168	ALL ELECTRONIC PARTS
200	VICTORIOS II WINTER SPRINGS
260	ART NUVEAU INCORPORATED
276	MISSING CHILDREN CENTER INCORPORATED
280	FREDS PRO FLIGHT ARCHERY
290	SEMINOLE BAKERIES
300	BADCOCK HOME FURNISHING CENTERS
330	NATICE'S UNISEX SALON
	PURDIE, GEORGE H
350	SIR WALTERS PUB
370	ROYAL SWEETS OF ORLANDO
404	CUMMINGS, NELSON
408	NIEVES, ANGEL
410	HARVEY, A T
412	SMART, EDGAR E
414	ALLEN, DOUGLAS
416	V JAYS FASHION DESIGN
418	RODRIGUEZ, WILLIAM
420	MCCRACKEN, CLEO J
422	DUNCAN, ARTHUR O
424	ARTHUR DUNCAN ACCOUNTING BOOKKEEPING & TAX SERVICE
426	AFFORDABLE LEGAL CLINIC INCORPORATED
	BINFORD, THOMAS A
	RAINBOW TRAVEL SERVICES INCORPORATED
500	FILLMAN, PHILLIP E
	MUSCLE PAIN CORRECTION
501	POWERS, A C
504	CARTER, K
506	CLARK, JAMES O
541	PAPA TONYS ITALIAN RESTAURANT
650	LESKOWYAK, K
680	CAKES ACROSS AMERICA
	SUN STATE ELECTRONICS
710	A BUDGET TREE SERVICE
	MEAGHER, JAMES J
822	SEMINOLE COUNTY PUBLIC SCHOOLS
839	WINTER SPRINGS BEAUTY SALON
845	BATTEN, IRA
870	EVANS, D W
1116	TAYLOR RENTAL
1126	WINTER SPRINGS CITY OF CITY HALL
	WINTER SPRINGS WATER & SEWER
1159	COTTON, R
1161	RICE, MARK W
1163	BOOTHE, HAROLD
1175	ROBERTS, CARL R
1205	MOBILE ORLANDO JAWAD INCORPORATED

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE ROAD 434 2000 (Cont'd)

1271 SUBWAY SANDWICHES & SALADS
1420 KISINGER CAMPO & ASSOCIATES CORPORATION
1481 CONTRAVEST CONSTRUCTION COURTNEY PLACE
1501 HESS EXPRESS

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 2000

1270 MUNIZ, LUIS A

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSKAWILLA RD 2000

130	SCHOOLS-PUBLIC SEMINOLE CNTY WINTER SPRINGS HIGH
190	GRIFFITH EDWARD W DVM VET
	GRIFFITH, E
	LAKE JESUP ANIMAL HOSPITAL
201	HI FLAVOR MEATS INCORPORATED
206	SOILEAU, BRUCE
290	BAILEY, HILDE E
300	LOFROOS, ROBERT W
395	LORD OF LIFE FELLOWSHIP
397	HI FLAVOR MEATS INCORPORATED
401	LOPEZ, BENITO
550	SCHOOLS-PUBLIC SEMINOLE CNTY INDN TRAILS MID SCHOO
575	ST STEPHENS CATHOLIC CHURCH
600	KEETH ELEMENTARY SCHOOL
	KEETH P T A ABSENTEE HOTLINE
	SCHOOLS-PUBLIC SEMINOLE CNTY KEETH ELEM SCHOOL
611	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

MILKY WAY 1995

1280 MCCOY, ANNA
1296 MUNOZ, JOSE R

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

STATE ROAD 434 E 1995

7	BRACCO, LUCY
12	SARTORI, JAMES B
13	THOMPSON, JAMES M
20	DZIOLOWSKI, RAYMOND
25	SPOERING, D
33	DICEMBRE, MICHAEL J
35	DAVIS, K M
44	MELTON, F D
45	ADLINGTON, CHARLES F
47	OTHLING, B J
48	GALLAGHER, FRED J
73	OCCUPANT UNKNOWNN
82	WYNNE, JOHN
83	OCCUPANT UNKNOWNN
85	TAYLOR, CHARLES
90	WRUCK, WILLIAM B
93	CANTON, FRANK W
94	BOYD, G L
95	POWELL, H B
96	DIORIO, CARMINO
97	HOEY, FRANK
98	KNOWLES, HAROLD
99	HILL, E N
100	WOLF, MARY
101	TORCASO, JOHN V
106	HERRON, M J
110	LINDA ANDERSON
115	WILKERSON, V
117	NIREN, BEN
119	NEAL, THERESA E
121	SNYDER, DONALD G
122	PALOMBI, JOSEPH
123	BRANCH, I
127	SIMPSON, D H
129	BURNS, M J
130	OCCUPANT UNKNOWNN
132	KLINEHAN, DONALD
133	HANSON, J B
134	FELTON, RICHARD
136	HAGLEY, LEONARD M
137	KINNEE, ROBERT J SR
138	ANDRESAKES, GEORGE N
141	BERNE, ABRAHAM
144	PHILBRICK, Y
145	BOISDORF, JOHN
146	ATHERTON, V E
	EDER, D J
147	SPROULL, JAMES D
148	CRAWFORD, SIBERT E
150	MYERS, SHELDON L

STATE ROAD 434 E 1995 (Cont'd)

151	SMITH, RAMON W
152	KILLIAN, KENNY
	MORRILL, I
153	WARTLUFT, LEON
154	ROSSI, ANTHONY
155	ALLEN, GEORGE N
161	OCCUPANT UNKNOWNN
165	FOLEY, JAMES A
167	HUGHES, FRED G
169	WOOD, HELEN
176	MCKENZIE, J A
178	SHEPARDSON, LEROY M
179	GREENLEAF, A M
180	FORD, ROBERT
182	BEST, WILLIAM J
200	DUNN, JOE P
	OSTERHOUT, M E
201	SCHIERHOLZER, S M
207	ANDERSON, THOMAS E
211	HUTCHINSON, I A
220	FOSTER, KENNETH V
221	MULLINS, JAMES W
225	SMITH, L B
226	DUVAL, GUY E
227	SCHILL, D C
239	LOVETT, DAN S
252	PATTERSON, CHARLES JR
256	CUTRONI, JOHN F
258	HOWELL, KENNETH
263	PEARSON, ROY
264	OCCUPANT UNKNOWNN
267	ROGERS, L R
269	DILLON, WILMA A
273	FORSTER, ALBERT C
277	OCCUPANT UNKNOWNN
284	OCCUPANT UNKNOWNN
286	OCCUPANT UNKNOWNN
288	OCCUPANT UNKNOWNN
290	OCCUPANT UNKNOWNN
296	OCCUPANT UNKNOWNN
304	RAGLAND, WILLIAM H
306	WHATLEY, TOM
310	MCCALL, JAY
314	DZIOK, WALTER SR
315	LELLIS, MICHAEL R
319	DAUCHER, WILLIAM F
320	PITZER, F
327	GAHAGAN, WILLIAM
336	BRUND, JACQUE
339	HOWES, T

STATE ROAD 434 E 1995 (Cont'd)

345 OCCUPANT UNKNOWNN
348 BROPSON, FRANK
350 THOMAS, SAMUEL H
354 LUTE, ROBERT
359 SOLUSKI, FRANK G
360 DOLFI, H P
364 BROOKS, WALTER T
365 THORNBURGH, L M
367 GEE, RICHARD C
368 RICHARDSON, GEORGE I
387 DEPIZOL, T
388 OCCUPANT UNKNOWNN
391 REESE, WILLIAM J JR
403 OCCUPANT UNKNOWNN
404 CUMMINGS, ALLEN S
405 EARNSHAW, DONALD
407 HALL, HOWARD E
410 HARVEY, A T
411 SMART, EDGAR E
414 HUGHES, FRANK L
415 FRANCIS, F K
417 WAGNER, JAMES T
426 BINFORD, THOMAS A
439 PHILLIPS, JOHN G
442 LEAF, KENNETH T
443 RIGNEY, M
446 STRANG, WOODROW
447 LONDT, CHARLES F
450 OCCUPANT UNKNOWNN
459 FRANKENHEIM, NORMAN
468 KOENIG, EDNA
476 PARKS, F
479 KOBRIN, PAUL
481 GAUL, ROBERT
482 EMRICH, HARRY
JONES, MILO J
STANG, BERNARD P
WRIEDE, ARTHUR G
500 KALEY, JAMES L
KELLY, O A
SINGER, HARRY
TEDESCO, WILLIAM R
505 CLARK, JAMES O
510 OCCUPANT UNKNOWNN
515 LESKOWYAK, K
517 OCCUPANT UNKNOWNN
525 ALLY, STEPHEN
ALVEO, JILMA
ANDERSON, RHAMED
BAKER, R

STATE ROAD 434 E 1995 (Cont'd)

525 FLUHARTY, RICHARD A
GARRICK, C
MARSHALL, E M
MONTANEZ, JORGE
SCHAEFER, ANDY
STEVENS, BOB
549 OCCUPANT UNKNOWNN
551 ACTA, M
ALLITON, KURT
ALVAREZ, MARIA
ARCE, ABRAHAM
BENAMI, DORA
BUSCHE, SARALEE M
CONNELL, A J
COUTERMARSH, KENNETH
DELEON, L S
GARRIDO, JOSE
GEORGE, JANE
GIL, EDGAR
GONZALEZ, O
GREEN, JOHN
HERNANDEZ, WANDA
KEENEY, KYLE A
LABOSSIER, PAUL J
LAMON, MICHAEL R
LANGTEAU, L
LAPLACA, VINCENT
LIGHTON, H
MATUTAT, TIM
RANKIN, S
VELEZ, LEANDRO
WALTERS, P
WANG, PEGGY
WARLICK, SHAMBA
WATTS, WAYNE
ZAMBRANO, ANNA M
620 WINTER SPRINGS DENTAL LAB
621 MORRIS, ZANDI
661 OCCUPANT UNKNOWNN
810 NORWOOD, R
845 BELL, NELL
851 OCCUPANT UNKNOWNN
870 CARBONE, ANA
1065 US POST OFFICE
1130 BLUMBERG, JUANITA
1135 OCCUPANT UNKNOWNN
1159 OCCUPANT UNKNOWNN
1161 RICE, MARK W
1165 OCCUPANT UNKNOWNN
1175 ROBERTS, CARL R

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSKAWILLA RD 1995

117	FULTON, ROBERT P
290	BAILEY, HILDE E
300	JUSHE, BONNIE
550	INDIAN TRAILS MIDDLE SCHOOL
575	ST STEPHENS CATHOLIC CHURCH
600	KEETH ELEMEMTARY SCHOOL
619	MABRY, NED B
628	FRASER, WESLEY E

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE RD 434 1992

200	DOLFI, H P
	HOWELL, KENNETH
	MORGAN, A W
	OSTERHOUT, H P
	ZANGMEISTER, B
286	BURT, PHILLIP S
320	PITZER, F
403	CUMMINGS, NELSON
410	LEEBRICK, PHIL
411	SMART, EDGAR E
426	BINFORD, THOMAS A
482	ADAMS, FRED
	ANDERSON, THOMAS E
	BROOKS, WALTER T
	COVINGTON, DUDLEY L
	DAMRON, JAMES M
	DEPIZOL, T
	DINSMORE, C M
	DUVAL, GUY E
	EMRICH, HARRY
	EVENSON, KENNETH
	FORSTER, ALBERT C
	FOSTER, KENNETH V
	FRANCIS, F K
	FRANKENHEIM, NORMAN
	GAHAGAN, WILLIAM
	GAUL, ROBERT
	GEBHARDT, ROBERT F
	GREIFFENDORF, C W
	GUGEL, MERL
	GUMBERT, EDGAR B
	HOWES, T
	HUGHES, FRANK L
	HUTCHINSON, I A
	JAYNES, MELVIN J
	JONES, MILO J
	KLEIN, NEIL W
	LAWLOR, MICHAEL B
	LEAF, KENNETH T
	LELLIS, MICHAEL R
	LONDT, CHARLES F
	LOVETT, DAN S
	MCCALL, JAY
	MOSS, NATHAN
	MULLINS, JAMES W
	MURDOCK, JOHN G
	NELSON, CARL H
	OBERG, HARRY E
	PAINTER, JOHN H
	PARKS, F

E STATE RD 434 1992 (Cont'd)

482	RAGLAND, WILLIAM H
	REESE, WILLIAM J JR
	RICHARDSON, GEORGE I
	ROGERS, L R
	SCHILL, D C
	SHADOWENS, GEORGE W
	SHELLEM, WILLIAM
	SMITH, L B
	SOLUSKI, FRANK G
	STANG, BERNARD P
	STRANG, WOODROW
	TAYLOR, MAX A
	THORNBURGH, L M
	WRIEDE, ARTHUR G
500	ADLINGTON, CHARLES F
	ALLEN, GEORGE N
	ANDRESAKES, GEORGE N
	ATHERTON, V E
	BERNE, ABRAHAM
	BEST, WILLIAM J
	BOISDORF, JOHN
	BOYD, G L
	BRACCO, LUCY
	BRANCH, I
	BREITENBRUCK, JOSEPH
	BROPSON, FRANK
	BRUND, JACQUE
	BURNS, J R
	CANTON, FRANK W
	CRAIG, DARRELL R
	CRAWFORD, SIBERT E
	CUTRONI, JOHN F
	DAUCHER, WILLIAM F
	DAVIS, K M
	DELEON, VERNON C
	DESSEZ, ROBERT A
	DICEMBRE, MICHAEL J
	DILLON, WILMA A
	DIORIO, CARMINO
	DUNN, JOE P
	DZIOK, WALTER SR
	DZIOLOWSKI, RAYMOND
	EARNSHAW, DONALD
	EDER, D J
	FELTON, RICHARD
	FOLEY, JAMES A
	FORD, ROBERT
	GALLAGHER, FRED J
	GEE, RICHARD C
	GREENLEAF, A M

E STATE RD 434 1992 (Cont'd)

500 HADAWAY, BILLY J
HALL, HOWARD E
HANSON, J B
HAYDEN, THOMAS A
HAZELETT, A N
HERRON, M J
HUGHES, FRED G
KALEY, JAMES L
KELLY, O A
KILLIAN, KENNY
KINNEE, ROBERT J SR
KLINEHAN, DONALD
KNOWLES, HAROLD
KOBRIN, PAUL
KOENIG, EDNA
KRISTALYN, ROBERT C
LUTE, ROBERT
MCGINLEY, HAROLD W
MCKENZIE, J A
MELTON, F D
MORLEY, E M
MORRILL, I
MYERS, SHELDON L
NEAL, THERESA E
NIREN, BEN
OTHLING, B J
PALOMBI, JOSEPH
PATTERSON, CHARLES JR
PEARSON, ROY
PHILBRICK, Y
PHILLIPS, JOHN G
POWELL, H B
RIGNEY, M
ROSE, SUSAN H
ROSSI, ANTHONY
SARTORI, JAMES B
SAVARESE, ROY
SCHIERHOLZER, S M
SHEPARDSON, LEROY M
SIMPSON, D H
SINGER, HARRY
SMITH, RAMON W
SNYDER, DONALD G
SPOERING, WILLIAM G
SPROULL, JAMES D
TAYLOR, CHARLES
TEDESCO, WILLIAM R
THOMAS, SAMUEL H
THOMPSON, JAMES M
TORCASO, JOHN V

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE RD 434 1992 (Cont'd)

500	WAGNER, JAMES T
	WARDER, ROBERT
	WARTLUFT, LEON
	WHATLEY, TOM
	WHITEHEAD, B J
	WHITTINGTON, H H
	WILKERSON, V
	WILLIAMS, S T
	WOLF, MARY
	WOOD, HELEN
	WRUCK, WILLIAM B
	WYNNE, JOHN
505	CLARK, JAMES O
515	LESKOWYAK, K
525	ALVEO, JILMA
	CARRILLO, GLADIS
	FLUHARTY, RICHARD A
	LEWIS, KATHRYN S
	MANIS, KENNETH E
	MARSHALL, E M
	MILLER, KEVIN R
	MILLER, LARRY M
	MORALES, CARMEN
	RIVERA, OLGA
551	ARANZA, ALBERT
	ARCE, ANDREW
	BENAMI, DORA
	BERMUDEZ, IVONNE
	BILLINGS, MICHAEL D
	BLOSS, M E
	BOGGESS, DAVE
	BOUCHER, JEAN P
	BRENNER, SKIP
	BURKE, JAY
	CHAMP, CATHRYN
	CHOKSHI, DINESH
	COLON, CARLOS
	CONNELL, A J
	CUTLER, J A
	DAPHNIS, F
	DAVID, ELAINE
	DAVIS, C K
	DAVIS, DAVE A
	DEANGELIS, M
	DEJESUS, THOMAS
	DELEDEZMA, ISABEL
	DELEON, L S
	DEWANEH, GHADEH
	DEXTRE, MYRTA
	DOBBS, TERRY

E STATE RD 434 1992 (Cont'd)

551
DUVAK, CHRIS
EDWARDS, SHAWN
FIOL, ISAURA
FRAZIER, JUSTUS F JR
GARCIA, DARIO
GARVER, THOMAS
GAY, MICHAEL
GINN, TIFFANY S
GOMEZ, AFONZO
GONZALEZ, AGUSTIN
GONZALEZ, JOSE A
GONZALEZ, O
GUTIERREZ, DIANE
HARDEMAN, DOROTHY
HENNESSEY, J
HERNANDEZ, WANDA
HISEY, BRENT
ISAZA, JORGE I
JEAN, EDMOND R
JOLLAY, HELEN O
KEENEY, KYLE A
LAJANO, JAMES
LAPLACA, VINCENT
LEWIS, JAMIE
LOPEZ, F
LOWMILLER, JILL
MARINELLI, BRIAN
MARTIN, KENNETH R
MATHERS, JOSEPH
MELENDEZ, ZAIDA
MILLER, DAVID M
MONTANEZ, JORGE
MURDAUGH, C J
OHL, STEPHEN
OROURKE, MICHAEL A
PAVAO, LOUIS
PEDONE, SAMUEL
PETIT, KARINE
POWELL, STEVEN P
RANKIN, S
REAVES, J K
REEVESJONES, CRIS
RIDGWAY, M W
RIVERA, IVAN G
ROBSON, THERESA J
RODRIGUEZ, FELIX J
RODRIGUEZ, IRIS
ROMAN, DAINA
ROSTAMLOO, NEJDEH
SAMMONS, C A

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E STATE RD 434 1992 (Cont'd)

551	SANTANA, ISABEL
	SANTOS, DOMINGO
	SCHULTZ, J
	SCOTT, DENNIS R
	SCOTT, F J
	SHELTON, JASON S
	SHUFELT, K
	SMETZER, MICHAEL
	STEVENS, SUSAN M
	THOMPSON, JOHN C
	THOMPSON, SHERRIE
	TSINTZAS, ALEX
	URRUTIA, ERICKA J
	VANANDEN, RAYMOND
	VELEZ, LEANDRO
	VENABLE, JAMES C
	WARREN, JOSEPH E
	WELSCH, JEFFREY
	WINSLETT, LEE
	ZAMBRANO, ANNA M
	ZAMBRANO, LEWIS
661	KIGGINS, J
701	PETTIT, ANNA P
810	NORWOOD, R
851	GRESHAM, DEBBIE
1161	RICE, MARK W
1175	ROBERTS, CARL R

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TUSCAWILLA RD 1992

190	GRIFFITH EDWARD W
201	HI-FLAVOR MEATS INC
395	FRESH START MINISTRIES INC
	LORD OF LIFE LUTH CH
397	HI FLAVOR MEATS INC
575	ST STEPHENS CATH CH
600	KEETH ELEM SCHOOL

Sutton Crossing

Tuskawilla Rd & FL 434

Winter Springs, FL 32708

Inquiry Number: 7123398.4

September 20, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

09/20/22

Site Name:

Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708
EDR Inquiry # 7123398.4

Client Name:

Native Geoscience, Inc.
2014 Edgewater Drive #246
Orlando, FL 32804
Contact: Clinton Wilhelm

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Native Geoscience, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# R0789.1
Project: R0789.1

Coordinates:

Latitude:	28.695011 28° 41' 42" North
Longitude:	-81.262068 -81° 15' 43" West
UTM Zone:	Zone 17 North
UTM X Meters:	474399.98
UTM Y Meters:	3174224.33
Elevation:	42.92' above sea level

Maps Provided:

2018
2015
2012
1994
1980
1972
1970
1962

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Casselberry
2018
7.5-minute, 24000



Oviedo
2018
7.5-minute, 24000

2015 Source Sheets



Casselberry
2015
7.5-minute, 24000



Oviedo
2015
7.5-minute, 24000

2012 Source Sheets

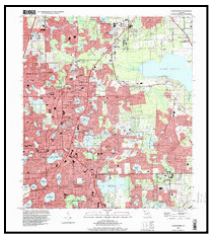


Casselberry
2012
7.5-minute, 24000



Oviedo
2012
7.5-minute, 24000

1994 Source Sheets



Casselberry
1994
7.5-minute, 24000
Aerial Photo Revised 1994

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1980 Source Sheets

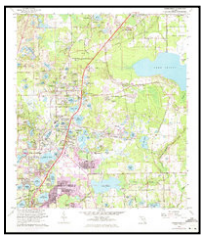


Oviedo
1980
7.5-minute, 24000
Aerial Photo Revised 1977



Casselberry
1980
7.5-minute, 24000
Aerial Photo Revised 1977

1972 Source Sheets

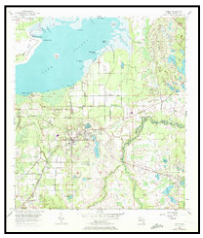


Casselberry
1972
7.5-minute, 24000
Aerial Photo Revised 1970

1970 Source Sheets



Casselberry
1970
7.5-minute, 24000
Aerial Photo Revised 1970



Oviedo
1970
7.5-minute, 24000
Aerial Photo Revised 1970

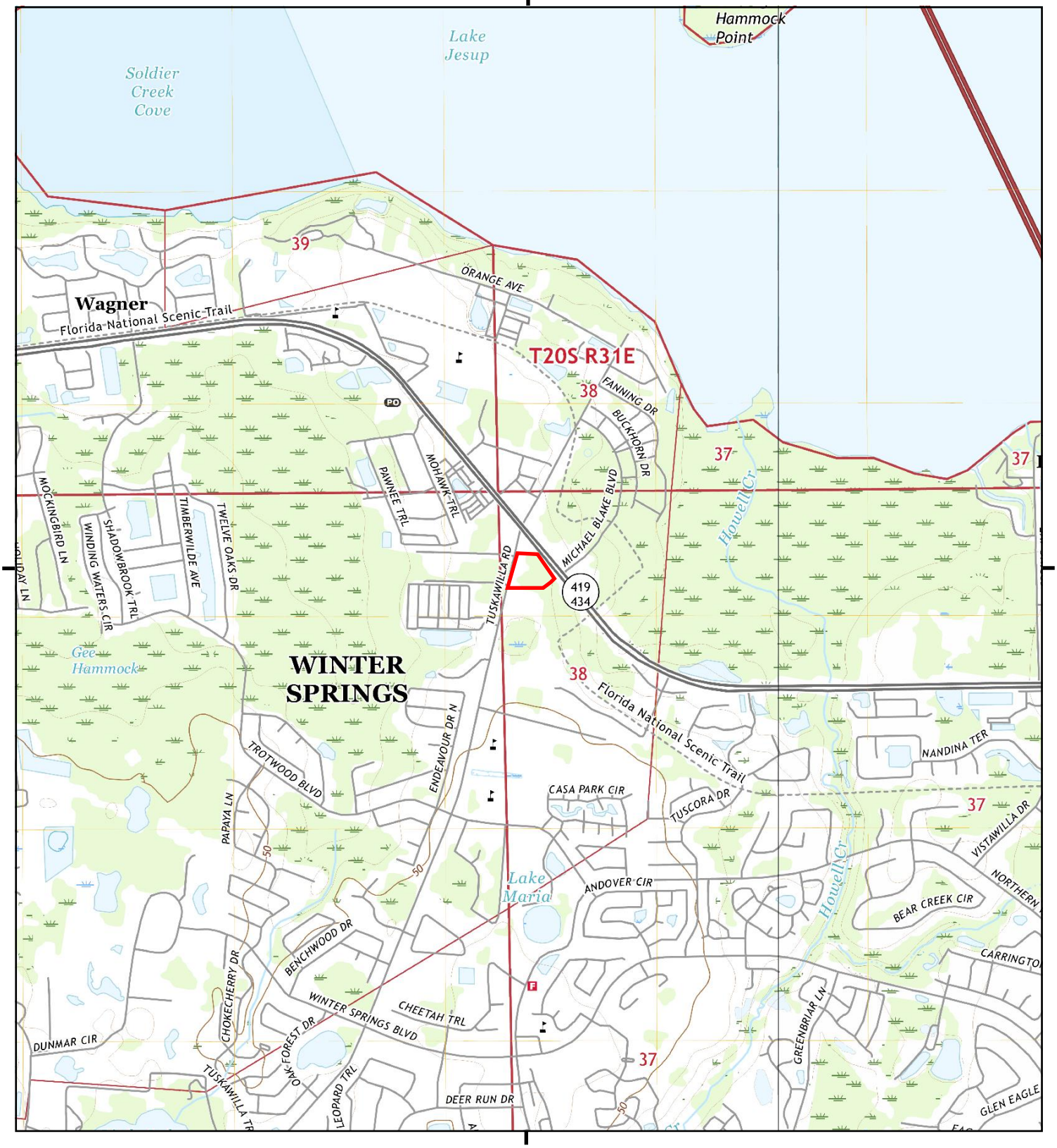
1962 Source Sheets



Casselberry
1962
7.5-minute, 24000
Aerial Photo Revised 1958

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 2018, 7.5-minute
E, Oviedo, 2018, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 2015, 7.5-minute
E, Oviedo, 2015, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

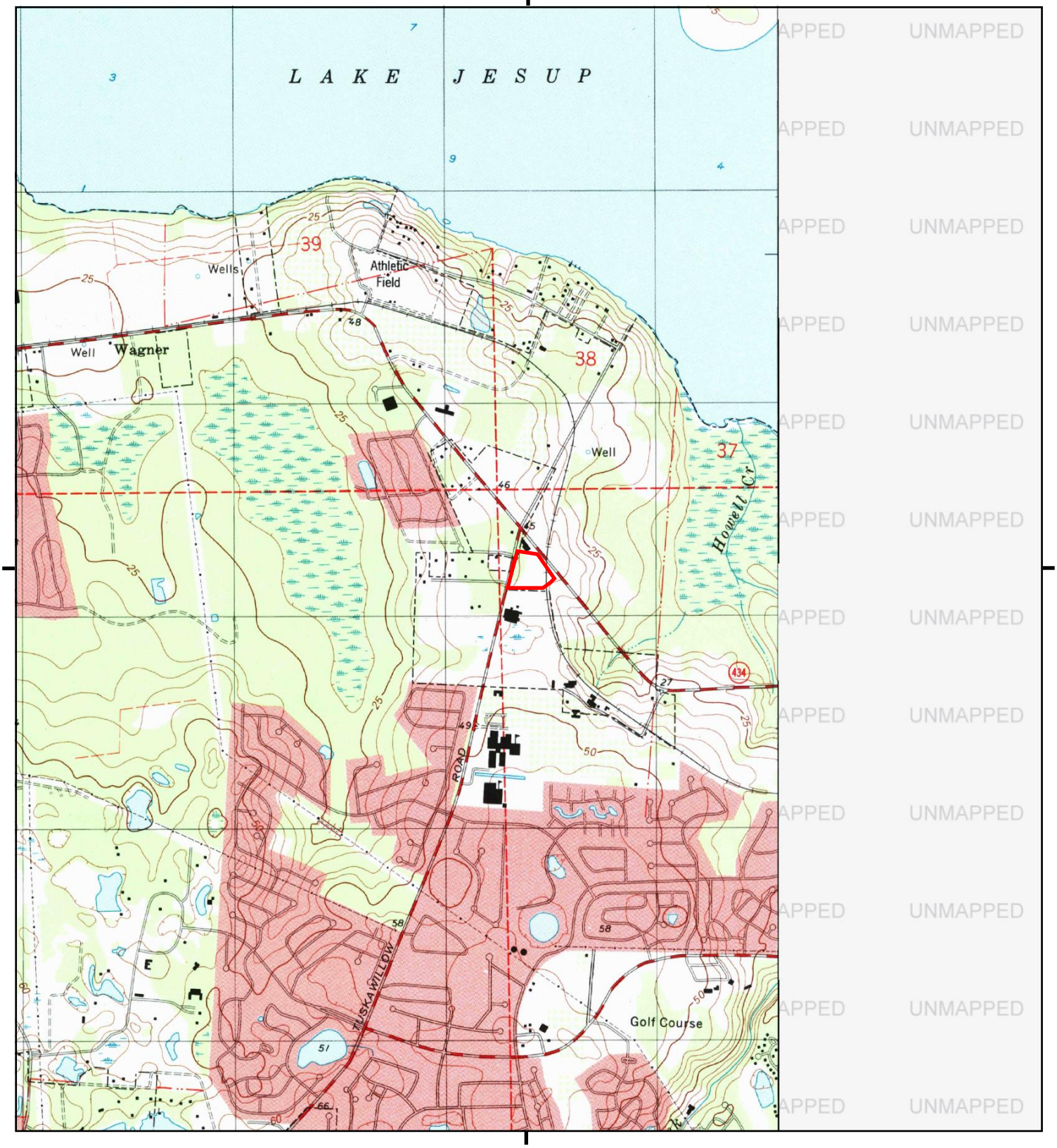
TP, Casselberry, 2012, 7.5-minute
E, Oviedo, 2012, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

1994



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1994, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

1980



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

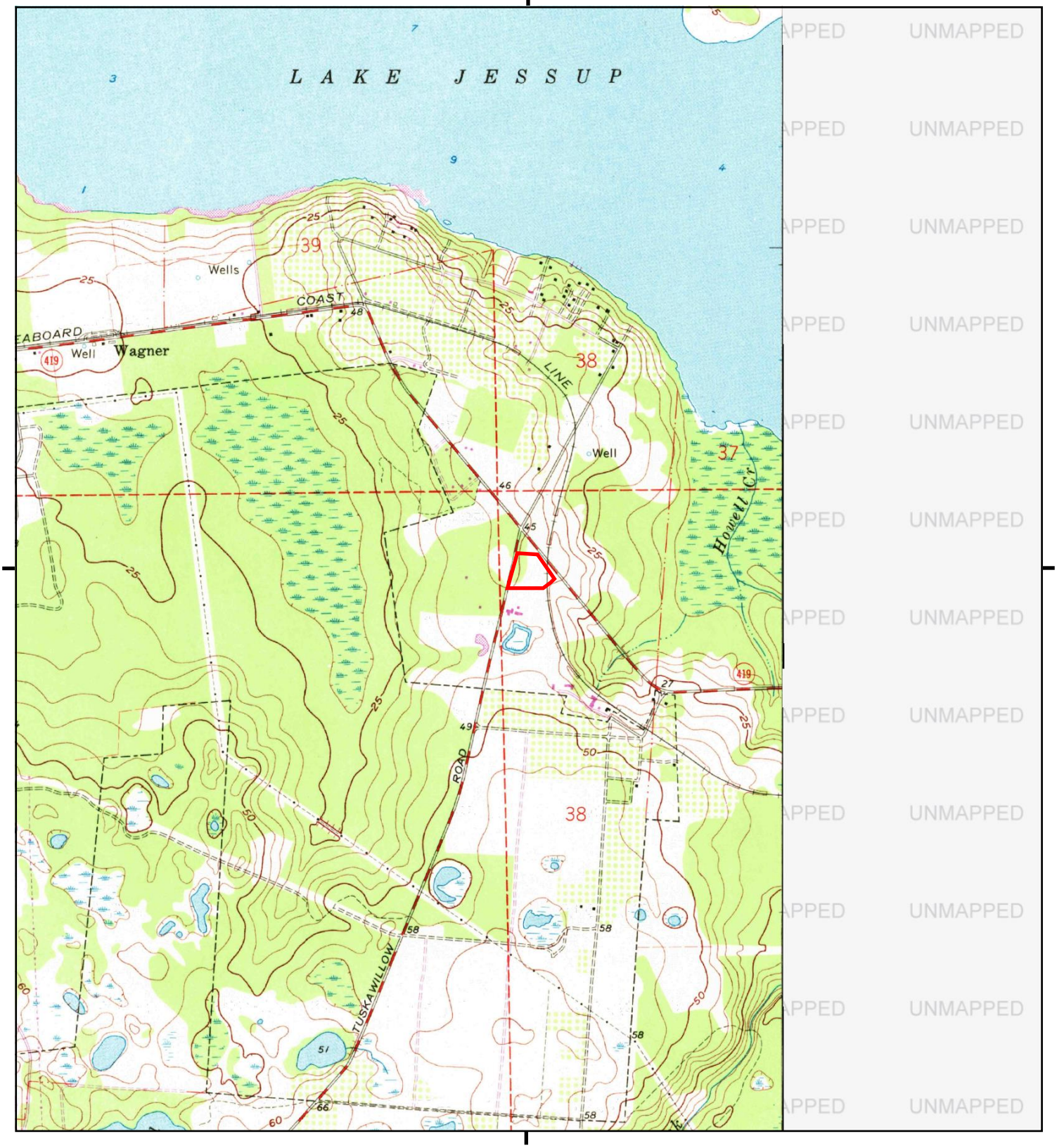
TP, Casselberry, 1980, 7.5-minute
E, Oviedo, 1980, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Historical Topo Map

1972



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1972, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N



This report includes information from the following map sheet(s).

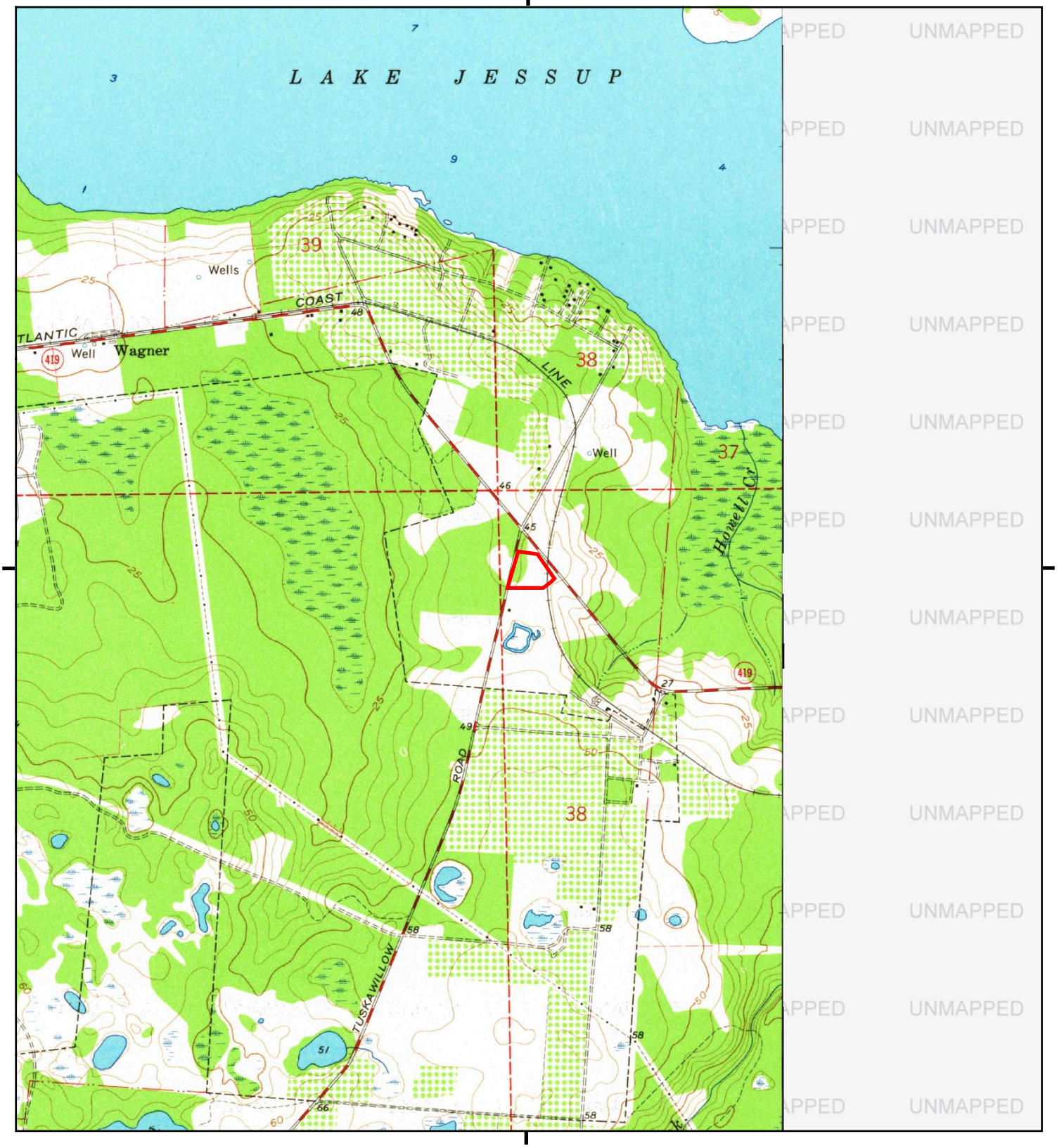
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1970, 7.5-minute
E, Oviedo, 1970, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Casselberry, 1962, 7.5-minute

SITE NAME: Sutton Crossing
ADDRESS: Tuskawilla Rd & FL 434
Winter Springs, FL 32708
CLIENT: Native Geoscience, Inc.

N

Property Record Card

David Johnson, CFA
PROPERTY APPRAISER
SEMINOLE COUNTY, FLORIDA

Parcel 26-20-30-5AR-0A00-008D
Property Address 434 SR WINTER SPRINGS, FL 32708

Parcel Information

Parcel	26-20-30-5AR-0A00-008D
Owner(s)	SCHRIMSHER LAND FUND 1985 LTD - Tenants in Common :50 SCHRIMSHER LAND FUND VI LTD - Tenants in Common :10.45908 SCHRIMSHER LAND FUND V LTD - Tenants in Common :39.54092
Property Adrress	434 SR WINTER SPRINGS, FL 32708
Mailing	600 E COLONIAL DR STE 100 ORLANDO, FL 32803-4647
Subdivision Name	D R MITCHELLS SURVEY OF THE LEVY GRANT
Tax District	W1-WINTER SPRINGS
DOR Use Code	10-VAC GENERAL-COMMERCIAL
Exemptions	None
Agricultural Classification	No



Value Summary

	2022 Working Values	2021 Certified Values
Valuation Method	Cost/Market	Cost/Market
Number of Buildings	0	0
Depreciated Bldg Value		
Depreciated EXFT Value		
Land Value (Market)	$620,600	$394,081
Land Value Ag		
Just/Market Value	$620,600	$394,081
Portability Adj		
Save Our Homes Adj	$0	$0
Amendment 1 Adj	$360,567	$157,687
P&G Adj	$0	$0
Assessed Value	$260,033	$236,394

2021 Tax Amount without Exemptions:	$6,342.30
2021 Tax Bill Amount:	$4,723.03
2021 Tax Savings with Exemptions:	$1,619.27

** Does NOT INCLUDE Non Ad Valorem Assessments*

Legal Description

PT OF LOT 8 DESC AS BEG INT
WLY R/W ACL RR & NLY LI LOT 17
TUSKAWILLA EXT RUN NLY ALONG RR
TO SLY R/W OVIEDO RD NWLY ALONG
SLY R/W TO A PT N OF BEG S TO BEG (LESS RD)
BLK A
D R MITCHELLS SURVEY OF THE
LEVY GRANT
PB 1 PG 5

Taxes

Taxing Authority	Assessment Value	Exempt Values	Taxable Value
SJWM(Saint Johns Water Management)	$260,033	$0	$260,033
CITY WINTER SPRINGS	$260,033	$0	$260,033
FIRE FUND	$260,033	$0	$260,033
COUNTY GENERAL FUND	$260,033	$0	$260,033
Schools	$620,600	$0	$620,600

Sales

Description	Date	Book	Page	Amount	Qualified	Vac/Imp

1352

Land

Method	Frontage	Depth	Units	Units Price	Land Value
SQUARE FEET			62060	$10.00	$620,600

Building Information

Permits

Permit #	Description	Agency	Amount	CO Date	Permit Date
26920	INSTALL OUTDOOR ADVERTISING SIGN	Winter Springs	$6,596		5/1/1995
00801	SITE PLAN REVIEW - ALSO INCLUDES LOT 8H	Winter Springs	$0		5/5/2010

Extra Features

Description	Year Built	Units	Value	New Cost

Zoning

Zoning	Zoning Description	Future Land Use	Future Land Use Description
T-C		Town Center District	

Utility Information

Fire Station	Power	Phone(Analog)	Water Provider	Sewer Provider	Garbage Pickup	Recycle	Yard Waste	Hauler
26.00	DUKE	AT&T	WINTER SPRINGS	CITY OF WINTER SPRINGS	NA	NA	NA	NA

Political Representation

Commissioner	US Congress	State House	State Senate	Voting Precinct
Dist 2 - Jay Zembower	Dist 7 - Stephanie Murphy	Dist 28 - David "Dave" Smith	Dist 9 - Jason Brodeur	49

School Information

Elementary School District	Middle School District	High School District
Layer	Indian Trails	Winter Springs

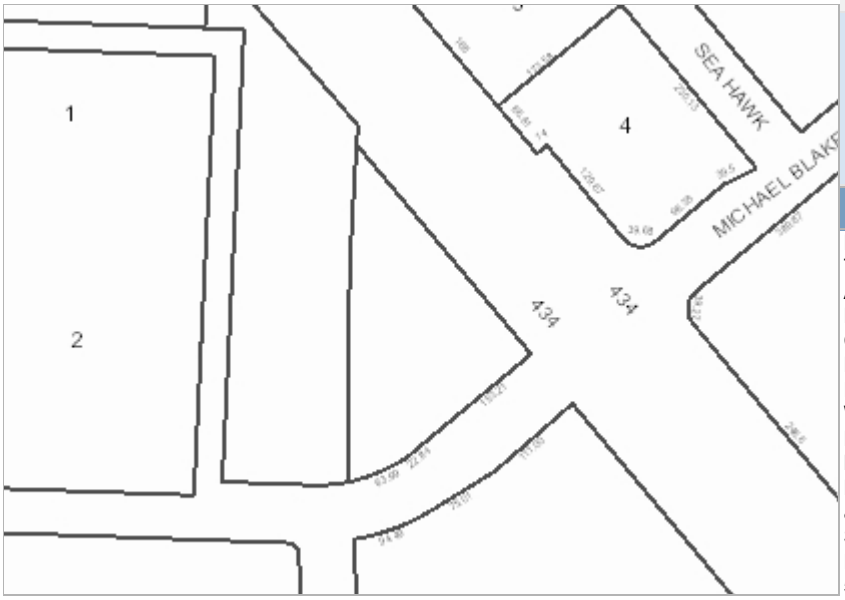
Property Record Card

David Johnson, CFA
PROPERTY APPRAISER
SEMINOLE COUNTY, FLORIDA

Parcel 26-20-30-5AR-0A00-008H
Property Address E 434 SR WINTER SPRINGS, FL 32708

Parcel Information

Parcel	26-20-30-5AR-0A00-008H
Owner(s)	SCHRIMSHER LAND FUND VI LTD - Tenants in Common :10.4591 SCHRIMSHER LAND FUND V LTD - Tenants in Common :39.5409 SCHRIMSHER LAND FUND 1986-II LTD - Tenants in Common :50
Property Adrress	E 434 SR WINTER SPRINGS, FL 32708
Mailing	600 E COLONIAL DR STE 100 ORLANDO, FL 32803-4647
Subdivision Name	D R MITCHELLS SURVEY OF THE LEVY GRANT
Tax District	W1-WINTER SPRINGS
DOR Use Code	10-VAC GENERAL-COMMERCIAL
Exemptions	None
Agricultural Classification	No



Value Summary

	2022 Working Values	2021 Certified Values
Valuation Method	Cost/Market	Cost/Market
Number of Buildings	0	0
Depreciated Bldg Value		
Depreciated EXFT Value		
Land Value (Market)	$383,430	$243,478
Land Value Ag		
Just/Market Value	$383,430	$243,478
Portability Adj		
Save Our Homes Adj	$0	$0
Amendment 1 Adj	$236,126	$109,565
P&G Adj	$0	$0
Assessed Value	$147,304	$133,913

2021 Tax Amount without Exemptions:	$3,918.51
2021 Tax Bill Amount:	$2,793.40
2021 Tax Savings with Exemptions:	$1,125.11

** Does NOT INCLUDE Non Ad Valorem Assessments*

Legal Description

PT OF LOT 8 DESC AS FROM SE COR BLOCK C GARDENA FARMS TOWN SITES RUN N 55 DEG 28 MIN 13 SEC W 800 FT NWLY ALONG CURVE 1148.44 FT N 49 DEG 31 MIN 30 SEC E 250.50 FT TO POB RUN N 39 DEG 49 MIN 53 SEC W 659.48 FT NLY ALONG CURVE 133.83 FT TO POB RUN ELY ALONG CURVE 63.99 FT N 49 DEG 13 MIN 20 SEC E 22.84 FT N 50 DEG 22 MIN 25 SEC E TO WLY R/W SR 434 NWLY ALONG R/W TO WLY R/W OF RR SELY ALONG WLY R/W OF RR TO BEG (LESS PT NOT PLATTED) BLK A
DR MITCHELLS SURVEY OF THE
LEVY GRANT
PB 1 PG 5
&
SEC 06 TWP 21S RGE 31E
FROM SE COR BLOCK C GARDENA FARMS TOWN SITES RUN N 55 DEG 28 MIN 13 SEC W 800 FT NWLY ALONG CURVE 1148.44 FT N 49 DEG 31 MIN 30 SEC E 250.50 FT TO POB RUN N 39 DEG 49 MIN 53 SEC W 659.48 FT NLY ALONG CURVE 133.83 FT TO POB RUN ELY ALONG CURVE 63.99 FT N 49 DEG 13 MIN 20 SEC E 22.84 FT N 50 DEG 22 MIN 25 SEC E TO WLY R/W SR 434 NWLY ALONG R/W TO WLY R/W OF RR SELY ALONG WLY R/W OF RR TO BEG (LESS PT PLATTED)

Taxes

Taxing Authority	Assessment Value	Exempt Values	Taxable Value
SJWM(Saint Johns Water Management)	$147,304	$0	$147,304
CITY WINTER SPRINGS	$147,304	$0	$147,304
FIRE FUND	$147,304	$0	$147,304
COUNTY GENERAL FUND	$147,304	$0	$147,304
Schools	$383,430	$0	$383,430

1354

Sales

Description	Date	Book	Page	Amount	Qualified	Vac/Imp
SPECIAL WARRANTY DEED	02/02/2017	08856	0546	$277,200	No	Vacant

Land

Method	Frontage	Depth	Units	Units Price	Land Value
SQUARE FEET			38343	$10.00	$383,430

Building Information

Permits

Permit #	Description	Agency	Amount	CO Date	Permit Date
00490	CONSTRUCTION OF A 145 SUITE, 4 STORY RETIREMENT RESIDENCE.PAD PER PERMIT: 80 MICHAEL BLAKE BLVD.	Winter Springs	$25,405,047		7/8/2019
02739	CONSTRUCTION OF A RETAINING WALL.	Winter Springs	$162,200		8/15/2019
03654	CONSTRUCTION OF LIFT STATION	Winter Springs	$33,000		11/14/2019

Extra Features

Description	Year Built	Units	Value	New Cost

Zoning

Zoning	Zoning Description	Future Land Use	Future Land Use Description
T-C		Town Center District	

Utility Information

Fire Station	Power	Phone(Analog)	Water Provider	Sewer Provider	Garbage Pickup	Recycle	Yard Waste	Hauler
26.00	DUKE	AT&T	WINTER SPRINGS	CITY OF WINTER SPRINGS	NA	NA	NA	NA

Political Representation

Commissioner	US Congress	State House	State Senate	Voting Precinct
Dist 2 - Jay Zembower	Dist 7 - Stephanie Murphy	Dist 28 - David "Dave" Smith	Dist 9 - Jason Brodeur	49

School Information

Elementary School District	Middle School District	High School District
Layer	Indian Trails	Winter Springs

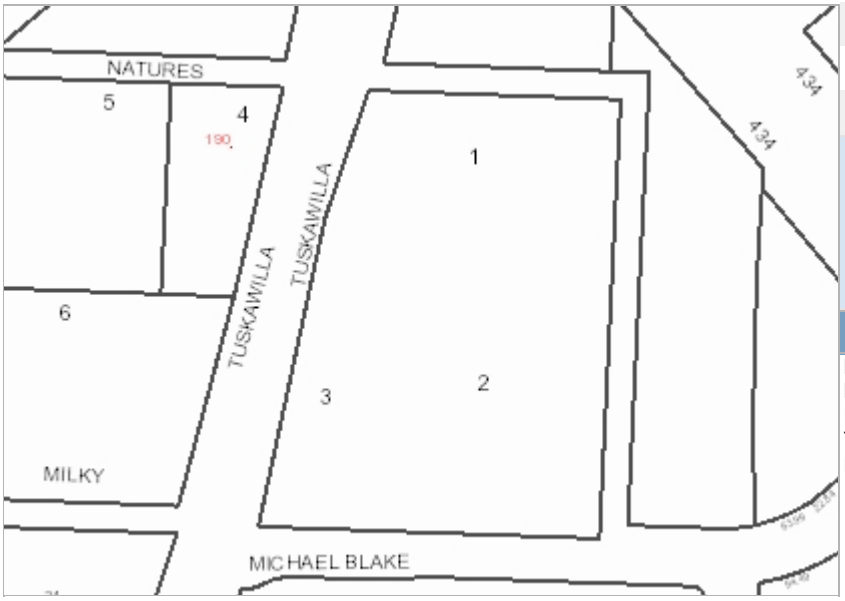
Property Record Card

David Johnson, CFA
PROPERTY APPRAISER
SEMINOLE COUNTY, FLORIDA

Parcel 01-21-30-501-0000-0010
Property Address TUSKAWILLA RD WINTER SPRINGS, FL 32708

Parcel Information

Parcel	01-21-30-501-0000-0010
Owner(s)	SCHOEN, PATTI A
Property Adrress	TUSKAWILLA RD WINTER SPRINGS, FL 32708
Mailing	PO BOX 397 SCOTT DEPOT, WV 25560-0397
Subdivision Name	TUSCAWILLA
Tax District	W1-WINTER SPRINGS
DOR Use Code	1003-VAC FEEDER RD FRONTAGE
Exemptions	None
Agricultural Classification	No



Value Summary

	2022 Working Values	2021 Certified Values
Valuation Method	Cost/Market	Cost/Market
Number of Buildings	0	0
Depreciated Bldg Value		
Depreciated EXFT Value		
Land Value (Market)	$1,200,293	$1,091,175
Land Value Ag		
Just/Market Value	$1,200,293	$1,091,175
Portability Adj		
Save Our Homes Adj	$0	$0
Amendment 1 Adj	$542,085	$492,804
P&G Adj	$0	$0
Assessed Value	$658,208	$598,371

2021 Tax Amount without Exemptions:	$17,561.26
2021 Tax Bill Amount:	$12,500.71
2021 Tax Savings with Exemptions:	$5,060.55

** Does NOT INCLUDE Non Ad Valorem Assessments*

Legal Description

LOTS 1 + 2 + THAT PART OF
LOTS 3 + 4 E OF GOLDENROD
RD & 1/2 OF VACD ST ON S
TUSKAWILLA
PB 1 PG 5

Taxes

Taxing Authority	Assessment Value	Exempt Values	Taxable Value
SJWM(Saint Johns Water Management)	$658,208	$0	$658,208
CITY WINTER SPRINGS	$658,208	$0	$658,208
FIRE FUND	$658,208	$0	$658,208
COUNTY GENERAL FUND	$658,208	$0	$658,208
Schools	$1,200,293	$0	$1,200,293

Sales

Description	Date	Book	Page	Amount	Qualified	Vac/Imp

Land

Method	Frontage	Depth	Units	Units Price	Land Value

1356

SQUARE FEET	145490	$8.25	$1,200,293

Building Information

Permits

Permit #	Description	Agency	Amount	CO Date	Permit Date
01144	SITE SIGN - TUSKAWILLA RD & E SR 434	Winter Springs	$604		5/5/2004

Extra Features

Description	Year Built	Units	Value	New Cost

Zoning

Zoning	Zoning Description	Future Land Use	Future Land Use Description
T-C		Town Center District	

Utility Information

Fire Station	Power	Phone(Analog)	Water Provider	Sewer Provider	Garbage Pickup	Recycle	Yard Waste	Hauler
26.00	DUKE	AT&T	WINTER SPRINGS	CITY OF WINTER SPRINGS	NA	NA	NA	NA

Political Representation

Commissioner	US Congress	State House	State Senate	Voting Precinct
Dist 2 - Jay Zembower	Dist 7 - Stephanie Murphy	Dist 28 - David "Dave" Smith	Dist 9 - Jason Brodeur	49

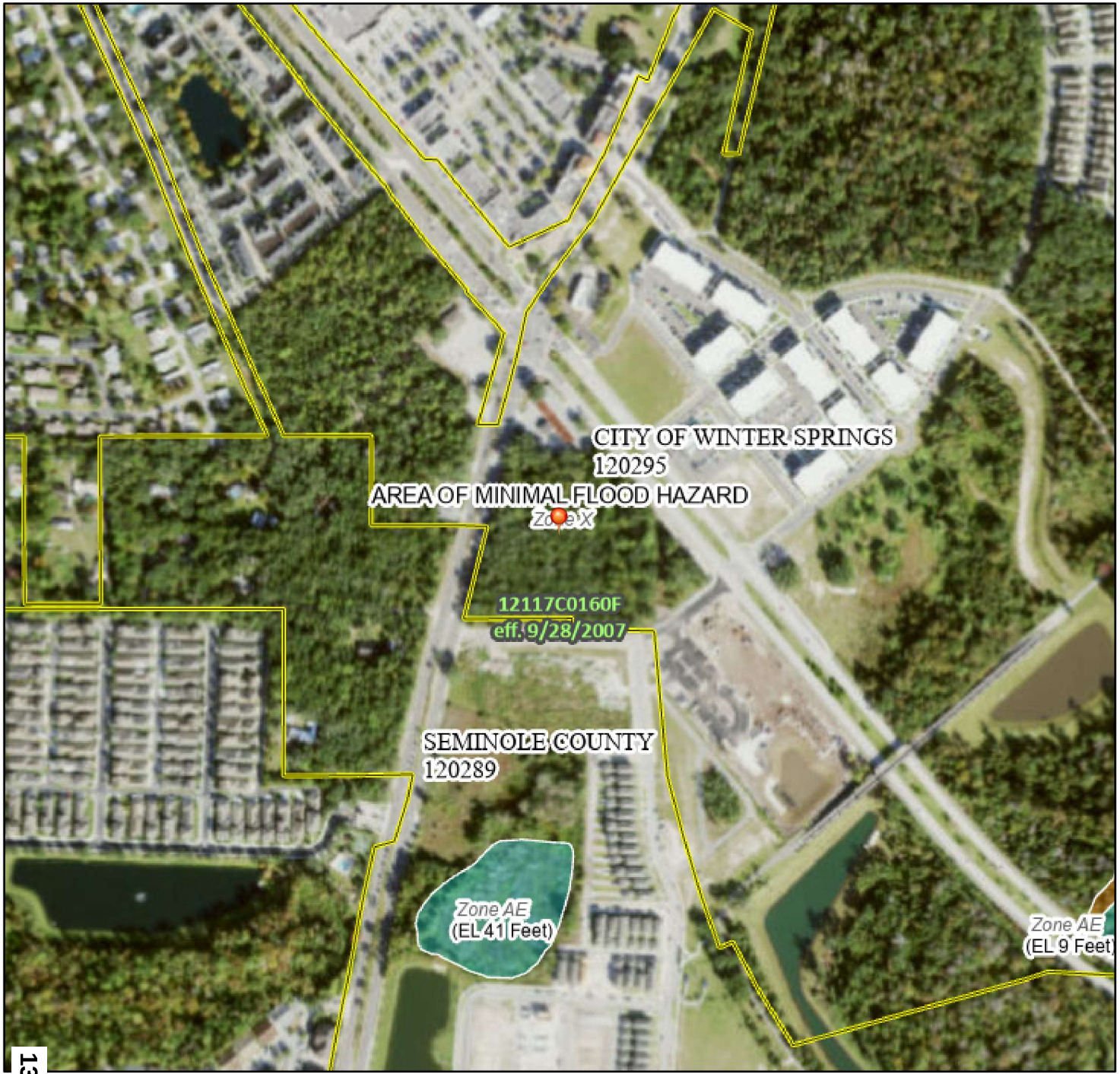
School Information

Elementary School District	Middle School District	High School District
Layer	Indian Trails	Winter Springs

National Flood Hazard Layer FIRMette

FEMA

81°16'2"W 28°41'58"N



81°15'25"W 28°41'26"N

1358

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/5/2022 at 2:18 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

User Questionnaire

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

Site Name: Sutton Crossings **Site Acreage:** 4.442 ac +/- + ROW areas

Please fill out the following information about yourself and answer the questions below.

Name: Ryan P. Stahl

Organization: EQX-HRP Winter Springs, LLC

Date:

1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law? (circle answer below)

   YES **(NO)**

   If yes, please explain.

2. Are you aware of any activity and use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   (YES) **NO**

   If yes, please explain.

   City use restrictions

3. As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

   (YES) **NO**

   If yes, please explain.

   Developer of Winter Springs Marketplace across Tuskawilla Road from subject.

4. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

YES NO

If no, please explain.

---

5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

a. Do you know the past uses of the property?

YES NO

b. Do you know of specific chemicals that are present or once were present at the property?

YES NO

c. Do you know of spills or other chemical releases that have taken place at the property?

YES NO

d. Do you know of any environmental cleanups that have taken place at the property?

YES NO

If yes to any above, please explain.

Previously recorded REC - Adjacent gas station from 1993

---

6. As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

YES NO

If yes, please explain.

Owner Questionnaire

Site: TUSKAWILLA ROAD, SEMINOLE COUNTY

Name: PATTI ANN SCHOEN

Organization: —

Date: 9/17/20

How long have you been involved with the property?

Answer: SINCE 12/07/71

In what capacity?

Answer: OWNER

Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property?

Answer: NO

Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property?

Answer: NO

Are you aware of any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products on the property?

Answer: NO

Are you aware of any current or past above or below ground storage tanks containing hazardous materials or petroleum products on the property?

Answer: NO

Are you aware of any soil or groundwater contamination on the property?

Answer: NO

Are you aware of any wells on the property? If so, how many?

Answer: NO

Are you aware of a septic system on the property?

Answer: NO

Please describe your knowledge of the former uses of the subject property.

Answer: NO KNOWLEDGE, THIS PROPERTY WAS GIFTED TO ME WHEN I WAS 10 YEARS OLD.

Owner Questionnaire

Site: Seminole County Parcels: 26-20-30-5AR-0A00-008D and 26-20-30-5AR-0A00-008H

Name: Michael A. Schrimsher, vice president of Schrimsher, Inc.,

Organization: general partner of Schrimsher Land Fund 1986-II, V and VI, Ltd.

Date: October 12, 2022

How long have you been involved with the subject property?

Answer: since 1985-86

In what capacity?

Answer: Property management

Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property?

Answer: No.

Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property?

Answer: No.

Are you aware of any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products on the subject property?

Answer: No.

Are you aware of any current or past above or below ground storage tanks containing hazardous materials or petroleum products on the subject property?

Answer: No.

Are you aware of any soil or groundwater contamination on the subject property?

Answer: Yes. soil under the former CSX railroad was contaminated by creosote on wooden railroad ties and herbicide sprayed along railroad tracks.

Are you aware of any wells on the subject property? If so, how many?

Answer: NO.

Are you aware of any septic system(s) on the subject property?

Answer: NO.

Are you aware of any cattle dipping vats on or near the subject property?

Answer: NO, not on the subject property. I have no personal knowledge but am aware that there were cattle operations on pastures on the former Plante property.

Please describe your knowledge of the former uses of the subject property.

Answer: Besides the single railroad track the property has been vacant wooded property.

Cain Diehl

From: Kristin Banks <Kristin@equinox-development.com>
Sent: Monday, October 17, 2022 8:08 PM
To: Cain Diehl
Cc: Kirsten Davis; Ryan Stahl
Subject: RE: Phase I Proposal - Sutton Crossings, Winter Springs

Cain,

I confirmed with the Schoens the information provided from the questionnaire in 2020 is still accurate. Let me know if you need anything else.

Thank you!

KRISTIN BANKS
Development Coordinator



O 407.628.0077 **C** 404.324.2874
630 S. Maitland Ave. Suite 100, Maitland, FL 32751
Kristin@equinox-development.com
Equinox-Development.com

From: Cain Diehl <cdiehl@nativegeo.com>
Sent: Monday, October 17, 2022 9:36 AM
To: Kristin Banks <Kristin@equinox-development.com>
Cc: Kirsten Davis <kirsten@equinox-development.com>; Ryan Stahl <RStahl@equinox-development.com>
Subject: RE: Phase I Proposal - Sutton Crossings, Winter Springs

Good morning Kristin,

Any luck with Ms. Schoen? We are ready to finalize the report once we hear back. Thanks!

Cain

From: Kristin Banks <Kristin@equinox-development.com>
Sent: Thursday, October 13, 2022 9:49 AM
To: Cain Diehl <cdiehl@nativegeo.com>
Cc: Kirsten Davis <kirsten@equinox-development.com>; Ryan Stahl <RStahl@equinox-development.com>
Subject: RE: Phase I Proposal - Sutton Crossings, Winter Springs

We will follow up with her- I'll keep you posted.

Natural Attenuation Monitoring Quarterly Report

Site:
Handy Way Food Store #3333
170 Tuskawilla Road
Winter Springs, Seminole County, Florida
FDEP Facility No. 59/8516641
Work Order No.2013-59-W2072A

Prepared for:
David M. Press
Orange County Environmental Protection Division
800 Mercy Drive, Suite 4
Orlando, Florida 32808

Prepared by*:*

320 East South Street
Orlando, Florida 32801
(407) 304-4400

February 1, 2013

AECOM Project No. 60277373

Natural Attenuation Monitoring Quarterly Report

In accordance with the provisions of Florida Statutes, Chapter 471 this Natural Attenuation Monitoring Report for the former Handy Way #3333 facility located in Winter Springs, Seminole County, Florida, has been prepared under the direct supervision of a Professional Engineer registered in the State of Florida. This work was performed in accordance with generally accepted professional engineering practices pursuant to Chapter 471 of the Florida Statutes. The data, findings, recommendations, specifications or professional opinions were prepared solely for the use of the Florida Department of Environmental Protection. AECOM makes no other warranty, either expressed or implied, and is not responsible for the interpretation by others of these data.

Site:
Handy Way Food Store #3333
170 Tuskawilla Road
Winter Springs, Seminole County, Florida
FDEP Facility No. 59/8516641
Work Order No.2013-59-W2072A

Prepared for:
David Press
Orange County Environmental Protection Division
800 Mercy Drive, Suite 4
Orlando, Florida 32808

Prepared by:

AECOM

320 East South Street
Orlando, Florida 32801
(407) 304-4401

February 1, 2013

Author: Daniel S. Phillips

Title: Project Manager

Signature: Daniel S. Phillips

Reviewer: Suzanne Schomer, P.E.

Title: Program Manager
Florida License No. 40433
Eng. Bus. Authorization No. 8115

Signature: Suzanne L. Schomer

SUZANNE L. SCHOMER
LICENSE
2/1/13
NO. 40433
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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1.0 INTRODUCTION

AECOM Technical Services, Inc.(AECOM), is pleased to present the Orange County Environmental Protection Division (OCEPD) with this Natural Attenuation Monitoring Quarterly Report for the former Handy Way #3333 site, located at 170 Tuskawilla Road, Winter Springs, Florida. Work at this site is being performed under Florida Department of Environmental Protection (FDEP) Petroleum Preapproval Program Work Order #2013-59-W2072A and this report is intended to satisfy the requirements of the Event 2 and final deliverable. This report documents the recent groundwater sampling activities, consisting of the collection of groundwater samples from four existing monitor wells. **Figure 1** presents the current site layout.

2.0 GROUNDWATER SAMPLING

On January 23, 2013, AECOM personnel collected the required groundwater samples from monitor wells CW-2, MW-1, MW-4 and MW-16. The collected samples were analyzed by the selected laboratory for volatile organic aromatic compounds (VOA) by EPA Methods 8260B and for polynuclear aromatic hydrocarbons (PAH) by EPA Method 8270C. This groundwater sampling event was conducted in accordance with FDEP-SOP 001/01 guidance. Samples were placed on ice upon collection and kept on ice until they were delivered to the laboratory.

Water level measurements were recorded from the monitor wells selected for sampling, prior to purging water from any of the wells. A summary of current and historical water level data for the site is provided in **Table 1**. A groundwater contour map for January 23, 2013 is provided as **Figure 2**. The groundwater flow direction at the site was determined to be southeast at the time of sampling, which is consistent with previous determinations.

A review of the recent groundwater analytical results indicates that no contaminant of concern was detected above FDEP GCTLs in any of the four wells sampled. Trace levels of contaminants were detected in MW-4, as indicated in the table below:

Contaminant	Detected Concentration (ug/l)	FDEP GCTL (ug/l)
Benzene	0.8 I	1
Ethylbenzene	9.5	40
Naphthalene	9.8	14
1-methylnaphthalene	1.5	28
2-methylnaphthalene	1.6	28

As indicated above, none of the contaminants detected in MW-4 exceed the FDEP GCTLs. This is the second consecutive quarterly sampling event for this site that indicates no contamination above FDEP cleanup criteria. A historical summary of groundwater monitor well analytical data is provided in **Table 2**. A current groundwater contamination map illustrating recent analytical data is provided as **Figure 3**. A copy of the laboratory analytical report for the groundwater sampling event is presented in **Appendix A** and FDEP groundwater sampling logs are provided in **Appendix B**.

3.0 OBSERVATIONS/RECOMMENDATIONS

Upon review of the recent and historical groundwater analytical data, the following observations are offered:

- The current groundwater flow direction appears to be southeast, which is consistent with previous determinations.
- The recent groundwater analytical results indicate contaminant reductions such that no well/sample currently exceeds the FDEP GCTLs. This is the second consecutive quarterly sampling event where all wells sampled meet the FDEP cleanup criteria.

AECOM recommends further Natural Attenuation Monitoring (NAM) be conducted at this site for an additional two quarters, in accordance with the approved NAM Approval Letter, dated October 8, 2012. Should the third and fourth quarter groundwater sampling results indicate that there are no contaminants detected above the FDEP GCTL, then the issuance of a Site Rehabilitation Completion Order will be recommended. However, if contaminant rebound is observed and active remediation should be considered necessary in the future, AECOM will evaluate short term, episodic air sparge/soil vapor extraction events for feasibility and cost effectiveness.

4.0 CLOSURE

AECOM appreciates the opportunity to be of continued service to Orange County and the FDEP at this site. Should you have any questions or comments concerning this report, please do not hesitate to contact Dan Phillips at (407) 304-4434.

Tables

TABLE 1: GROUNDWATER ELEVATION TABLE

Facility Name:Handy Way #3333 **Facility ID#:598516641**

All Measurements = Feet
No Data = Blank

WELL NO.	MW-1			MW-2			MW-3			MW-4			MW-5D			MW-6			MW-7			MW-8		
DIAMETER (IN.)	2			2			2			2			2			2			2			2		
WELL DEPTH (FT.)	14.10			13.80			13.70			13.80			32.80			13.80			13.70			14.40		
SCREEN INT. (FT.)	4.1-14.1			3.8-13.8			3.7-13.7			3.8-13.8			27.8-32.8			3.8-13.8			3.7-13.7			1.9-14.4		
TOC ELEVATION (FT.)	49.84			49.92			49.46			49.50			50.01			50.34			49.86			49.58		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
03/28/94																								
09/15/94	46.58	3.26		46.48	3.44		46.71	2.75		46.79	2.71		46.23	3.78		46.59	3.75		46.72	3.14				
09/26/94	47.94	1.90		47.90	2.02		47.94	1.52		47.93	1.57		47.84	2.17		47.84	2.50		47.72	2.14				
11/10/94	46.56	3.28		46.47	3.45		46.70	2.76		46.75	2.75		46.61	3.40		46.50	3.84		46.79	3.07				
05/19/95	46.39	3.45		destroyed/			46.35	3.11		46.42	3.08		destroyed/			destroyed/			46.46	3.40				
06/02/95	46.04	3.80		abandoned			45.94	3.52		45.99	3.51		abandoned			abandoned			46.04	3.82		46.06	3.52	
06/21/95	46.40	3.44					46.48	2.98		46.56	2.94								46.62	3.24		46.63	2.95	
08/08/95	48.04	1.80					48.29	1.17		48.37	1.13								48.42	1.44		48.55	1.03	
12/18/95	45.74	4.10					46.01	3.45		46.03	3.47								45.97	3.89		46.27	3.31	
06/29/00	41.89	7.95					42.05	7.41		42.08	7.42								41.93	7.93		42.21	7.37	
10/26/00										42.96	6.54													
11/30/00	42.04	7.80					42.13	7.33		42.16	7.34								42.20	7.66		42.19	7.39	
01/29/01	41.23	8.61					41.28	8.18		41.31	8.19								41.37	8.49		41.34	8.24	
05/24/01	40.76	9.08					40.73	8.73		40.87	8.63								40.91	8.95		40.81	8.77	
06/04/01							41.10	8.36		41.20	8.30											41.24	8.34	
11/02/01	44.97	4.87					45.13	4.33		45.20	4.30								45.32	4.54		45.29	4.29	
02/22/02	43.58	6.26					43.81	5.65		43.74	5.76								43.80	6.06		43.82	5.76	
07/23/02	45.19	4.65					45.45	4.01		45.57	3.93								45.55	4.31		45.72	3.86	
10/04/02	45.93	3.91					46.31	3.15		46.48	3.02								46.59	3.27		46.67	2.91	
05/20/03	44.48	5.36					44.70	4.76		44.77	4.73								44.86	5.00		44.89	4.69	
08/28/03	45.94	3.90					46.25	3.21		46.39	3.11								46.46	3.40		46.60	2.98	
11/20/03	44.55	5.29					44.90	4.56		44.88	4.62								44.95	4.91		45.01	4.57	
02/27/04	44.09	5.75					44.18	5.28		44.27	5.23								44.25	5.61		44.37	5.21	
06/03/04	42.23	7.61					42.33	7.13		42.39	7.11								42.46	7.40		42.43	7.15	
12/07/04	45.63	4.21					44.86	4.60		44.94	4.56								44.98	4.88		45.07	4.51	
04/18/05	44.19	5.65					44.37	5.09		44.43	5.07								44.46	5.40		44.53	5.05	
10/14/05	45.54	4.30					45.81	3.65		45.90	3.60								45.92	3.94		46.08	3.50	
04/28/06	42.59	7.25					42.51	6.95		42.55	6.95								42.56	7.30		41.78	7.80	
11/21/06	42.59	7.25					42.65	6.81		42.70	6.80								42.76	7.10		42.78	6.80	
06/28/07	41.99	7.85					42.22	7.24		42.20	7.30								42.21	7.65		42.27	7.31	
12/05/07	41.56	8.28					41.60	7.86		41.71	7.79								41.81	8.05		41.73	7.85	
07/17/08										42.75	7.05													
11/06/08	45.24	4.60					45.54	3.92		45.94	3.86											45.78	3.80	
07/31/12	43.27	6.57					43.45	6.01		43.81	5.99											43.58	6.00	
10/24/12	44.62	5.22								45.18	4.62													
01/23/13	43.21	6.63								43.67	6.13													

TABLE 1: GROUNDWATER ELEVATION TABLE

Facility Name:Handy Way #3333 **Facility ID#:598516641** **All Measurements = Feet**
No Data = Blank

WELL NO.	MW-9			MW-10			MW-11			MW-12			MW-13			MW-14			MW-15			MW-16		
DIAMETER (IN.)	2			2			2			2			2			2			2			2		
WELL DEPTH (FT.)	14.10			14.30			14.20			8.40			14.50			14.50			14.50			14.50		
SCREEN INT. (FT.)	1.6-14.1			4.3-14.3			1.7-14.2			3.4-8.4			4 - 14			4 - 14			4 - 14			4.5- 14.5		
TOC ELEVATION (FT.)	49.87			50.07			50.74			50.98			49.78			49.65			49.77			50.40		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
03/28/94																								
09/15/94																								
09/26/94																								
11/10/94																								
05/19/95																								
06/02/95	45.14	4.73		45.91	4.16		45.83	4.91																
06/21/95	46.73	3.14		46.47	3.60		46.29	4.45																
08/08/95	48.57	1.30		48.22	1.85		48.07	2.67																
12/18/95	46.26	3.61		45.53	4.54		45.29	5.45		45.13	5.85													
06/29/00	42.04	7.83		41.91	8.16		41.83	8.91		abandoned														
10/26/00	43.08	6.79											43.17	6.61		43.16	6.49		43.13	6.64				
11/30/00	42.25	7.62		42.18	7.89		42.07	8.67					42.31	7.47		42.31	7.34		42.28	7.49				
01/29/01	41.41	8.46		41.34	8.73		41.26	9.48					41.42	8.36		41.42	8.23		41.42	8.35		41.28	9.12	
05/24/01	40.91	8.96		40.84	9.23		40.77	9.97					40.87	8.91		40.91	8.74		40.93	8.84		40.92	9.48	
06/04/01				41.10	8.97																	41.06	9.34	
11/02/01	45.42	4.45		45.22	4.85		Could not locate						45.74	4.04		45.55	4.10		45.56	4.21		45.05	5.35	
02/22/02	43.86	6.01		43.76	6.31		43.62	7.12					44.10	5.68		44.03	5.62		43.97	5.80		43.66	6.74	
07/23/02	45.71	4.16		45.46	4.61		45.26	5.48					46.67	3.11		46.30	3.35		46.01	3.76		45.29	5.11	
10/04/02	46.81	3.06		46.33	3.74		46.42	4.32					47.48	2.30		47.28	2.37		47.08	2.69		46.06	4.34	
05/20/03	44.97	4.90		44.71	5.36		44.50	6.24					45.37	4.41		45.23	4.42		45.12	4.65		44.65	5.75	
08/28/03	46.70	3.17		46.27	3.80		46.03	4.71					47.44	2.34		47.21	2.44		47.00	2.77		46.00	4.40	
11/20/03	45.06	4.81		44.82	5.25		46.53	4.21					45.55	4.23		45.40	4.25		45.28	4.49		44.65	5.75	
02/27/04	44.36	5.51		44.19	5.88		46.33	4.41					45.03	4.75		44.77	4.88		44.55	5.22		44.15	6.25	
06/03/04	42.49	7.38		42.42	7.65		Could not locate						42.53	7.25		42.54	7.11		42.53	7.24		42.35	8.05	
12/07/04	45.13	4.74		44.86	5.21		Could not locate						45.68	4.10		45.52	4.13		45.36	4.41		44.69	5.71	
04/18/05	44.58	5.29		44.37	5.70		44.20	6.54					45.00	4.78		44.88	4.77		44.75	5.02		44.26	6.14	
10/14/05	46.14	3.73		45.79	4.28		45.56	5.18					46.79	2.99		46.61	3.04		46.40	3.37		45.58	4.82	
04/28/06	42.63	7.24		42.52	7.55		42.45	8.29					42.74	7.04		42.68	6.97		42.67	7.10		42.41	7.99	
11/21/06	42.86	7.01		42.72	7.35		42.59	8.15					43.03	6.75		42.99	6.66		42.93	6.84		42.63	7.77	
06/28/07	42.32	7.55					42.59	8.71					42.57	7.21		42.50	7.15		42.42	7.35		42.08	8.32	
12/05/07	41.86	8.01		41.77	8.30		unable to open						41.98	7.80		41.95	7.70		41.92	7.85		41.66	8.74	
11/06/08																						45.31	5.09	
07/31/12							43.35	7.39														43.36	7.04	
10/24/12																						44.68	5.72	
01/23/13																						43.25	7.15	

TABLE 1: GROUNDWATER ELEVATION TABLE

Facility Name:Handy Way #3333 **Facility ID#:598516641** **All Measurements = Feet**
No Data = Blank

WELL NO.	MW-17			MW-18			CW-1			CW-2			CW-3			CW-4								
DIAMETER (IN.)	2			2			2			2			2			2								
WELL DEPTH (FT.)	15.00			13.14			14.70			11.20			14.40			14.60								
SCREEN INT. (FT.)	5-15			3-13.14			-			2.0-11.2'			-			-								
TOC ELEVATION (FT.)	48.71			49.80			50.31			49.80			49.99			50.44								
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
03/28/94							44.61	5.70		44.61	5.19		44.47	5.52		44.44	6.00							
09/15/94																								
09/26/94							47.76	2.55		47.90	1.90		47.89	2.10		47.86	2.58							
11/10/94							46.64	3.67		46.75	3.05		46.55	3.44		46.49	3.95							
05/19/95							destroyed/						destroyed/			destroyed/								
06/02/95							abandoned			44.97	4.83		abandoned			abandoned								
06/21/95										46.48	3.32													
08/08/95										48.24	1.56													
12/18/95										45.74	4.06													
06/29/00										41.94	7.86													
10/26/00										42.94	6.86													
11/30/00										42.14	7.66													
01/29/01	41.23	7.48								41.27	8.53													
05/24/01	40.74	7.97								40.90	8.90													
06/04/01																								
11/02/01	44.68	4.03								44.31	5.49													
02/22/02	43.59	5.12								43.69	6.11													
07/23/02	45.16	3.55		45.51	4.29					45.40	4.40													
10/04/02	46.11	2.60		46.55	3.25					46.23	3.57													
05/20/03	44.42	4.29		44.75	5.05					44.43	5.37													
08/28/03	45.73	2.98		46.38	3.42					46.19	3.61													
11/20/03	44.51	4.20		44.86	4.94					44.73	5.07													
02/27/04	44.05	4.66		44.22	5.58					44.16	5.64													
06/03/04	42.29	6.42		42.40	7.40					42.35	7.45													
12/07/04	44.54	4.17		44.91	4.89					44.78	5.02													
04/18/05	44.20	4.51		44.43	5.37					44.33	5.47													
10/14/05	45.49	3.22		45.88	3.92					45.72	4.08													
04/28/06	42.44	6.27		42.53	7.27					42.50	7.30													
11/21/06	42.54	6.17		42.72	7.08					42.65	7.15													
06/28/07				42.19	7.61					42.10	7.70													
12/05/07				41.71	8.09					41.65	8.15													
07/17/08										42.25	7.55													
11/06/08										45.42	4.38													
07/31/12				43.54	6.26					43.42	6.38													
10/24/12										44.76	5.04													
1/23/2013										43.30	6.50													

Notes:
Elevations are in feet referenced to a Seminole County roadway bench mark of 49.63 feet AMSL.
The top of casing elevation is slightly below ground.
CW-2 was repaired May 31, 1995, and the top of casing elevation changed slightly.

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-1	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1	<1	<1	<3	<2						
	02/22/02	<1	<1	<1	<3	10	<5	<5	<5			
	07/23/02	<1	<1	<1	<3	20	<5	<5	<5			
	10/04/02	<1	<1	<1	<3	5	<5	<5	<5			
	05/20/03	<1	<1	<1	<3	<1	<5	<5	<5			
	08/28/03	<1	<1	<1	<3	<1	<5	<5	<5			
	11/20/03	<1	<1	<1	<3	<2	<5	<5	<5			
	02/27/03	<1	<1	<1	<3	<5	<5	<5	<5			
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	05/01/06	1 U	6	1 U	3 U	5 U	1.0 U	1.0 U	1.0 U			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	**4.9**	1.0 U	2.6	1.5 U	1.0 U	**15**	0.36 I	0.40 I			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.13 I	0.10 U	0.10 U			
MW-2	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-3	09/26/94	<1	6	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	06/04/01	<1	<1	<1	<3	9	<5	<5	<5			
	11/02/01	<1	<1	<1	<3	6						
	02/22/02	<1	<1	<1	<3	2						
	07/23/02	<1	<1	<1	<3	6						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-4	09/27/94	**370**	**420**	**430**	**1690**	19				12	<1	<0.02
	05/19/95	**390**	5	**560**	**269**	13						
	08/08/95	**490**	10	**700**	**390**	**210**						
	06/29/00	**150**	<10	**600**	**<30**	<20						
Duplicate	06/29/00	**150**	<10	**610**	**<30**	<20						
	10/26/00	**82**	<10	**200**	**<30**	<20						
Duplicate	10/26/00	**79**	<10	**180**	**<30**	<20						
	01/29/01	**16**	<1.0	**53**	5.0	3.0	**210**	**71**	**40**	<5.0		
	06/04/01	**30**	<1	**48**	4*	3.0	**180**	**65**	**37**			
	11/02/01	**14**	1	**57**	5	24	**77**	**20**	**25**			
	02/22/02	**44**	3	**248**	3*	<1	**88**	**25**	18			
	07/23/02	**23**	2	**96**	4	5	**99**	**24**	**21**			
	10/04/02	**17**	1	**86**	<4	<1	**76**	**22**	18			
	05/20/03	**13**	1	**59**	3	<1	**51**	14	13			
	08/28/03	**11**	1	**90**	<3	<1	**75**	20	15			
	11/20/03	**11**	1	**62**	4	<2	**83**	**25**	**21**			
	02/27/04	**4**	<1	17	<3	<5	**38**	11	9			
	06/03/04	**12**	2	**37**	4	<5	**148**	**38**	**30**			
	12/07/04	**6**	4	**68**	7	<5	**57**	17	11			
	04/18/05	**2**	<1	**17**	<3	<5	**49**	11	9.5			
	10/14/05	**5**	0.9	**67**	2.6	<5	**79**	20	14			
	04/28/06	**4**	0.6 I	**37**	2.2 I	5 U	**30**	7.5	7.5			
	11/21/06	**1**	0.5 U	10	1.7 U I	2.8 I	**57**	10	6.5			
	06/28/07	**6**	1.0 U	**94**	1.6 I	1.0 U	**43**	6.9	7.3			
	12/05/07	**1.5**	1.0 U	24	1.5 U	1.0 U	**23**	4.7	4.2			
	07/17/08	0.7 I	1.0 U	18	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	11/06/08	**1.6**	1.0 U	**50**	1.5 U	1.0 U	**18**	2.8	2.3			
	07/31/12	**1.2**	1.0 U	15	1.5 U	1.0 U	**25**	2.4	4.2			
	10/24/12	0.5 I	1.0 U	6.3	1.5 U	1.0 U	7.8	0.92	0.6			
	01/23/13	0.8 I	1.0 U	9.5	1.5 U	1.0 U	9.8	1.5	1.6			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-5D	09/27/94	<1	<1	<1	<3	<2				**131**	<1	<0.02
MW-6	09/27/94	<1	<1	<1	<3	<2				<5	<1	<0.02
MW-7	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
MW-8	06/02/95	**4**	<1	<1	10	**4400**				**18**	<1	<0.02
	08/08/95	**1**	3	1	8	44						
	06/29/00	<1.0	<1.0	<1.0	<3.0	6.0 **						
	01/29/01	<1.0	<1.0	<1.0	<3.0	14	<10	<10	<10	<5.0		
	06/04/01	<1	<1	<1	<3	43						
	11/02/01	<1	<1	<1	<3	<1						
	02/22/02	<1	<1	<1	<3	1						
	07/23/02	<1	<1	<1	<3	4						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-9	06/02/95	<1	<1	<1	<3	<2				**15**	<1	<0.02
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	10/26/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	01/29/01	<1.0	<1.0	<1.0	<3.0	<2.0	<10	<10	<10	<5.0		
MW-10	06/02/95	<1	**800**	2	3	**2300**				**20**	<1	<0.02
	08/08/95	<1	3	<1	<3	16						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	06/04/01	<1	<1	<1	<3	<1	<5	<5	<5			
	04/28/06									2 U		
MW-11	06/02/95	<1	<1	<1	<3	<2				**31**	<1	<0.02
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	04/28/06									2 U		
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
MW-12	12/18/95	<1	<1	<1	<3	<2						
MW-13	10/26/00	<1.0	<1.0	<1.0	<3.0	<2.0						
MW-14	10/26/00	<1	<1	**45**	3	20						
	11/22/00	<1	<1	<1	<3	15						
	01/29/01	<1	<1	<1	<3	6						

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-15	10/26/00	<1	<1	<1	<3	4						
MW-16	01/29/01	<1.0	<1.0	<1.0	3.0	<2.0	<10	<10	<10	**150**		
	06/04/01	<1	<1	<1	<3	<1				<5		
	11/02/01	<1	<1	<1	<3	<1						
	02/22/02	<1	<1	<1	<3	<1						
	07/23/02	<1	<1	<1	<3	<1						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	04/18/05	<1	<1	<1	<3	<5	<1	<1	<1			
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	04/28/06	1 U	1 U	1 U	3 U	5 U	0.5 I	1.0 U	1.0 U			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
MW-17	01/29/01	<1.0	<1.0	<1.0	<3.0	<2.0	<10	<10	<10	**18**		
	04/28/06									2 U		
	11/21/06									0.004 I		

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
MW-18	07/23/02	<1	<1	<1	<3	<1	<5	<5	<5			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
CW-1	03/28/94	<1	<1	<1	<3	<2						
	09/27/94	<1	2	<1	<3	<2				<5	<1	<0.02
CW-2	03/28/94	**140**	<10	**410**	**380***	<20						
	09/27/94	**700**	20	**890**	**840**	24				<5	<10	<0.02
Duplicate	09/27/94	**610**	20	**840**	**820**	20				<5	<10	<0.02
	06/02/95	**8**	<1	22	<3	3				11	<1	<0.02
	08/08/95	**1**	<1	2	<3	**100**						
	06/29/00	**6.2**	<1.0	**67**	<3.0	<2.0						
	10/26/00	**82**	<1	**200**	<3	<2						
	06/04/01	**6**	1	**44**	3	3	**37**	5	<5			
	11/02/01	<1	<1	<1	<3	<1	<5	<5	<5			
	02/22/02	<1	<1	<1	<3	<1	<5	<5	<5			
	07/23/02	<1	<1	9	<3	<1	<5	<5	<5			
	10/04/02	<1	<1	<1	<3	<1	<5	<5	<5			
	05/20/03	<1	<1	3	<3	<1	<5	<5	<5			
	08/28/03	<1	<1	<1	<3	<1	<5	<5	<5			
	11/20/03	<1	<1	8	<3	<2	<5	<5	<5			
	02/27/04	<1	<1	19	<3	<5	11	5.6	<5			
	06/03/04	<1	<1	5	<3	<5	<5	<5	<5			
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	04/18/05	<1	<1	<1	<3	<5	1.1	<1	<1			
	10/14/05	<1	<1	5	<3	<5	11	7.4	4.8			
	04/28/06	1 U	1 U	0.9 I	3 U	5 U	3.4	2.7	1.7			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	2	1.5 U	1.0 U	4.5	2.8	1.5 I			
	12/05/07	0.5 U	1.0 U	2.2	1.5 U	1.0 U	3.1	2.3	1.7			
	07/17/08	0.5 U	1.0 U	2.1	1.5 U	1.0 U	6.8	1.1	1.9			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/L**

Blank or N\A = Not Analyzed

Sample Location	Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		**1**	**40**	**30**	**20**	**20**	**14**	**28**	**28**	**15**	**3**	**0.02**
FDEP NADCs [4]		**100**	**400**	**300**	**200**	**200**	**140**	**280**	**280**	**150**	**300**	**20**
CW-3	03/28/94	**560**	<10	**120**	**61***	**120**						
	09/27/94	**290**	<10	**320**	**80***	20				8	<10	<0.02
CW-4	03/28/94	<1	<1	<1	<3	15						
	09/27/94	<1	<1	<1	<3	<2				<5	<1	<0.02

Note:
1. MTBE = Methyl tert butyl ether
2. EDB = 1,2 Dibromoethane
3. GCTLs = Groundwater Cleanup Target Levels
4. NADCs= Natural Attenuation Default Concentrations
# indicates dissolved lead was also run on this sample, with results of <0.005 mg/L.
U indicates the compound was analysed but not detected.
I indicates the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Figures

PINCH A PENNY
(FORMER HANDY WAY FOOD
STORE NO. 3333)

SIDEWALK

APPROXIMATE LOCATION OF
FORMER TANK FARM

MW-13
MW-14
MW-15
UST
UST
CANOPY
MW-9
MW-7
MW-18
MW-8
MW-4
CW-2
MW-5D
MW-3
RETENTION POND

APPROXIMATE LOCATION OF FORMER TANK
FARM, CANOPY AND DISPENSER ISLAND

APPROXIMATE LOCATION OF
FORMER TANK FARM

CW-1
MW-10
MW-6
CW-4
MW-11
MW-16
CW-3
MW-2
MW-17
MW-12
MW-1
SIDEWALK
SIDEWALK

STATE ROAD 434

MEDIAN

TUSKAWILLA ROAD

LEGEND

- COMPLIANCE WELL LOCATION
- MONITOR WELL LOCATION
- ABANDONED MONITOR/COMPLIANCE WELL LOCATION
- STREET LIGHT POLE
- FENCE
- OVERHEAD UTILITY
- UNDERGROUND WATER LINE

N

0' 15' 30' 60'

REVISED BY: JC
DRAWN BY: JJL
L:\work\FDEP\Preapproval\Handy Way 3333\7.0_Deliverables\CAD\F1_SITE_PLAN.dwg

AECOM

FIGURE 1
SITE PLAN

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

11/06/12

60277373

PINCH A PENNY
(FORMER HANDY WAY FOOD
STORE NO. 3333)

SIDEWALK

APPROXIMATE LOCATION OF
FORMER TANK FARM

MW-14
(NM)

UST

UST

MW-13
(NM)

MW-15
(NM)

CANOPY

APPROXIMATE LOCATION OF
FORMER TANK FARM

MW-9
(NM)

MW-7
(NM)

CW-1

MW-10
(NM)

MW-18
(NM)

CW-2
(43.30)

MW-8
(NM)

MW-4
(43.67)

MW-5D

MW-11
(NM)

MW-16
(43.25)

CW-3

MW-3
(NM)

MW-1
(43.21)

RETENTION POND

APPROXIMATE LOCATION OF FORMER TANK
FARM, CANOPY AND DISPENSER ISLAND

43.30

43.25

TUSKAWILLA ROAD

SIDEWALK

MW-6

CW-4

MW-2

MW-17
(NM)

MW-12

43.30

43.25

STATE ROAD 434

MEDIAN

LEGEND

- COMPLIANCE WELL LOCATION
- MONITOR WELL LOCATION
- (NM) NOT MEASURED
- (43.30) GROUNDWATER ELEVATION IN FEET
- GROUNDWATER FLOW CONTOUR LINE
- GROUNDWATER FLOW DIRECTION
- ANOMALOUS DATA POINT – NOT USED FOR CONTOURS
- ABANDONED MONITOR/COMPLIANCE WELL LOCATION
- STREET LIGHT POLE
- FENCE
- OE OVERHEAD UTILITY
- W UNDERGROUND WATER LINE

N

0' 15' 30' 60'

AECOM

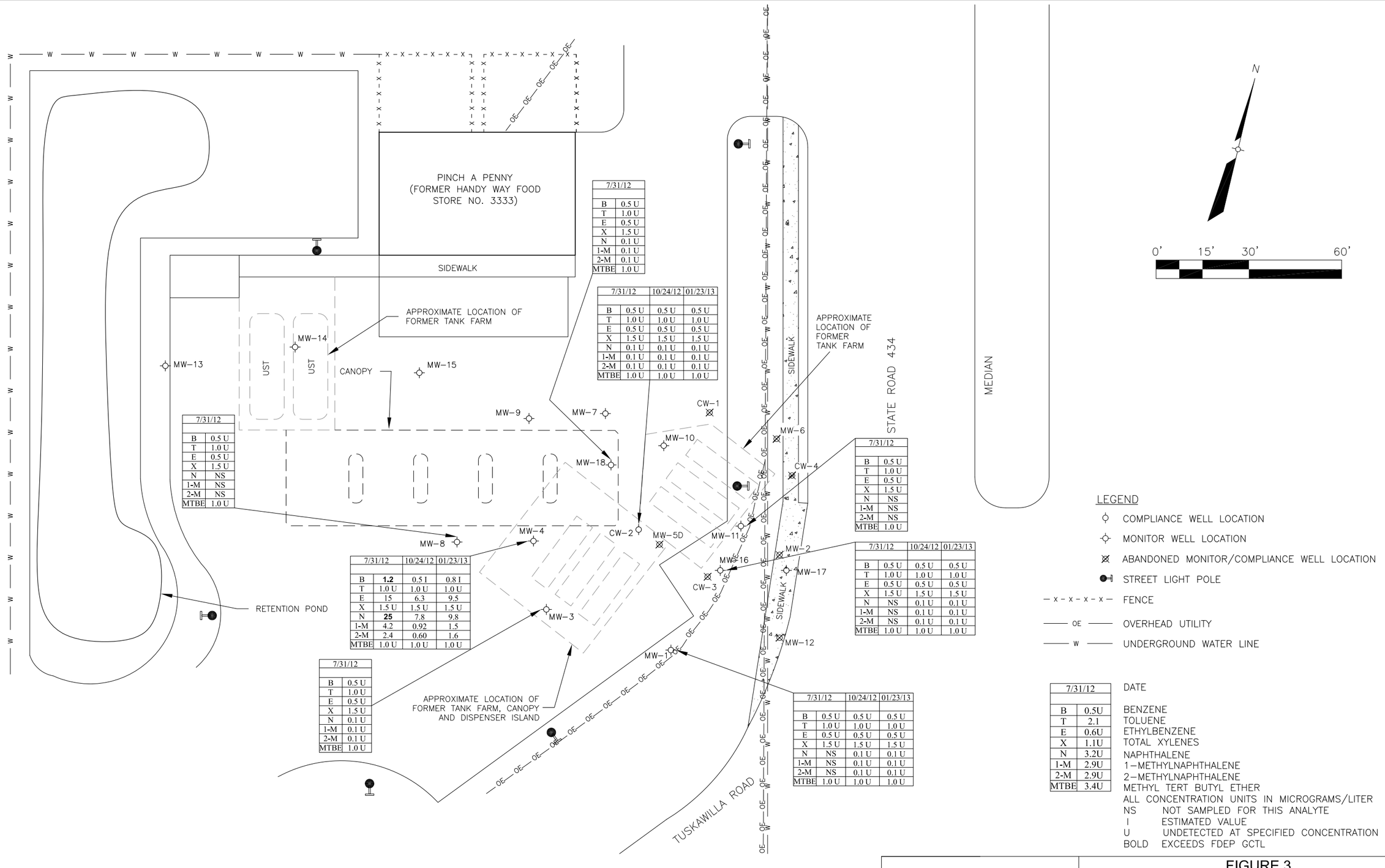
FIGURE 2
GROUNDWATER CONTOUR MAP
JANUARY 23, 2013

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

02/01/2013

60277373

REVISED BY: JC
DRAWN BY: JJL
L:\work\FDEP\Preapproval\Handy Way 3333\7.0_Deliverables\CAD\F2_GW_CONTOUR.dwg



7/31/12	
B	0.5 U
T	1.0 U
E	0.5 U
X	1.5 U
N	0.1 U
1-M	0.1 U
2-M	0.1 U
MTBE	1.0 U

7/31/12		10/24/12	01/23/13
B	0.5 U	0.5 U	0.5 U
T	1.0 U	1.0 U	1.0 U
E	0.5 U	0.5 U	0.5 U
X	1.5 U	1.5 U	1.5 U
N	0.1 U	0.1 U	0.1 U
1-M	0.1 U	0.1 U	0.1 U
2-M	0.1 U	0.1 U	0.1 U
MTBE	1.0 U	1.0 U	1.0 U

7/31/12	
B	0.5 U
T	1.0 U
E	0.5 U
X	1.5 U
N	NS
1-M	NS
2-M	NS
MTBE	1.0 U

7/31/12		10/24/12	01/23/13
B	**1.2**	0.5 I	0.8 I
T	1.0 U	1.0 U	1.0 U
E	15	6.3	9.5
X	1.5 U	1.5 U	1.5 U
N	**25**	7.8	9.8
1-M	4.2	0.92	1.5
2-M	2.4	0.60	1.6
MTBE	1.0 U	1.0 U	1.0 U

7/31/12	
B	0.5 U
T	1.0 U
E	0.5 U
X	1.5 U
N	0.1 U
1-M	0.1 U
2-M	0.1 U
MTBE	1.0 U

7/31/12		10/24/12	01/23/13
B	0.5 U	0.5 U	0.5 U
T	1.0 U	1.0 U	1.0 U
E	0.5 U	0.5 U	0.5 U
X	1.5 U	1.5 U	1.5 U
N	NS	0.1 U	0.1 U
1-M	NS	0.1 U	0.1 U
2-M	NS	0.1 U	0.1 U
MTBE	1.0 U	1.0 U	1.0 U

7/31/12		10/24/12	01/23/13
B	0.5 U	0.5 U	0.5 U
T	1.0 U	1.0 U	1.0 U
E	0.5 U	0.5 U	0.5 U
X	1.5 U	1.5 U	1.5 U
N	NS	0.1 U	0.1 U
1-M	NS	0.1 U	0.1 U
2-M	NS	0.1 U	0.1 U
MTBE	1.0 U	1.0 U	1.0 U

7/31/12		10/24/12	01/23/13
B	0.5 U	0.5 U	0.5 U
T	1.0 U	1.0 U	1.0 U
E	0.5 U	0.5 U	0.5 U
X	1.5 U	1.5 U	1.5 U
N	NS	0.1 U	0.1 U
1-M	NS	0.1 U	0.1 U
2-M	NS	0.1 U	0.1 U
MTBE	1.0 U	1.0 U	1.0 U

N

0' 15' 30' 60'

LEGEND

- COMPLIANCE WELL LOCATION
- MONITOR WELL LOCATION
- ABANDONED MONITOR/COMPLIANCE WELL LOCATION
- STREET LIGHT POLE
- — x - x - x - x — FENCE
- —— OE —— OVERHEAD UTILITY
- —— W —— UNDERGROUND WATER LINE

7/31/12	DATE
B	0.5U BENZENE
T	2.1 TOLUENE
E	0.6U ETHYLBENZENE
X	1.1U TOTAL XYLENES
N	3.2U NAPHTHALENE
1-M	2.9U 1-METHYLNAPHTHALENE
2-M	2.9U 2-METHYLNAPHTHALENE
MTBE	3.4U METHYL TERT BUTYL ETHER

ALL CONCENTRATION UNITS IN MICROGRAMS/LITER
NS NOT SAMPLED FOR THIS ANALYTE
I ESTIMATED VALUE
U UNDETECTED AT SPECIFIED CONCENTRATION
BOLD EXCEEDS FDEP GCTL

AECOM

FIGURE 3
GROUNDWATER CONTAMINATION MAP
JANUARY 2013

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

02/01/2013 60277373

REVISED BY: JC
DRAWN BY: JJL
L:\work\FDEP\Preapproval\Handy Way 3333\7.0_Deliverables\CAD\F3_GW_CONTAMINATION.dwg

Appendix A

Laboratory Analytical Report

Southern Research Laboratories, Inc.

2251 Lynx Lane, Suite 1
Orlando, Florida 32804
(407) 522-7100 Fax (407) 522-7043
Toll Free 1 (888) 420-Test

Thank you **Mr. Daniel Phillips** for the opportunity to be of service to you and your company; we **S**incerely **A**ppreciate **Y**our **B**usiness. SRL certifies these **Laboratory Results** were produced in accordance with NELAC Standards. Hold times and preservation requirements were met for all analytes unless specifically noted in the report. Results relate only to the samples as received.

Client Name: **AECOM**	Date(s) Collected: 01/23/13
Contact Name: Daniel Phillips	Date Received: 01/23/13
Project Name: HW 3333	Time Received: 13:18
Project Number: NA	Date Reported : 01/31/13
Phone Number: (407) 304-4400	Date Facsmiled : 01/31/13
Fax Number: (407) 304-4401	SRL Work Order # 13-01024

SRL WO #	Clients #	Matrix	Analysis Requested
13-01024-001	CW-2/0123/13	Liquid	EPA8260 (VOA)/8270(PAH)
13-01024-002	MW-1/012313	Liquid	EPA8260 (VOA)/8270(PAH)
13-01024-003	MW-4/012313	Liquid	EPA8260 (VOA)/8270(PAH)
13-01024-004	MW-16/012313	Liquid	EPA8260 (VOA)/8270(PAH)
13-01024-005	Trip Blank	Liquid	EPA8260 (VOA)

Sherri Payne
Vice President & Quality Assurance Officer
Southern Research Laboratories, Inc.

This report shall not be reproduced except in full, without written approval of the laboratory.

Southern Research Laboratories, Inc.
an MBE Environmental Laboratory
2251 Lynx Lane, Suite 1
Orlando, Florida 32804 (407) 522-7100

NELAP Certified
FDOH Cert # : E83484
SRL Lab Ref # : 13-01024
Received Date : 01/23/13

Daniel Phillips
AECOM
320 E. South Street
Orlando, Florida 32801 (407) 304-4400

Project Number/Project Name
NA
HW 3333
Winter Springs, FL

EPA Method 5030/8260B VOA {602} Compounds in Water by GC-MS

Client ID #	**:**	**CW-2/0123/13**	**MW-1/012313**	**MW-4/012313**	**MW-16/012313**			
SRL (Lab) ID#	**:**	13-01024-001	13-01024-002	13-01024-003	13-01024-004			
Date Collected	**:**	01/23/13	01/23/13	01/23/13	01/23/13			
Lab FDOH Certification #	**:**	E83484	E83484	E83484	E83484			
Date Prepared	**:**	01/29/13	01/29/13	01/29/13	01/29/13			
Date Analyzed	**:**	01/29/13	01/29/13	01/29/13	01/29/13	**MDL**	**PQL**	**CAS Number**
Methyl-tert-butyl-ether		1.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0	1634-04-4
Benzene		0.5 U	0.5 U	**0.8 I**	0.5 U	0.5	1.0	71-43-2
Toluene		1.0 U	1.0 U	1.0 U	1.0 U	1.0	2.0	108-88-3
Chlorobenzene		0.2 U	0.2 U	0.2 U	0.2 U	0.2	1.0	108-90-7
Ethylbenzene		0.5 U	0.5 U	**9.5**	0.5 U	0.5	1.0	100-41-4
m & p **X**ylene		1.0 U	1.0 U	1.0 U	1.0 U	1.0	2.0	108-38-3/106-42-3
o-**X**ylene		0.5 U	0.5 U	0.5 U	0.5 U	0.5	1.0	95-47-6
1,3-Dichlorobenzene		0.5 U	0.5 U	0.5 U	0.5 U	0.5	1.0	541-73-1
1,4-Dichlorobenzene		0.5 U	0.5 U	0.5 U	0.5 U	0.5	1.0	106-46-7
1,2-Dichlorobenzene		0.5 U	0.5 U	0.5 U	0.5 U	0.5	1.0	95-50-1
Total BTEX		3.5 U	3.5 U	**12.8**	3.5 U	3.5	7.0	NA
Units	**:**	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Dilution Factor (MEDF)	**:**	1	1	1	1	1	1	
Surrogate (% Rec)	**:**					(Surrogate Control Limits)		
4-Bromofluorobenzene		78.8%	78.3%	92.1%	79.7%	70-130		

Client ID #	**:**	**Trip Blank**				
SRL (Lab) ID#	**:**	13-01024-005				
Date Collected	**:**	01/21/13				
Lab FDOH Certification #	**:**	E83484				
Date Prepared	**:**	01/29/13				
Date Analyzed	**:**	01/29/13	**MDL**	**PQL**	**CAS Number**	
Methyl-tert-butyl-ether		1.0 U	1.0	3.0	1634-04-4	
Benzene		0.5 U	0.5	1.0	71-43-2	
Toluene		1.0 U	1.0	2.0	108-88-3	
Chlorobenzene		0.2 U	0.2	1.0	108-90-7	
Ethylbenzene		0.5 U	0.5	1.0	100-41-4	
m & p **X**ylene		1.0 U	1.0	2.0	108-38-3/106-42-3	
o-**X**ylene		0.5 U	0.5	1.0	95-47-6	
1,3-Dichlorobenzene		0.5 U	0.5	1.0	541-73-1	
1,4-Dichlorobenzene		0.5 U	0.5	1.0	106-46-7	
1,2-Dichlorobenzene		0.5 U	0.5	1.0	95-50-1	
Total BTEX		3.5 U	3.5	7.0	NA	
Units	**:**	ug/L	ug/L	ug/L		
Dilution Factor (MEDF)	**:**	1	1	1		
Surrogate (% Rec)	**:**		(Surrogate Control Limits)			
4-Bromofluorobenzene		78.8%	70-130			

Southern Research Laboratories, Inc.
an MBE Environmental Laboratory
2251 Lynx Lane, Suite 1
Orlando, Florida 32804 (407) 522-7100

NELAP Certified
FDOH Cert # : E83484
SRL Lab Ref # : 13-01024
Received Date : 01/23/13

Daniel Phillips
AECOM
320 E. South Street
Orlando, Florida 32801 (407) 304-4400

Project Number/Project Name
NA
HW 3333
Winter Springs, FL

EPA Method 3510/8270C-SIM Polynuclear Aromatic Hydrocarbon Compounds in Water by GC-MS

Client ID #	**:**	**CW-2/0123/13**	**MW-1/012313**	**MW-4/012313**	**MW-16/012313**			
SRL (Lab) ID#	**:**	13-01024-001	13-01024-002	13-01024-003	13-01024-004			
Date Collected	**:**	01/23/13	01/23/13	01/23/13	01/23/13			
Lab FDOH Certification #	**:**	E83484	E83484	E83484	E83484			
Date Extracted	**:**	01/29/13	01/29/13	01/29/13	01/29/13			
Date Analyzed	**:**	01/30/13	01/30/13	01/30/13	01/30/13	**MDL**	**PQL**	**CAS Number**
Naphthalene		0.10 U	**0.13 I**	**9.8**	0.10 U	0.10	0.50	91-20-3
2-Methylnaphthalene		0.10 U	0.10 U	**1.6**	0.10 U	0.10	0.50	91-57-6
1-Methylnaphthalene		0.10 U	0.10 U	**1.5**	0.10 U	0.10	0.50	90-12-0
Acenaphthylene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	208-96-8
Acenaphthene		0.10 U	0.10 U	**0.12 I**	0.10 U	0.10	0.50	83-32-9
Fluorene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	86-73-7
Phenanthrene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	85-01-8
Anthracene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	120-12-7
Fluoranthene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	206-44-0
Pyrene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	129-00-0
Benzo (a) anthracene		0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.10	56-55-3
Chrysene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	218-01-9
Benzo (b) fluoranthene		0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.10	205-99-2
Benzo (k) fluoranthene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	207-08-9
Benzo (a) pyrene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	50-32-8
Indeno (1,2,3-cd) pyrene		0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.10	193-39-5
Dibenzo (a,h) anthracene		0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.10	53-70-3
Benzo (g,h,i) perylene		0.10 U	0.10 U	0.10 U	0.10 U	0.10	0.50	191-24-2
Units	**:**	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Dilution Factor (MEDF)	**:**	1	1	1	1	1	1	
Surrogate (% Rec)						(Surrogate Control Limits)		
Nitrobenzene-D5		76.3%	80.1%	86.3%	79.6%		60-140	
2-Fluorobiphenyl		101.4%	88.8%	84.1%	92.6%		60-140	
p-Terphenyl-D14		105.0%	98.9%	91.6%	101.4%		60-140	

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an MBE Environmental Laboratory
2251 Lynx Lane, Suite 1
Orlando, Florida 32804 (407) 522-7100

NELAP Certified
FDOH Cert # : E83484
SRL Lab Ref # : 13-01024
Received Date : 01/23/13

Daniel Phillips
AECOM
320 E. South Street
Orlando, Florida 32801 (407) 304-4400

Project Number/Project Name
NA
HW 3333
Winter Springs, FL

EPA Method 3510/8270C-SIM Polynuclear Aromatic Hydrocarbon Compounds in Water by GC-MS

Client ID #	**:**	**Method Blank**		
SRL (Lab) ID#	**:**	MB012913		
Date Collected	**:**	NA		
Lab FDOH Certification #	**:**	E83484		
Date Extracted	**:**	01/29/13		
Date Analyzed	**:**	01/30/13	**MDL**	**PQL**
Naphthalene		0.10 U	0.10	0.50
2-Methylnaphthalene		0.10 U	0.10	0.50
1-Methylnaphthalene		0.10 U	0.10	0.50
Acenaphthylene		0.10 U	0.10	0.50
Acenaphthene		0.10 U	0.10	0.50
Fluorene		0.10 U	0.10	0.50
Phenanthrene		0.10 U	0.10	0.50
Anthracene		0.10 U	0.10	0.50
Fluoranthene		0.10 U	0.10	0.50
Pyrene		0.10 U	0.10	0.50
Benzo (a) anthracene		0.05 U	0.05	0.10
Chrysene		0.10 U	0.10	0.50
Benzo (b) fluoranthene		0.05 U	0.05	0.10
Benzo (k) fluoranthene		0.10 U	0.10	0.50
Benzo (a) pyrene		0.10 U	0.10	0.50
Indeno (1,2,3-cd) pyrene		0.05 U	0.05	0.10
Dibenzo (a,h) anthracene		0.05 U	0.05	0.10
Benzo (g,h,i) perylene		0.10 U	0.10	0.50
Units	**:**	ug/L	ug/L	ug/L
Dilution Factor (MEDF)	**:**	1	1	1
Surrogate (% Rec)			(Surrogate Control Limits)	
Nitrobenzene-D5		78.1%	60-140	
2-Fluorobiphenyl		81.3%	60-140	
p-Terphenyl-D14		110.8%	60-140	

	% Recovery LCS/MS/MSD	**Acceptable Limits**	**%RPD MS/MSD**	**Acceptable Limits**
Naphthalene	95/86/88	60-140	2.1	30
Fluorene	103/101/104	60-140	1.3	30
Fluoranthene	92/89/90	60-140	1.0	30
Chrysene	86/89/87	60-140	1.7	30
Benzo (a) pyrene	83/81/83	60-140	2.4	30

Southern Research Laboratories, Inc.
Quality Assurance/Quality Control Report

Client: **AECOM** SRL# 13-01024
Project: **NA** QC012813009.D
Handy Way 3333 MSQC012813 25-26.D
Winter Garden, FL Spiked sample 012813014.D {MW-9}

VOC Analytes	Method Blank Value	LCS Obs. Value	LCS True Value	LCS % Rec.	Sample Value	Spike Amount Added	MS Value	MSD Value	MS % Rec.	MSD % Rec.	% Rec. Control Lower Limit	% Rec. Control Upper Limit	% RPD	RPD Control Limits
1,1-Dichloroethene (8)	0	32.0	25.0	128	0	25	21.9	24.4	88	98	70	130	10.8	30
Trans-1-2-Dichloroethene (11)	0	26.1	25.0	104	0	25	31.8	32.0	127	128	70	130	0.6	30
Chloroform (19)	0	27.2	25.0	109	0	25	27.6	27.6	110	110	70	130	0.2	30
Benzene (25)	0	28.8	25.0	115	**1.2**	25	24.6	25.1	93	96	70	130	2.2	30
Trichloroethene (28)	0	26.2	25.0	105	0	25	20.3	21.4	81	86	70	130	5.3	30
1,2-Dichloropropane (31)	0	30.8	25.0	123	0	25	24.7	26.3	99	105	70	130	6.2	30
Toluene (35)	0	26.5	25.0	106	0	25	20.6	21.4	82	86	70	130	3.8	30
Tetrachloroethene (36)	0	26.3	25.0	105	0	25	19.9	20.8	80	83	70	130	4.3	30
Chlorobenzene (44)	0	22.5	25.0	90	0	25	17.4	17.6	70	70	70	130	0.9	30
Ethylbenzene (45)	0	25.9	25.0	103	0	25	21.3	22.3	85	89	70	130	4.6	30
o-Xylene (48)	0	23.3	25.0	93	0	25	20.2	20.8	81	83	70	130	2.9	30
Surrogates:														
Dibromofluoromethane	108	10.0	10	100	107	10	11.3	11.3	113	113	70	130	0.2	30
1.2-Dichloroethane-D4	126	11.2	10	112	108	10	11.3	11.4	113	114	70	130	0.5	30
Toluene-D8	90.7	10.1	10	101	82.8	10	10.4	10.7	104	107	70	130	2.7	30
4-Bromofluorobenzene	100	9.2	10	92.4	85.6	10	8.3	8.3	82.9	83	70	130	0.5	30

SRL Quality Assurance Officer

Southern Research Laboratories, Inc.
an MBE Environmental Laboratory
2251 Lynx Lane, Suite 1
Orlando, Florida 32804 (407) 522-7100

NELAP Certified
FDOH Cert # : E83484
SRL Lab Ref # : 13-01024
Received Date : 01/23/13

Daniel Phillips
AECOM
320 E. South Street
Orlando, Florida 32801 (407) 304-4400

Project Number/Project Name
NA
HW 3333
Winter Springs, FL

DATA QUALIFIER CODES

Reporting Exceptions and Qualified Data

When quality control results are outside established control limits reanalysis, including re-extraction (if applicable), is preferred. If re-analysis is not viable or desirable, then results may be qualified. Sample results associated with quality control data that exceed acceptance criteria will be qualified with an appropriate comment.

D = Data reported from a dilution and or multiple dilutions.

I = Estimated Value, The reported value is between the Laboratory Method Detection Limit (**MDL**) and the Laboratory Practical Quantitation Limit (**PQL**)

J = Estimated value

L = Off-Scale high; exceeds the linear range or highest calibration standard.

O = Sampled, but analysis lost or not performed

Q = Sample held beyond normal holding time

U = indicates the compound was analyzed for, but not detected. The numerical value preceding the "U" is the limit of detection for that compound based upon the dilution. **MEDF** = **M**atrix **E**ffected **D**ilution **F**actor.

V = Analyte was detected in both the sample and associated Laboratory Method Blank; Laboratory Contamination

Y = The analysis was from an unpreserved or improperly preserved sample. The data may not be accurate

Unless otherwise noted, ug/Kg and mg/Kg denote dry weight.

(SOILS) Actual Reporting Limit will depend on moisture content of sample and the amount of sample received.

Chain of Custody

13-01024

Page 1 of 1

Project Manager: Daniel Phillips	Project Name: HW 3333
Company: AECOM	Project Location: Winter Springs, FL
Address: 3320 E. South Street, 2nd Floor	
City, State, Zip: Orlando, Florida 32801	
Phone: +1 (407) 304-4400 Fax: +1 (407) 304-4401	

Southern Research Laboratories, Inc.
2251 Lynx Lane, Suite #1
Orlando, Florida 32804
(407) 522-7100
Toll Free 1 (888) 420-TEST
Fax: (407) 522-7043

Sampled by [Print Name(s)] / Affiliation: Austin Slater / AECOM

Sampler(s) Signature(s): Austin Slater

Project Number:

REQUESTED DUE DATE:

Sampling QAP No.:

Approval Date:

	Sample Identification	Sampled Date:	Sampled Time:	Grab or Composite	Matrix: (see codes)	Total Number of Containers	Preservatives (see codes): H	Preservatives (see codes): I	Analyses Requested: BTEX/MTBE	Analyses Requested: 8270 PAH	Comments:
1	CW-2/ 012313	1/23/13	1037	Grab	GW	3			X	X	13-01024-001
2	MW-1/		1148			3			X	X	13-01024-002
3	MW-4/		1226			3			X	X	13-01024-003
4	MW-16/		1113			3			X	X	13-01024-004
5	Trip Blank	1-21-13	16:50		W	2			X		13-01024-005

Shipment Method:

Out: / / Via:

Returned: / / Via:

Additional Comments:

Relinquished by: / Affiliation:	Date:	Time:	Accepted by: / Affiliation:	Date:	Time:
Aiden Turner / SRL	1-21-13	19:05	Austin Slater / AECOM	1/23/13	0800
Austin Slater / AECOM	1/23/13	1318	[illegible] Payne	1/23/13	13:18

Cooler No.(s) / Temperature(s) (°C): X376 1.8°C

Sampling Kit No.: 5924

Equipment ID No.:

Matrix Codes: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water(Blanks) HW = Potential Haz Waste O = Other(Specify:)

Preservative Codes: H = Hydrochloric Acid & Ice I = Ice Only N = Nitric Acid & Ice S = Sulfuric Acid & Ice X = Sodium Hydroxide & Ice O = Other(Specify)

1392

Appendix B

FDEP Groundwater Sampling Logs

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former HW #3333	SITE LOCATION:	Winter Springs, FL	
WELL NO:	CW-2	SAMPLE ID:	CW-2/012313	DATE: 1/23/13

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/4"	2 feet to 11.2 feet	6.50	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (11.2 feet – 6.50 feet) X .16 gallons/foot = .75 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
7.5'	7.5'	1018	1036	1.11

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/l or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1030	.75	.75	.06	6.75	6.56	21.3	618	0.96	1.76	none	none
1032	.12	.87	.06	6.75	6.46	21.0	615	1.14	2.01	4	11
1034	.12	.99	.06	6.75	6.45	21.0	613	1.17	1.88	4	4
1036	.12	1.11	.06	6.75	6.43	21.0	613	1.20	1.64	4	4

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Dustin Slater / AECOM		1037	1045

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
7.5'	PE		

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
CW-2	2	CG	40mL	HCl	—	—	8260B AROM	RFPP	<100 ml/min
012313	1	AG	1L	ICE	—	—	8270 PAH	APP	—

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former HW# 3333	SITE LOCATION:	Winter Springs, FL	
WELL NO:	MW-1	SAMPLE ID:	MW-1/012313	DATE: 1/23/13

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/4"	4.1 feet to 14.1 feet	6.63	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (14.1 feet – 6.63 feet) X .16 gallons/foot = 1.20 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
7.5'	8'	1125	1147	1.68

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1141	1.20	1.20	.08	6.91	5.46	22.0	166	0.95	1.63	none	none
1143	.16	1.36	.08	6.91	5.45	21.9	165	0.96	1.58	"	"
1145	.16	1.52	.08	6.91	5.43	22.0	165	0.93	1.13	"	"
1147	.16	1.68	.08	6.91	5.42	22.0	164	0.94	1.45	"	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Dustin Slater / AECOM		1148	1155

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
8'	PE		

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-1	2	CG	40mL	HCl	—	—	8260B Aroma	RFPP	<100mL/min
012313	1	AG	1L	ICE	—	—	8270 PAH	APP	—

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former HW #3333	SITE LOCATION:	Winter Springs, FL
WELL NO:	MW-4	SAMPLE ID:	MW-4/012313
		DATE:	1/23/13

PURGING DATA

WELL DIAMETER (inches):	2"	TUBING DIAMETER (inches):	¼"	WELL SCREEN INTERVAL DEPTH:	3.8 feet to 13.8 feet	STATIC DEPTH TO WATER (feet):	6.13	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (13.8 feet – 6.13 feet) X .16 gallons/foot = 1.23 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	7'	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	7.5'	PURGING INITIATED AT:	1159	PURGING ENDED AT:	1225	TOTAL VOLUME PURGED (gallons):	1.61

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1219	1.25	1.25	.06	6.46	6.54	24.9	765	0.44	1.94	Lt. yellow	Petro
1221	.12	1.37	.06	6.46	6.54	24.9	764	0.42	1.47	"	"
1223	.12	1.49	.06	6.46	6.54	24.9	760	0.40	1.36	"	"
1225	.12	1.61	.06	6.46	6.53	24.9	757	0.39	1.21	"	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	Dustin Slater / AECOM	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	1226	SAMPLING ENDED AT:	1233
PUMP OR TUBING DEPTH IN WELL (feet):	7.5'	TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	
FIELD DECONTAMINATION:	PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE:	Y (N)		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-4	2	CG	40mL	HCl	—	—	8260B Aromatics	RFPP	<100 ml/min
012313	1	AG	1L	ICE	—	—	8270 PAH	APP	—

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former HW #3333	SITE LOCATION:	Winter Springs, FL
WELL NO:	MW-16	SAMPLE ID:	MW-16/012313
DATE:	1/23/13		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/4"	4.5 feet to 14.5 feet	7.15	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (14.5 feet – 7.15 feet) X .16 gallons/foot = 1.18 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
8'	8'	1047	1112	1.67

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/l or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1106	1.25	1.25	.07	7.32	6.56	23.2	627	1.07	1.03	none	none
1108	.14	1.39	.07	7.32	6.56	23.2	630	0.95	0.79	"	"
1110	.14	1.53	.07	7.32	6.55	23.2	624	0.85	1.40	"	"
1112	.14	1.67	.07	7.32	6.54	23.3	624	0.79	1.43	"	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Austin Slater / AECOM		1113	1120

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
8'	PE		

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-16	2	CG	40mL	HCl	—	—	8260B AROM	RFPP	<100mL/min
012313	1	AG	1L	ICE	—	—	8270 PAH	APP	—

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

DEP-SOP-001/01

FT 1200 Field Measurement of Specific Conductance and pH

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE LOCATION: Former HW #3333

INSTRUMENT (MAKER/MODEL#): YSI 556 MPS / Hach 2100P **INSTRUMENT #:** 1 / SN 07M100453 / 1 / SN 31373

PARAMETER: *CONDUCTIVITY (+/-5%), pH (+/-0.2)*

Standard A	*pH 7.00 SU @ 25°C*	*Lot*	*1639*	*Expires*	*2/13*
Standard B	*pH 4.01 SU @ 25°C*	*Lot*	*1634*	*Expires*	*1/13*
Standard C	*pH 10.01 SU @ 25°C*	*Lot*	*1645*	*Expires*	*11/12*
Standard D	*Cond. 84 µS/cm @ 25°C*	*Lot*	*9477*	*Expires*	*1/13*
Standard E	*Cond. 447 µS/cm @ 25°C*	*Lot*	*9808*	*Expires*	*2/13*
Standard F	*Cond. 1413 µS/cm @ 25°C*	*Lot*	*2174*	*Expires*	*1/13*

Standard G 0.1-10 NTU *Standard H 41-100 NTU* *Standard I >100 NTU*

DATE (mm/dd/yy)	TIME (hr:min)	STD (A,B,C,...)	STD VALUE	INSTRUMENT RESPONSE	DEV	WITHIN RANGE?	TYPE (INIT, CONT)	SAMPLER INITIALS
1/23/13	1006	Temp.	20°	20.4°	-------	-------	-------	DS
"	"	A	7.02	6.95	-.07	yes	Initial	"
"	"	B	4.00	4.00	—		"	"
"	"	C	10.05	10.01	-.04		"	"
"	"	D	75.9	76	+.13%		"	"
"	"	E	404	398	-1.49%		"	"
"	"	F	1277	1252	-1.96%	↓	"	"
1/23/13	1238	Temp.	22°	21.9°	-------	-------	-------	DS
"	"	A	7.01	7.09	+.08	yes	Final	"
"	"	B	4.00	3.98	-.02		"	"
"	"	C	10.03	9.97	-.06		"	"
"	"	D	79.9	77	-2.65%		"	"
"	"	E	424	416	-1.19%		"	"
"	"	F	1330	1307	-1.73%	↓	"	"
1/23/13	1004	G	6.25	6.01	-3.84%	yes	Initial	DS
"	"	H	54.7	54.3	-.73%		"	"
"	"	I	567	555	-2.12%	↓	"	"
1/23/13	1235	G	6.25	6.06	-3.04%	yes	Final	DS
"	"	H	54.7	54.7	—		"	"
"	"	I	567	561	-1.06%	↓	"	"

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE LOCATION: Former Hw#3333

INSTRUMENT (MAKER/MODEL#) YSI 556 MPS **INSTRUMENT #** 1 S/N 07M100457

PARAMETER: ***DISSOLVED OXYGEN (+/-0.3 mg/L)***

STANDARDS: ***Temperature (°C) and Dissolved Oxygen (mg/L)***

DATE (mm/dd/yy)	TIME (hr:min)	STD	STD VALUE	INSTRUMENT RESPONSE	DEV	WITHIN RANGE?	TYPE (INIT, CONT)	SAMPLER INITIALS
1/23/13	1014	Temp.	17.8°	17.8°	------	------	------	DS
"	"	D.O.	9.506	9.50	-	yes	Initial	"
1/23/13	1245	Temp.	21.0°	21.0°	------	------	------	DS
"	"	D.O.	8.915	9.07	+.16	yes	Final	"
		Temp.			------	------	------	
"	"	D.O.						"
		Temp.			------	------	------	
"	"	D.O.						"
		Temp.			------	------	------	
"	"	D.O.						"
		Temp.			------	------	------	
"	"	D.O.						"
		Temp.	------		------	------	------	
"	"	D.O.						"
		Temp.	------		------	------	------	
"	"	D.O.						"
		Temp.	------		------	------	------	
"	"	D.O.						"

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
BOB MARTINEZ CENTER
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

October 2, 2013

CERTIFIED MAIL #7013 1710 0002 1762 5171
RETURN RECEIPT REQUESTED

Ms. Robbie Ondick
989 Greentree Drive
Winter Park, Florida 32789-2787

Subject: Site Rehabilitation Completion Order
Handy Way Food Store #3333
170 Tuscawilla Rd
Winter Springs, Seminole County
FDEP Facility ID# 598516641
Discharge Dates: September 28, 1987 (EDI); August 7, 2000 (SRFA)
Discharge Score: 56

Dear Ms. Ondick:

The Orange County Environmental Protection Division (OCEPD), on behalf of the Florida Department of Environmental Protection (Department), has reviewed the Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) dated June 14, 2013 (received on June 19, 2013) and the Monitoring Well Abandonment Report dated August 28, 2013 (received September 3, 2013), prepared and submitted by AECOM for the petroleum product discharges referenced above. Documentation submitted with the SRCR/NFAP confirms that criteria set forth in Subsection 62-780.680(1), Florida Administrative Code (F.A.C.), have been met. Please refer to the attached maps of the source property and analytical summary tables. The SRCR/NFAP is hereby incorporated by reference in this Site Rehabilitation Completion Order (Order). Therefore, you are released from any further obligation to conduct site rehabilitation at the facility for petroleum product contamination associated with the discharges referenced above, except as set forth below.

In the event concentrations of petroleum products' contaminants of concern increase above the levels approved in this Order, or if a subsequent discharge of petroleum or petroleum product occurs at the facility, the Department may require site rehabilitation to reduce concentrations of petroleum products' contaminants of concern to the levels approved in the SRCR/NFAP or otherwise allowed by Chapter 62-780, F.A.C.

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below.

Persons affected by this Order have the following options:

(A) If you choose to accept the Department's decision regarding the SRCR/NFAP you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order.

(B) If you choose to challenge the decision, you may do the following:

(1) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or

(2) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to Subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Robbie Ondick, shall mail a copy of the request to Robbie Ondick at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Robbie Ondick,

shall mail a copy of the petition to Robbie Ondick at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

(a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;

(b) A statement of when and how each petitioner received notice of the Department's action or proposed action;

(c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;

(d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;

(e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice

of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding the OCEPD's review of the SRCR/NFAP should be directed to David M. Press, P.G. at (407) 836-1507. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

The FDEP Facility Number for this facility is 598516641. Please use this identification on all future correspondence with the Department or the OCEPD.

Sincerely,

Valerie K. Huegel
Program Administrator
Petroleum Restoration Program

VKH/dp

Attachments

ec: Bret LeRoux, FDEP Central District Office – Bret.LeRoux@dep.state.fl.us
David M. Press, OCEPD – David.Press@ocfl.net
Carlos S. Gonzalez, OCEPD – Carlos.Gonzalez2@ocfl.net
Daniel S. Phillips, P.G., AECOM – Daniel.Phillips@aecom.com
Wesley Curtis, St. Johns River Water Management District – wcurtis@sjrwmd.com
FDEP File

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to
§120.52 Florida Statutes, with the
designated Department Clerk, receipt
of which is hereby acknowledged.

Theresa Sellers — 10/2/13

Clerk
(or Deputy Clerk)

Date

ENVIRONMENTAL PROTECTION DIVISION
Lori Cunniff, CEP, CHMM, Deputy Director
Community, Environmental and Development Services Department
800 Mercy Drive, Suite 4
Orlando, FL 32808-7896
407-836-1400 ▪ Fax 407-836-1499
www.ocfl.net

P.G. CERTIFICATION

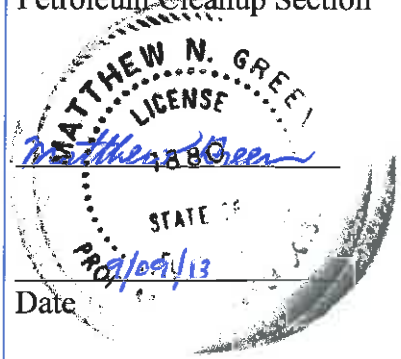
Site Rehabilitation Completion Report (SRCR) and No Further Action Proposal (NFAP) dated June 14, 2013 (received on June 19, 2013) and Monitoring Well Abandonment Report dated August 28, 2013 (received September 3, 2013), for Handy Way Food Store #3333, located at 170 Tuscawilla Rd, Winter Springs, FDEP Facility ID# 598516641.

I hereby certify that in my professional judgment, the components of this Site Rehabilitation Completion Report and No Further Action Proposal prepared for the September 28, 1987 and August 7, 2000 petroleum product discharges discovered at the above-referenced facility satisfy the requirements set forth in Chapter 62-780, Florida Administrative Code (F.A.C.), and that the conclusions in this report provide reasonable assurances that the site rehabilitation objectives stated in Chapter 62-780, F.A.C., have been met.

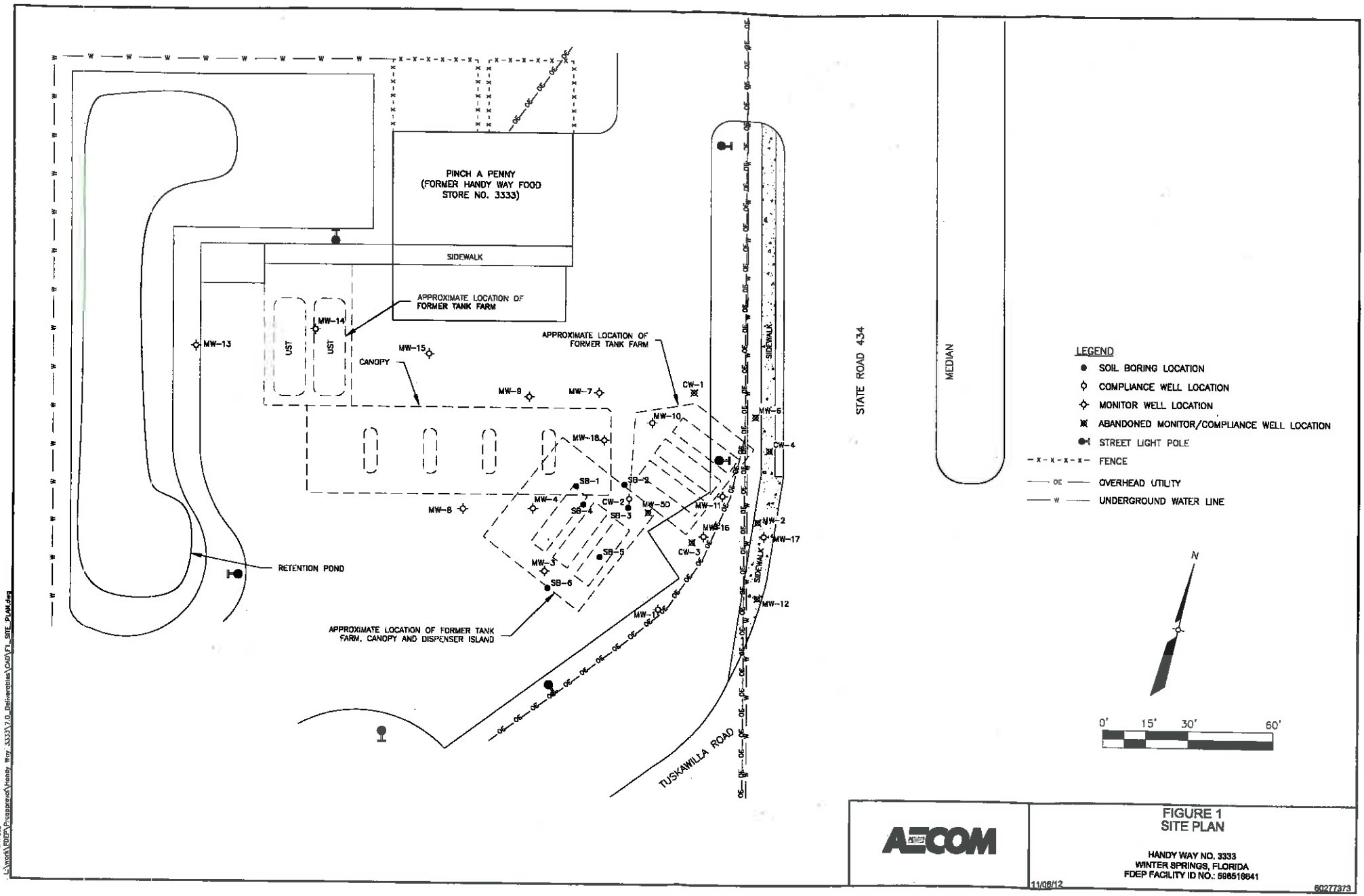
__ I personally completed this review.

_X_ This review was conducted by David M. Press working under my direct supervision.

Matthew N. Green, P.G.
Professional Geologist # 1880
Petroleum Cleanup Section



Matthew Green
9/04/13
Date



REVISED BY: JC
DRAWN BY: JM
L:\work\FDEP\Preapproved\Handy Way 3333\7.0_Deliverables\Cad\F1_SITE_PLAN.dwg

FAC ID 598516644

TABLE 3: SOIL ANALYTICAL DATA

Facility Name: Handy Way #3333 **Facility ID#: 59/8516641** **Analytical Results = mg/kg**

Boring No.	Date Collected	Depth to Water (feet)	Sample Interval (FBLS)	Net OVA Reading (ppm)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene
		feet	FBLS	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SCTL - Residential					1.2	7,500	1,500	130	4,400	460	55	200	210
SCTL - Industrial					1.7	60,000	9,200	700	24,000	2,700	300	1800	2100
SCTL - Leachability					0.007	0.5	0.6	0.2	0.09	340	1.2	3.1	8.5
SB-1	05/28/13	6	4	0	0.001 U	0.001 U	0.001 U	0.003 U	0.001 U	3.9 U	0.011 U	0.011 U	0.011 U

U indicates the compound was analyzed for but not detected

I indicated the value is an estimate, The reported value is between the Detection Limit and the Practical Quantitation Limit

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloro ethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-1	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1	<1	<1	<3	<2						
	02/22/02	<1	<1	<1	<3	10	<5	<5	<5			
	07/23/02	<1	<1	<1	<3	20	<5	<5	<5			
	10/04/02	<1	<1	<1	<3	5	<5	<5	<5			
	05/20/03	<1	<1	<1	<3	<1	<5	<5	<5			
	08/28/03	<1	<1	<1	<3	<1	<5	<5	<5			
	11/20/03	<1	<1	<1	<3	<2	<5	<5	<5			
	02/27/03	<1	<1	<1	<3	<5	<5	<5	<5			
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	05/01/06	1 U	6	1 U	3 U	5 U	1.0 U	1.0 U	1.0 U			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	4.9	1.0 U	2.6	1.5 U	1.0 U	15	0.36 I	0.40 I			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.13 I	0.10 U	0.10 U			
MW-2	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
MW-3	09/26/94	<1	6	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	06/04/01	<1	<1	<1	<3	9	<5	<5	<5			
	11/02/01	<1	<1	<1	<3	6						
	02/22/02	<1	<1	<1	<3	2						
	07/23/02	<1	<1	<1	<3	6						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-4	09/27/94	370	420	430	1690	19				12	<1	<0.02
	05/19/95	390	5	560	269	13						
	08/08/95	490	10	700	390	210						
	06/29/00	150	<10	600	<30	<20						
Duplicate	06/29/00	150	<10	610	<30	<20						
	10/26/00	82	<10	200	<30	<20						
Duplicate	10/26/00	79	<10	180	<30	<20						
	01/29/01	16	<1.0	53	5.0	3.0	210	71	40	<5.0		
	06/04/01	30	<1	48	4*	3.0	180	65	37			
	11/02/01	14	1	57	5	24	77	20	25			
	02/22/02	44	3	248	3*	<1	88	25	18			
	07/23/02	23	2	96	4	5	99	24	21			
	10/04/02	17	1	86	<4	<1	76	22	18			
	05/20/03	13	1	59	3	<1	51	14	13			
	08/28/03	11	1	90	<3	<1	75	20	15			
	11/20/03	11	1	62	4	<2	83	25	21			
	02/27/04	4	<1	17	<3	<5	38	11	9			
	06/03/04	12	2	37	4	<5	148	38	30			
	12/07/04	6	4	68	7	<5	57	17	11			
	04/18/05	2	<1	17	<3	<5	49	11	9.5			
	10/14/05	5	0.9	67	2.6	<5	79	20	14			
	04/28/06	4	0.6 I	37	2.2 I	5 U	30	7.5	7.5			
	11/21/06	1	0.5 U	10	1.7 U I	2.8 I	57	10	6.5			
	06/28/07	6	1.0 U	94	1.6 I	1.0 U	43	6.9	7.3			
	12/05/07	1.5	1.0 U	24	1.5 U	1.0 U	23	4.7	4.2			
	07/17/08	0.7 I	1.0 U	18	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	11/06/08	1.6	1.0 U	50	1.5 U	1.0 U	18	2.8	2.3			
	07/31/12	1.2	1.0 U	15	1.5 U	1.0 U	25	2.4	4.2			
	10/24/12	0.5 I	1.0 U	6.3	1.5 U	1.0 U	7.8	0.92	0.6			
	01/23/13	0.8 I	1.0 U	9.5	1.5 U	1.0 U	9.8	1.5	1.6			
MW-5D	09/27/94	<1	<1	<1	<3	<2				131	<1	<0.02
MW-6	09/27/94	<1	<1	<1	<3	<2				<5	<1	<0.02
MW-7	09/26/94	<1	<1	<1	<3	<2				<5	<1	<0.02
	05/19/95	<1	<1	<1	<3	<2						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-8	06/02/95	4	<1	<1	10	4400				18	<1	<0.02
	08/08/95	1	3	1	8	44						
	06/29/00	<1.0	<1.0	<1.0	<3.0	6.0 **						
	01/29/01	<1.0	<1.0	<1.0	<3.0	14	<10	<10	<10	<5		
	06/04/01	<1	<1	<1	<3	43						
	11/02/01	<1	<1	<1	<3	<1						
	02/22/02	<1	<1	<1	<3	1						
	07/23/02	<1	<1	<1	<3	4						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	05/28/13									2.30 U		
MW-9	06/02/95	<1	<1	<1	<3	<2				15	<1	<0.02
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	10/26/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	01/29/01	<1.0	<1.0	<1.0	<3.0	<2.0	<10	<10	<10	<5.0		
	05/28/13									2.30 U		
MW-10	06/02/95	<1	800	2	3	2300				20	<1	<0.02
	08/08/95	<1	3	<1	<3	16						
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	06/04/01	<1	<1	<1	<3	<1	<5	<5	<5			
	04/28/06									2 U		
	05/28/13									2.30 U		
MW-11	06/02/95	<1	<1	<1	<3	<2				31	<1	<0.02
	06/29/00	<1.0	<1.0	<1.0	<3.0	<2.0						
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	04/28/06									2 U		
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	05/28/13									2.30 U		

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloroethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-12	12/18/95	<1	<1	<1	<3	<2						
MW-13	10/26/00	<1.0	<1.0	<1.0	<3.0	<2.0						
MW-14	10/26/00	<1	<1	45	3	20						
	11/22/00	<1	<1	<1	<3	15						
	01/29/01	<1	<1	<1	<3	6						
	03/13/01											
	03/30/01									<5	<1	<0.02
MW-15	10/26/00	<1	<1	<1	<3	4	<10	<10	<10			
MW-16	01/29/01	<1.0	<1.0	<1.0	3.0	<2.0	<10	<10	<10	150		
	06/04/01	<1	<1	<1	<3	<1				<5		
	11/02/01	<1	<1	<1	<3	<1						
	02/22/02	<1	<1	<1	<3	<1						
	07/23/02	<1	<1	<1	<3	<1						
	10/04/02	<1	<1	<1	<3	<1						
	05/20/03	<1	<1	<1	<3	<1						
	08/28/03	<1	<1	<1	<3	<1						
	11/20/03	<1	<1	<1	<3	<2						
	02/27/04	<1	<1	<1	<3	<5						
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	04/18/05	<1	<1	<1	<3	<5	<1	<1	<1			
	10/14/05	<1	<1	<1	<3	<5	<1	<1	<1			
	04/28/06	1 U	1 U	1 U	3 U	5 U	0.5 I	1.0 U	1.0 U			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.16 U	0.12 U	0.23 U			
	12/05/07	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.18 U	0.19 U	0.21 U			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U						
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	05/28/13									2.30 U		
MW-17	01/29/01	<1.0	<1.0	<1.0	<3.0	<2.0	<10	<10	<10	18		
	04/28/06									2 U		
	11/21/06									0.004 I		

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloro ethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
MW-18	07/23/02	<1	<1	<1	<3	<1	<5	<5	<5			
	07/31/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
CW-1	03/28/94	<1	<1	<1	<3	<2						
	09/27/94	<1	2	<1	<3	<2				<5	<1	<0.02
CW-2	03/28/94	140	<10	410	380*	<20						
	09/27/94	700	20	890	840	24				<5	<10	<0.02
Duplicate	09/27/94	610	20	840	820	20				<5	<10	<0.02
	06/02/95	8	<1	22	<3	3				11	<1	<0.02
	08/08/95	1	<1	2	<3	100						
	06/29/00	6.2	<1.0	67	<3.0	<2.0						
	10/26/00	82	<1	200	<3	<2						
	06/04/01	6	1	44	3	3	37	5	<5			
	11/02/01	<1	<1	<1	<3	<1	<5	<5	<5			
	02/22/02	<1	<1	<1	<3	<1	<5	<5	<5			
	07/23/02	<1	<1	9	<3	<1	<5	<5	<5			
	10/04/02	<1	<1	<1	<3	<1	<5	<5	<5			
	05/20/03	<1	<1	3	<3	<1	<5	<5	<5			
	08/28/03	<1	<1	<1	<3	<1	<5	<5	<5			
	11/20/03	<1	<1	8	<3	<2	<5	<5	<5			
	02/27/04	<1	<1	19	<3	<5	11	5.6	<5			
	06/03/04	<1	<1	5	<3	<5	<5	<5	<5			
	12/07/04	<1	<1	<1	<3	<5	<5	<5	<5			
	04/18/05	<1	<1	<1	<3	<5	1.1	<1	<1			
	10/14/05	<1	<1	5	<3	<5	11	7.4	4.8			
	04/28/06	1 U	1 U	0.9 I	3 U	5 U	3.4	2.7	1.7			
	11/21/06	0.5 U	0.5 U	0.5 U	1.5 U	2.0 U	0.16 U	0.12 U	0.23 U			
	06/28/07	0.5 U	1.0 U	2	1.5 U	1.0 U	4.5	2.8	1.5 I			
	12/05/07	0.5 U	1.0 U	2.2	1.5 U	1.0 U	3.1	2.3	1.7			
	07/17/08	0.5 U	1.0 U	2.1	1.5 U	1.0 U	6.8	1.1	1.9			
	11/06/08	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	10/24/12	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			
	01/23/13	0.5 U	1.0 U	0.5 U	1.5 U	1.0 U	0.10 U	0.10 U	0.10 U			

TABLE 2: GROUNDWATER MONITOR WELL ANALYTICAL SUMMARY

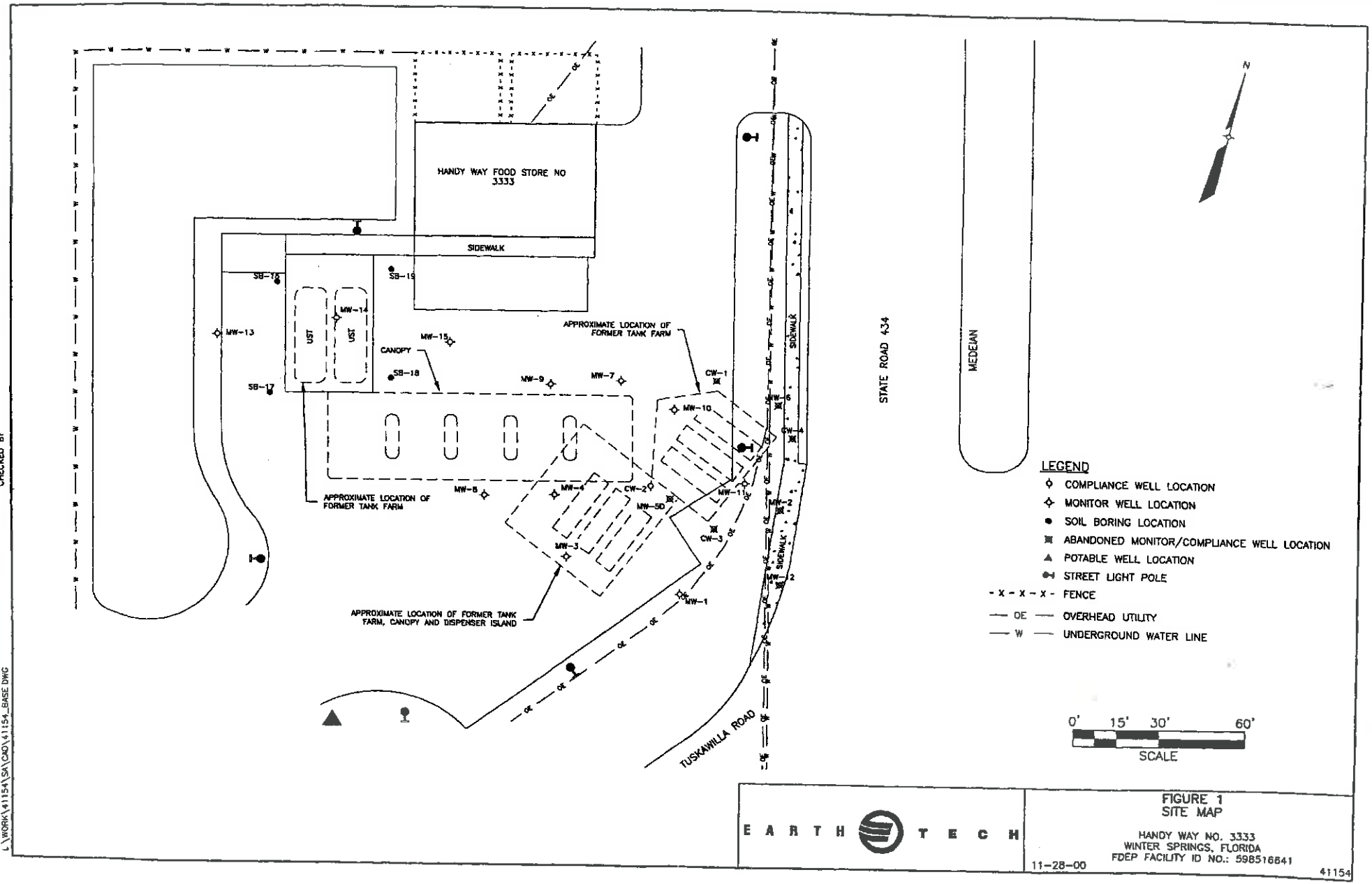
Facility Name: Handy Way #3333 **Facility ID#: 598516641**

Analytical Results = µg/L
Blank or N\A = Not Analyzed

Sample Location	Sample Date	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE[1]	Naphthalene	2-Methyl-Naphthalene	1-Methyl-Naphthalene	Total Lead	1,2 Dichloro ethane	EDB[2]
FDEP GCTLs[3]		1	40	30	20	20	14	28	28	15	3	0.02
FDEP NADCs[4]		100	400	300	200	200	140	280	280	150	300	20
CW-3	03/28/94	560	<10	120	61*	120						
	09/27/94	290	<10	320	80*	20						
										8	<10	<0.02
CW-4	03/28/94	<1	<1	<1	<3	15						
	09/27/94	<1	<1	<1	<3	<2						
										<5	<1	<0.02

Note:
1. MTBE = Methyl tert butyl ether
2. EDB = 1,2 Dibromoethane
3. GCTLs = Groundwater Cleanup Target Levels
4. NADCs= Natural Attenuation Default Concentrations
# indicates dissolved lead was also run on this sample, with results of <0.005 mg/L.
U indicates the compound was analysed but not detected.
I indicates the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

FAC ID 598516641



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TABLE 2: SOIL ANALYTICAL DATA

Facility Name: Handy Way # 3333

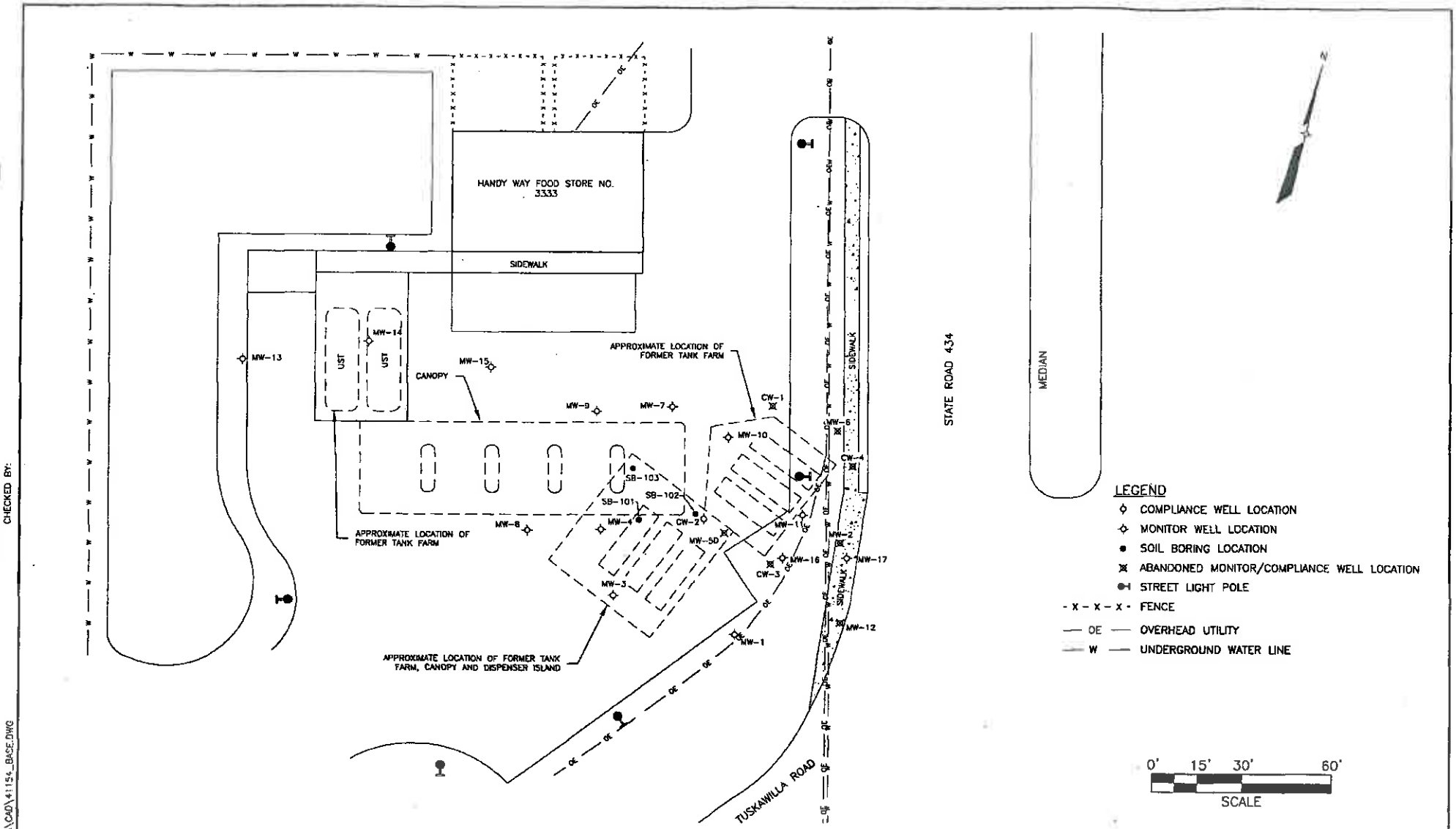
Facility ID#: 598516641

Analytical Results = µg/kg
ND = Not Detected
Blank = No Data

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Total VOA	Fractional Organic Carbon							
SB-18 (6-8')	10/18/00	<1.1	1.1	2.2	3.9*	8 3*	0.0069%							
SB-18 (10-12')	10/18/00	<1.3	<1 3	<1 3	<3.9	<7 8	0.012%							
MW-15 (6-8')	10/18/00	<1 4	<1 4	<1 4	<4.2	<8 4	0.0081%							
Florida SCTLs.		7	500	600	200	1307								

* - Value represents the sum of positive values plus detection limit values for components reported as non-detected

FAC ID 598516641



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EARTH TECH

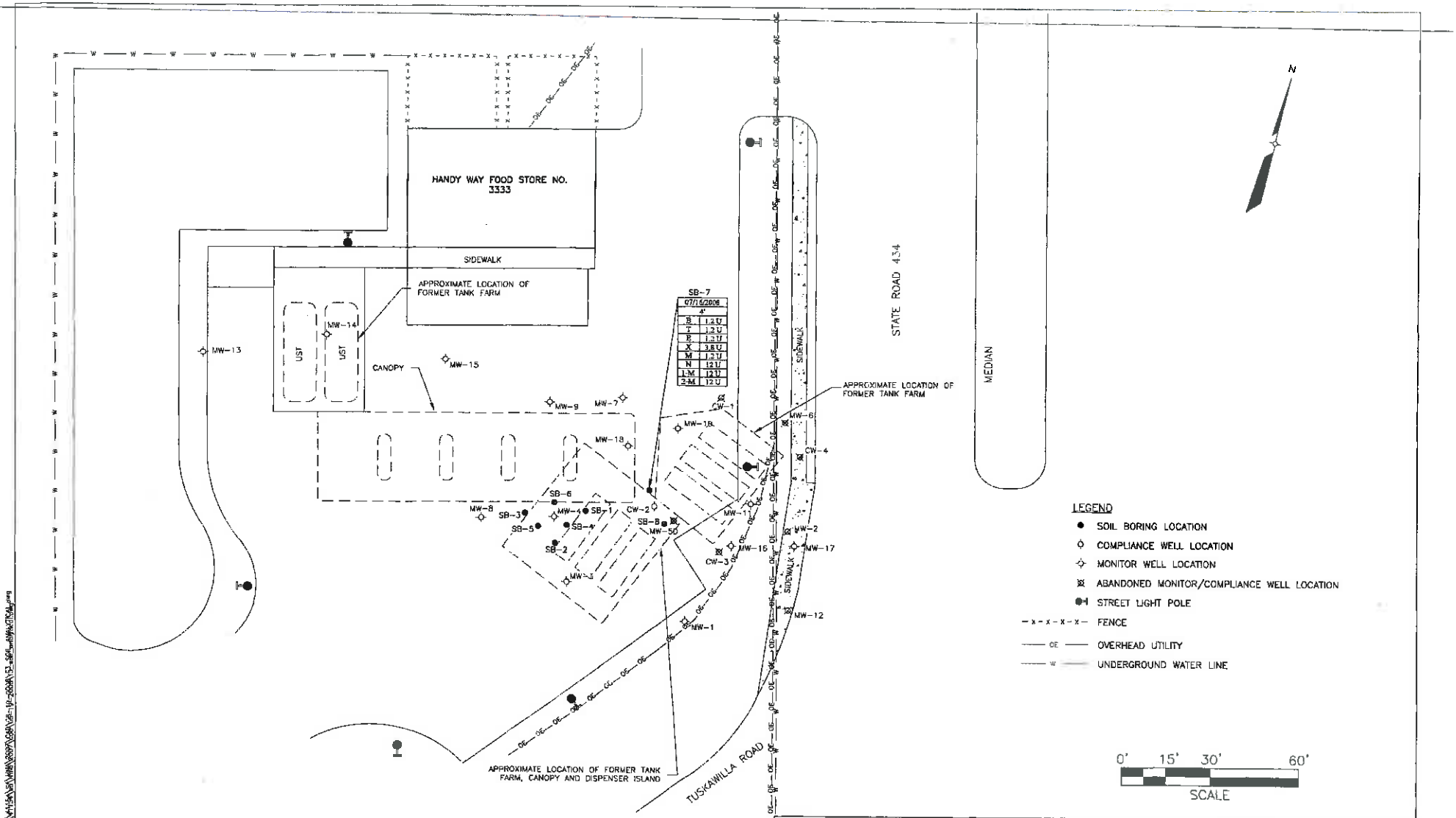
FIGURE 1
SITE MAP

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

03-05-01

41154

FAC ID 598516641



EARTH TECH | AECOM

FIGURE 3
SOIL ANALYTICAL MAP
JULY 16, 2008

HANDY WAY NO. 3333
WINTER SPRINGS, FLORIDA
FDEP FACILITY ID NO.: 598516641

08-19-2008

41154

REVISED BY:
DATE:
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TABLE 2: SOIL ANALYTICAL DATA

Facility Name: Handy Way #3333 **Facility ID#: 598516641** **Analytical Results = µg/kg**

Boring No.	Date Collected	Depth to Water (feet)	Sample Interval (FBLS)	Net OVA Reading (ppm)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene
		feet	FBLS	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SCTL - Residential					1.2	7,500	1,500	130	4,400	55	200	210
SCTL - Industrial					1.7	60,000	9,200	700	24,000	300	1800	2100
SCTL - Leachability					0.007	0.5	0.6	0.2	0.09	1.2	3.1	8.5
SB-1-09	06/04/01	9	9-10	120	<1	<1	<1	<3	8	<330	<330	<300
SB-2-09	06/04/01	9	9-10	50	<1	<1	<1	<3	<1	<330	<330	<300
SB-3-10	06/04/01	9	9-10	10	<1	<1	<1	<3	<1	<330	<330	<300
SB-7 (4')	07/16/08	7.5	4-5	2	1.2 U	1.2 U	1.2 U	3.8 U	1.2 U	12 U	12 U	12 U

U indicates the compound was analyzed for but not detected

I indicated the value is an estimate, The reported value is between the Detection Limit and the Practical Quantitation Limit

SITE ASSESSMENT REPORT

7-Eleven Store No. 34786
1205 E. State Road 434
Winter Springs, Seminole County, Florida
FDEP Facility ID No. 59/9045623
Work Order No. 2013-59-W4270A
Site Priority Score: 46 (PLIRP)
Discharge Date: April 26, 1003

July 30, 2013
Shaw Project No. 149035

Submitted to:

Orange County Environmental Protection Division
800 Mercy Drive, Suite 4
Orlando, Florida 32808

Prepared by:

Shaw Environmental, Inc.
A CB&I Company
1228 Winter Garden Vineland Road
Winter Garden, Florida 34787

PROFESSIONAL CERTIFICATION

PROFESSIONAL GEOLOGIST LICENSED IN THE STATE OF FLORIDA

For

Site Assessment Report

7-Eleven Store No. 34786
1205 East State Road 434
Winter Springs, Seminole County, Florida
FDEP Facility ID No. 59/9045623
Program Site

I certify that I am currently licensed by the State of Florida as a Professional Geologist through examination, education, and experience. I certify that the above report was prepared or completed by me, or under my responsible charge, and to the best of my knowledge is true, accurate, complete, and intended to meet the Chapter 62-780, Florida Administrative Code requirements for Site Assessment. Additionally, I certify that Shaw Environmental, Inc. is currently licensed (License No. GB409) as a geology business by the State of Florida.

Reviewed by:

David R. Martinez, P.G.
State of Florida License No. 2513

Date: 7-30-2013

Prepared by:

Daniel Roebke
Scientific Technician

Date: 7/30/2013

Shaw Environmental, Inc.
1228 Winter Garden Vineland Road
Winter Garden, Florida 34787

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List of Acronyms and Abbreviations

7-Eleven	7-Eleven, Inc.
Accutest	Accutest Laboratories
bls	below land surface
BPSS	Bureau of Petroleum Storage Systems
BTEX	sum of benzene, toluene, ethylbenzene, and xylene
btoc	below top-of-casing
DO	dissolved oxygen
DRF	Discharge Reporting Form
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FAC	Florida Administrative Code
FAC ID	Facility Identification
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
FID	flame-ionization detector
ft	foot or feet
ft/ft	foot per foot
GCTL	groundwater cleanup target level
GES	Groundwater & Environmental Services, Inc.
MTBE	methyl tert-butyl ether
NADC	Natural Attenuation Default Concentration
NAM	natural attenuation monitoring
OCEPD	Orange County Environmental Protection Division
OVA	organic vapor analyzer
PAHs	polynuclear aromatic hydrocarbons
ppm	parts per million
SCTL	soil cleanup target level
Shaw	Shaw Environmental, Inc., a CB&I company
SOP	Standard Operating Procedure
TRPH	total recoverable petroleum hydrocarbon
UST	underground storage tank

1.0 Introduction and Scope of Work

On May 3, 1993, Mobil Oil Corporation filed a Discharge Reporting Form (DRF) with the state indicating an unknown amount of free product was found in a monitoring well at a site in Winter Springs, Florida. A copy of the DRF is provided in **Appendix A**. The site priority score was set at 46, indicating a potential threat to human health and the environment. In 2011, 7-Eleven, Inc. (7-Eleven) acquired the subject property and re-designated it as 7-Eleven Store No. 34786.

Shaw Environmental, Inc. (Shaw), a CB&I company, was contracted to perform a site assessment to determine the possible extent of impact on the site. One monitoring well and nine soil borings were installed during the course of this assessment. Four previously-installed monitor wells were also sampled as part of the assessment.

2.0 Background

2.1 Area of Investigation

7-Eleven Store No. 34786 is located within Section 26, Township 20, Range 30 , of the United States Geological Survey, Casselberry, Florida Topographic Quadrangle. A site location map is included as **Figure 1**.

7-Eleven Store No. 34786 was constructed in 1990 on an approximate 0.50-acre parcel. The 648-sq ft retail building is located at the center of the property. The site is primarily covered by asphalt with grass landscaping at the perimeter, and a car wash on the south side of the property. The underground storage tank (UST) area is located on the south end of the site just north of the car wash. A site layout map is provided as **Figure 2**.

2.2 Previous Assessment Activities

A review of the Florida Department of Environmental Protection (FDEP) OCULUS online database revealed there was a petroleum discharge on April 26, 1993, a DRF was completed on March 3, 1993. The site was also determined to be eligible for funding under the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP). A monitoring well was installed on January 9, 2006. Then three more wells were installed during a Phase II Environmental Site Assessment (ESA) on March 14 and 15, 2007, with the supervision of Groundwater & Environmental Services, Inc. (GES). On December 11, 2008, GES filed a Limited Closure Summary Report describing activities during a tank removal at this site. During the removal, soils were collected and concentrations of benzene were reported to be above soil cleanup target limits (SCTL). In July 2009 the FDEP raised the funding threshold to 60, suspending funding for the site.

2.3 Site Chronology

The following is a chronological summary of recent environmental activities performed at the facility:

Date	Environmental Activity
April 8, 2013	Shaw oversees the installation of eight soil borings (SB-1, SB-3 thru SB-9)
April 15, 2013	Shaw conducts groundwater sampling on wells MW-1 thru MW-3 and MW-5
April 16, 2013	Receive soil analytical results indicating there was no SCTL exceedance
April 23, 2013	Receive groundwater analytical results indicating benzene concentration in MW-5 exceeds the groundwater cleanup target level (GCTL)
May 16, 2013	Aquifer ("slug") test is conducted

Date	Environmental Activity
July 12, 2013	Shaw oversees the installation of MW-6
July 15, 2013	Shaw conducts groundwater sampling of MW-6
July 25, 2013	Shaw receives groundwater analytical results from samples collected at MW-6. There were no GCTL exceedances

3.0 Site Assessment Activities and Results

3.1 Water Well Survey and Area Land Use

Shaw utilized the Florida Department of Health (FDOH) Bureau of Environmental Health EHWATER database to create a radius map displaying known supply wells in the vicinity of the subject site. The map indicated that four public supply wells were located within a ½-mile radius of the site, and five private wells were located within a ¼-mile radius.

Shaw utilized the FDOH EHWATER website database to search for nearby petroleum or dry-cleaning facilities within a ½-mile radius around the site. The search listed one site:

- Handyway Store No. 3333, FAC ID 59/8516641. This site was an active gas station. There was a discharge on September 28, 1987. A site assessment was conducted resulting in remediation activities. The site is currently undergoing quarterly natural attenuation monitoring (NAM) sampling.

The FDOH Supply Well Inventory and Facilities Inventory search results are summarized in **Tables 1 and 2** and depicted on **Figure 3**.

Shaw reviewed aerial photographs and utilized field-verification to determine land use in the vicinity of the site. The area within ½-mile of the site includes commercial, residential, and undeveloped zoning classifications. The area land use is shown on **Figure 4**.

3.2 Initial Investigation

On April 26, 1993, there was a petroleum discharge at 7-Eleven Store No. 34786. There are no records of a site assessment previously conducted. GES installed four monitoring wells (MW-1, MW-2, MW-3, and MW-5) during a Phase II ESA. The four wells were sampled semi-annually between March 2007 and 2009. Four USTs were replaced with two USTs during October and November 2008. Approximately 1,381 tons of pea gravel and soil were removed from the UST area and disposed during the tank replacement due to high organic vapor analyzer (OVA) readings from around the tank pit.

3.3 Soil Boring Installation

On April 8, 2013, Shaw supervised the installation of eight soil borings. The soil boring locations are depicted on **Figure 2**. The soil borings were installed in accordance with FDEP Bureau of Petroleum Storage Systems (BPSS) standards using a track-mounted direct-push rig to a total depth of 13 ft below land surface (bls). Soil samples were collected at 1-ft intervals to a depth of approximately 13 ft bls for organic vapor analysis using a Photovac MicroFID OVA equipped with a flame ionization detector (FID). Eight-ounce grab samples were collected, placed into clean 16-ounce jars, and allowed to equilibrate for approximately five minutes.

Following equilibration, the headspace in each glass jar was screened for the presence of organic vapors using an OVA-FID in accordance with Chapter 62-780.600(19), Florida Administrative Code (FAC). The OVA-FID was calibrated onsite to 500 parts per million (ppm) methane and zero-gas sources prior to the sample screening activities.

The field screening results indicated net organic vapor readings ranging from 0 to 43.0 ppm. OVA field readings and lithologic descriptions are presented in **Table 3**. Copies of the FDEP boring logs, FDEP well construction and development logs, and equipment calibration records are provided in **Appendix B**.

Shaw collected two soil samples for laboratory analysis: SB-3@12ft and SB-9@4ft. The samples were submitted to Accutest Laboratories (Accutest) in Orlando, Florida, for analysis of benzene, toluene, ethylbenzene, and xylenes (collectively known as BTEX) and methyl tert-butyl ether (MTBE) by EPA Method 8260B, polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270D, and total recoverable petroleum hydrocarbons (TRPH) by FDEP Method FL-PRO.

The laboratory analytical report indicated that no SCTL exceedances were detected in either of the samples. The soil analytical results are summarized in **Table 4** and a map summarizing the vadose zone assessment is included as **Figure 5**. Copies of the laboratory analytical reports and chain-of-custody documentation are provided in **Appendix C**.

3.4 Groundwater Sample Collection and Results

On April 15, 2013, Shaw returned to the site to sample the monitoring wells. Well purging and groundwater sampling activities were conducted in accordance with FDEP *SOP 001/01, FS 2200, Groundwater Sampling*, revised March 31, 2008, (effective December 3, 2008), and FDEP *SOP-PCS-005 Groundwater Sampling SOP Variances and Clarifications for Bureau of Petroleum Storage System Sites*, May 2, 2005. A peristaltic pump and clean polyethylene tubing were used for purging and sampling activities. Electronic water quality meters were used to track water quality parameters during purging activities. FDEP groundwater sampling logs were used to document well purging time, volume, and rates; depth to groundwater; monitored water quality parameters (hydrogen-ion concentration [pH], temperature, conductivity, dissolved oxygen [DO], turbidity, color, and odor); and sampling data for each well. The samples were collected in laboratory-supplied bottles and couriered to Accutest. Laboratory analytical results indicated no concentrations in excess of the Chapter 62-777, FAC, Table I, GCTLs in monitor wells MW-1, MW-2, and MW-3. The sample from MW-5 had concentrations exceeding the GCTLs for benzene and naphthalene.

On July 12, 2013, Shaw oversaw the installation of MW-6 on the southeast border of the property. Shaw returned on July 15, 2013, to sample MW-6. Shaw received the analytical results showing there were no GCTL exceedances in the groundwater collected from MW-6.

Monitor well construction data is presented in **Table 5**; groundwater analytical results are summarized in **Table 6**; **Figure 6** shows groundwater analytical results next to their corresponding wells. Laboratory analytical reports are included in **Appendix C**. Copies of the FDEP groundwater sampling logs, well construction and development logs, and field instrument calibration records are provided in **Appendix B**.

3.5 Water Level Measurements

Prior to each groundwater sampling event, depth-to-water from below top-of-casing (btoc) measurements for each of the existing wells was recorded. On April 25, 2013, depth-to-water measurements ranged from 8.48 to 9.11 ft btoc.

Relative top-of-casing elevations were surveyed by qualified Shaw personnel and calculated with depth-to-water measurements from each sampling event to determine groundwater flow. Water table elevation contours representative of the groundwater surface on April 25, 2013, indicate a groundwater gradient of 0.0094 feet per foot (ft/ft) towards the southeast.

Shaw returned to the site on July 15, 2013, to record the summer groundwater elevations. Water table elevation contours representative of the groundwater surface on April 25, 2013, indicate a groundwater gradient of 0.0074 ft/ft towards the southeast. Free-phase product was not encountered during any event.

A groundwater elevation summary is provided in **Table 7**. Groundwater elevation maps showing groundwater elevation contour intervals from April 25 and July 15, 2013 are provided as **Figure 7** and **Figure 8** respectively.

3.6 Site Lithology

Data collected during the assessment activities indicates that the site is underlain by mainly fine sand. Interspersed in the fine sand are lenses of silty-sand. A geologic cross-section showing the site lithology is illustrated on **Figure 9**. Copies of the boring logs (describing site lithology) are provided in **Appendix B**.

3.7 Slug Tests and Results

On May 16, 2013, Shaw performed slug tests on MW-1, MW-2, and MW-5 to assess the aquifer characteristics beneath the facility. During the slug tests, a volume of water was instantaneously removed from the well and the groundwater recovery rate was monitored by a Mini Troll® Level-Logger. The recovery rate was recorded logarithmically for the entire test. The data was

then analyzed using AQTESOLV for Windows by Hydrosolv Inc.™ The Bouwer and Rice 1976 Method for unconfined aquifers was chosen from AQTESOLV to calculate the range of hydraulic conductivity values associated with the aquifer. The hydraulic conductivity values were within acceptable ranges for unconsolidated deposits as found in R. Allen Freeze and John A. Cherry's 1979 Groundwater and C.W. Fetter's 1988 Applied Hydrogeology Second Edition. The estimated average linear groundwater velocity (V) for the surficial aquifer was calculated using the equation V=KI/n, where K=Hydraulic Conductivity, I=Hydraulic Gradient, and n=effective porosity. Aquifer characteristics are summarized in the following table.

Well ID	Screened Interval (ft)	Hydraulic Gradient (I) (ft/ft)	Effective Porosity (n) (%)	Hydraulic Conductivity (K) (ft/day)	Linear Groundwater Velocity (V) (ft/yr)
MW-1	5-15	0.0024	0.30	1.698	0.297
MW-2	5-15	0.0024	0.30	1.708	0.518
MW-5	5-15	0.0024	0.30	6.933	2.632

Slug test results and aquifer characteristic calculations are summarized in **Appendix D**.

4.0 Summary and Recommendations

- There are three public supply wells located within ½ mile of the facility.
- Analysis of groundwater samples collected on April 15, 2013, from MW-1, MW-2, MW-3, and MW-5 reported GCTLs were exceeded for benzene and naphthalene in the groundwater collected from MW-5.
- Analytical results from the MW-6 groundwater sample reported no GCTL exceedances, thereby delineating the extent of the plume.
- Although the GCTLs were exceeded for benzene and naphthalene in the groundwater collected from MW-5, the natural attenuation default concentration (NADC) guidance levels were not exceeded.
- Groundwater was initially indicated to flow to the southeast. Since then, the groundwater flow has been calculated to flow to the east.
- Free product was not encountered during site assessment activities.
- Net vadose zone OVA readings during soil boring activities and the installation of MW-6 (SB-10) were reported as less than 1 ppm.
- Soil analytical results from samples collected in the vadose zone during this assessment indicated that the SCTLs were not exceeded.
- The site is underlain by sand with lenses of silty sand.

Based upon the data gathered to date, contaminated soil does not exist outside the UST area. Accordingly, Shaw recommends that a Natural Attenuation Monitoring Plan be implemented for this site as per Chapter 62-780, FAC.

5.0 Disclaimer

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client and the county, unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, county, FDEP, purposes, locations, timeframes, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

TABLES

TABLE 1: WATER WELL SURVEY SUMMARY

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Map ID	Address		Use	Diameter (inches)	Total Depth	Casing Depth	Installation Date	Casing Material	Comments
	Owner	Location							
AAF0833	Carl Roberts	1175 E SR 434	Private Residential	2	NA	NA	NA	Galvanized	Inactive, Well Type 43
AAC0779	Pinch A Penny	170 Tuskawilla Rd	Limited Public Water	4	NA	NA	NA	Black Steel	Active, Well Type 42
AAK9365	NA	1249 Natures Way	Private Residential	2	NA	NA	NA	PVC	Active, Well Type 43
AAK3868	Donahoe	1233 Natures Way	Private Residential	4	NA	NA	NA	Black Steel	Active, Well Type 43
AAF0830	Lake Jessup Animal Hospital	190 Tuskawilla Rd	Limited Public Water	4	NA	NA	NA	Black Steel	Active, Well Type 42
59-57-00095	Lake Jessup Animal Hospital	190 Tuskawilla Rd	Registered LU Commercial	NA	NA	NA	NA	NA	Active, Registered LU Commercial
AAK9372	NA	Milky Way	Private Residential	2	0	0	NA	PVC	Active, Well Type 43
AAK9374	NA	290 Tuskawilla Rd	Private Residential	2	0	0	NA	PVC	Active, Well Type 43
AAK93639	Lofroos	300 Tuskawilla Rd	Private Residential	2	0	0	NA	Galvanized	Active, Well Type 43
AAF0886	Hi- Flavor Meats (Formerly)	201 Tuskawilla Rd	Non-Community Public	2	NA	NA	NA	Galvanized	Active, Well Type 41 (Non-Community Public Water System

Notes:

NA = data not readily available

TABLE 2: SUPER ACT FACILITIES SURVEY

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Name	Facility ID	Location	Facility Type	Distance from Site	Status	Comments
Handyway	8516641	170 Tuskawilla Rd	Retail Petroleum	0.07 mi	CLOSED	Three 10,000-gallon fuel tanks were removed

TABLE 3: OVA DATA AND LITHOLOGIC DESCRIPTION

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Boring Number	Date	Depth to Water (ft) (Observed)	Sample	OVA Reading (ppm)			Lithologic Description
				Unfiltered	Filtered	Net	
SB-1	04/08/13		1	<1	-	<1	Black/Grey, Fine, Sand, No Odor
			2	<1	-	<1	Black/Grey, Fine, Sand, No Odor
			3	<1	-	<1	Grey/Black, Fine, Sand, No Odor
			4	<1	-	<1	Grey/Black, Fine, Sand, No Odor
			5	<1	-	<1	Grey/Black, Fine, Sand, No Odor
			6	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
			7	<1	-	<1	Black, Silty Sand, Fine, No Odor
			8	<1	-	<1	Black, Silty Sand, Fine, No Odor
			9	<1	-	<1	Brown, Silty Sand, Find, No Odor
			10	<1	-	<1	Tan, Silty Sand, Fine, No odor
			11	<1	-	<1	Tan/Grey, Silty Sand, Fine, No Odor
		12	12	0.4	-	0.4	Brown, Silty Sand, Fine, No Odor
			13	<1	-	<1	Grey, Silty Sand, Fine, No Odor
SB-3	04/08/13		1	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Black, fine, Sand, No odor
			4	<1	-	<1	Black, fine, Sand, No odor
			5	<1	-	<1	Black, fine, Sand, No odor
			6	<1	-	<1	Tan, Fine, Sand, No odor
			7	<1	-	<1	Tan, Fine, Sand, No odor
			8	<1	-	<1	Black, fine, Sand, No odor
			9	<1	-	<1	Grey, fine, Sand, No Odor
			10	<1	-	<1	Grey, fine, Sand, No Odor
			11	16.5	18.9	NQ	Black, Fine, Silty Sand, No odor
		12	12	30.5	31.5	NQ	Black, Fine, Silty Sand, No odor
			13	51.1	8.1	43.0	Black, Fine, Silty Sand, No odor
SB-4	04/08/13		1	<1	-	<1	Tan, Fine, Sand, No odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Brown/Black, fine, Sand, No odor
			4	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			5	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			6	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			7	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			8	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			9	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			10	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			11	<1	-	<1	Grey, fine, Sand, No Odor
		12	12	<1	-	<1	Black, Fine, Silty Sand, No odor
			13	<1	-	<1	Dark Grey, Fine, Sand, No Odor
SB-5	04/08/13		1	<1	-	<1	Brown/Grey, fine, Sand, No odor
			2	0.5	-	0.5	Brown/Grey, fine, Sand, No odor
			3	<1	-	<1	Brown/Grey, fine, Silty Sand, No odor
			4	<1	-	<1	Grey, fine, Sand, No Odor
			5	<1	-	<1	Light Grey, fine, Sand, no odor
			6	<1	-	<1	Brown, Grey, Fine, Sand, No Odor
			7	<1	-	<1	Brown, Fine Sand, No Odor
			8	<1	-	<1	Brown, Fine Sand, No Odor
			9	<1	-	<1	Brown, Fine Sand, No Odor
			10	<1	-	<1	Brown, Fine Sand, No Odor
			11	<1	-	<1	Grey, fine, Sand, No Odor
		12	12	<1	-	<1	Grey, fine, Sand, No Odor
			13	<1	-	<1	Brown, Fine Sand, No Odor

TABLE 3: OVA DATA AND LITHOLOGIC DESCRIPTION

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Boring Number	Date	Depth to Water (ft) (Observed)	Sample	OVA Reading (ppm)			Lithologic Description
				Unfiltered	Filtered	Net	
SB-6	04/08/13		1	<1	-	<1	Brown, Fine, Sand, No odor
			2	<1	-	<1	Brown, Fine, Sand, No odor
			3	<1	-	<1	Brown, Fine, Sand, No odor
			4	<1	-	<1	Brown, Fine, Sand, No odor
			5	<1	-	<1	Grey, Fine, Sand, No odor
			6	<1	-	<1	Grey, Fine, Sand, No odor
			7	<1	-	<1	Grey, Fine, Sand, No odor
			8	<1	-	<1	Brown, Fine, Sand, No odor
			9	<1	-	<1	Brown, Fine, Silty Sand, No odor
			10	<1	-	<1	Brown, Fine, Silty Sand, No odor
			11	<1	-	<1	Brown, Fine, Silty Sand, No odor
			12	<1	-	<1	Brown, Fine, Silty Sand, No odor
			13	<1	-	<1	Brown, Fine, Silty Sand, No odor
SB-7	04/08/13		1	<1	-	<1	Tan, Fine, Sand, No odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
			4	<1	-	<1	Brown, Fine, Sand, No odor
			5	<1	-	<1	Brown/Grey, fine, Sand, No odor
			6	<1	-	<1	Brown/Tan, Fine, Silty Sand, No odor
			7	<1	-	<1	Tan, fine, Silty Sand, no odor
			8	<1	-	<1	Tan, fine, Silty Sand, no odor
			9	<1	-	<1	Tan, fine, Silty Sand, no odor
			10	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
			11	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
		12	12	<1	-	<1	Brown, Fine, Sand, No odor
			13	<1	-	<1	Grey, fine, Silty Sand, No odor
SB-8	04/08/13		1	<1	-	<1	Black/Grey, Fine, Sand, No Odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Grey, Fine, Sand, No Odor
			4	<1	-	<1	Grey, Fine, Sand, No Odor
			5	<1	-	<1	Grey, Fine, Sand, No Odor
			6	<1	-	<1	Grey, Fine, Sand, No Odor
			7	<1	-	<1	Grey, Fine, Sand, No Odor
			8	<1	-	<1	Grey, Fine, Sand, No Odor
			9	<1	-	<1	Grey, Fine, Sand, No Odor
			10	<1	-	<1	Grey, Fine, Sand, No Odor
			11	<1	-	<1	Dark, Grey, Fine, Sand, No Odor
		12	12	<1	-	<1	Dark, Grey, Fine, Sand, No Odor
			13	<1	-	<1	Grey, Fine, Sand, No Odor
SB-9	04/08/13		1	<1	-	<1	Tan, Fine, Sand, No odor
			2	<1	-	<1	Tan, Fine, Sand, No odor
			3	<1	-	<1	Black, fine, Sand, No odor
			4	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			5	<1	-	<1	Grey, fine, Sand, No Odor
			6	<1	-	<1	Tan/Grey, Fine, Sand, No odor
			7	<1	-	<1	Tan/Grey, Fine, Sand, No odor
			8	<1	-	<1	Tan/Grey, Fine, Sand, No odor
			9	<1	-	<1	Grey, fine, Sand, No Odor
			10	<1	-	<1	Black, Fine, Silty Sand, No odor
			11	<1	-	<1	Black, Fine, Silty Sand, No odor
		12	12	<1	-	<1	Black, Fine, Silty Sand, No odor
			13	<1	-	<1	Grey, fine, Silty Sand, No odor

TABLE 3: OVA DATA AND LITHOLOGIC DESCRIPTION

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Boring Number	Date	Depth to Water (ft) (Observed)	Sample	OVA Reading (ppm)			Lithologic Description
				Unfiltered	Filtered	Net	
SB-10	07/12/13	7	1	<1	-	<1	Tan/Brown, Fine, Sand, No Odor
			3	<1	-	<1	Dark Grey, Fine, Sand, No Odor
			5	<1	-	<1	Tan, Fine, Sand, No odor
			7	-	-	-	No Recovery
			9	-	-	-	
			11	<1	-	<1	Brown, Fine Sand, No Odor
			13	<1	-	<1	Dark Grey, Fine, Clayey Sand, No Odor
			15	<1	-	<1	White, Fine-Medium, Clayey Sand, No Odor

Notes: ppm = parts per million
ft = feet
NQ = Not Quantifiable

TABLE 4: SOIL ANALYTICAL SUMMARY

Facility Name: 7-Eleven Store No. 34786 Facility ID No.: 59/9045623

Sample					Laboratory Analysis (mg/kg)																				
ID Number	Date	Approx. Depth to Water (feet)	Sample Interval (ft bls)	Net OVA reading	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TRPH	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i) perylene	Fluoranthene	Fluorene	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene Equivalent*	Benzo(a) pyrene	Benzo(a) anthracene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd) pyrene
Toxic Equivalency Factor					**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**1**	**0.1**	**0.1**	**0.01**	**0.001**	**1.0**	**0.1**
SCTLs - Direct Exposure Industrial					**1.7**	**60,000**	**9,200**	**700**	**24,000**	**2,700**	**20,000**	**20,000**	**300,000**	**52,000**	**59,000**	**33,000**	**300**	**1,800**	**2,100**	**36,000**	**45,000**	**0.7**	*	*	*	*	*	*	*
SCTLs - Direct Exposure Residential					**1.2**	**7,500**	**1,500**	**130**	**4,400**	**460**	**2,400**	**1,800**	**21,000**	**2,500**	**3,200**	**2,600**	**55**	**200**	**210**	**2,200**	**2,400**	**0.1**	**0.1***	*	*	*	*	*	*
SCTLs - Leachability					**0.007**	**0.5**	**0.6**	**0.2**	**0.09**	**340**	**2.1**	**27**	**2,500**	**32,000**	**1,200**	**160**	**1.2**	**3.1**	**8.5**	**250**	**880**	**8**	**8**	**0.8**	**2.4**	**24**	**77**	**0.7**	**6.6**
SB-3 @ 12Ft	4/8/13	12	12	NA	0.00070 U	0.00070 U	0.00077 U	0.0021 U	0.00070 U	6.1 U	0.065 U	0.065 U	0.041 U	0.0081 U	0.041 U	0.065 U	0.065 U	0.065 U	0.065 U	0.041 U	0.041 U	-	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U
SB-9 @ 4Ft	4/8/13	12	4	<1	0.00074 U	0.00074 U	0.00082 U	0.0023 U	0.00074 U	10.6	0.058 U	0.058 U	0.036 U	0.0073 U	0.036 U	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.036 U	-	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U

Notes: SCTLs = Soil Cleanup Target Levels per Chapter 62-777, Table II, Florida Administrative Code
ft bls = feet below land surface
mg/kg = milligrams per kilogram
MTBE = methyl tertiary butyl ether
NA = not analyzed
ppm = parts per million
TRPH = total recoverable petroleum hydrocarbons
Bold indicates exceedance of Industrial SCTLs
Bold indicates SCTL exceeding Residential Criteria
Bold and Italics indicates exceedance of Leachability SCTLs
Flagged constituent data qualifers can be reviewed with attached laboratory final report
Blank = No data or not analyzed for that specific parameter
U = The compound was not detected
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
* = Equivalent concentration was calculated as the sum of each Polycyclic Aromatic Hydrocarbon concentration times its Toxic Equivalency Factor as taken from the February 2005 *Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.* If the analyte was not detected half the reporting limit is listed in ***bold italics***

TABLE 5: MONITOR WELL CONSTRUCTION DETAILS

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Well No.	Date Drilled	Installation Method	Total Well Depth (ft)	Screened Interval (ft bls)	Well Diameter (in)	Lithology of Screened Interval
MW-6	07/12/13	Direct Push	15	5-15	2	Sand

Notes:
ft = feet
ft bls = feet below land surface
in = inches
DPT = Direct Push Technology
* See detailed boring logs
Existing wells MW-1 through 5 were not installed by Shaw; thus their details are not included

Florida Department of Environmental Protection -- Bureau of Waste Cleanup -- Petroleum Cleanup Section

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

Sample		Laboratory Analysis (µg/L)																									
ID Number	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TRPH	Lead	EDB	1,2-DCA	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd) pyrene	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene	Phenanthrene	Pyrene
GCTLs		**1**	**40**	**30**	**20**	**20**	**5,000**	**15**	**0.02**	**3**	**20**	**210**	**2,100**	**0.05**	**0.2**	**0.05**	**210**	**0.5**	**4.8**	**0.005**	**280**	**280**	**0.05**	**14**	**28**	**28**	**210**	**210**
NADCs		**100**	**400**	**300**	**200**	**200**	**50,000**	**150**	**2**	**300**	**200**	**2,100**	**21,000**	**5**	**20**	**5**	**2,100**	**50**	**480**	**0.5**	**2,800**	**2,800**	**5**	**140**	**280**	**280**	**2,100**	**2,100**
MW-1	04/15/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	140 U	N/A	N/A	N/A	0.38 U	0.38 U	0.24 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.24 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.24 U	0.24 U
MW-2	04/15/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	240 U	N/A	N/A	N/A	0.39 U	0.39 U	0.25 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.25 U	0.39 U	0.039 U	0.39 U	0.39 U	0.39 U	0.25 U	0.25 U
MW-3	04/15/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	210 U	N/A	N/A	N/A	0.39 U	0.39 U	0.24 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.24 U	0.39 U	0.039 U	0.39 U	0.39 U	0.39 U	0.24 U	0.24 U
MW-5	04/15/13	**4.8**	0.20 U	3.3	0.50 U	0.34 (I)	446	N/A	N/A	N/A	0.40 U	0.40 U	0.25 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.25 U	0.40 U	0.040 U	**15.3**	2.3	2.2	0.25 U	0.25 U
MW-6	07/15/13	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	0.150 (I)	NA	NA	NA	0.32 U	0.32 U	0.20 U	0.032 U	0.032 U	0.032 UV	0.032UV	0.032 UV	0.032 UV	0.032 U	0.20 U	0.32 U	0.032 UV	0.32 U	0.32 U	0.32 U	0.20 U	0.20 U

Notes: GCTLs = Groundwater Cleanup Target Levels per Chapter 62-777, Table I, Florida Administrative Code (FAC)
NADCs = Natural Attenuation Default Concentrations per Chapter 62-777, Table V, FAC
µg/L = micrograms per liter
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-Dibromoethane
MTBE = methyl tertiary butyl ether
TRPH = total recoverable petroleum hydrocarbons
Flagged constituent data qualifers can be reviewed with attached laboratory final report.
Bold indicates GCTLs exceeded
Bold indicates NADCs exceeded
NA = not analyzed for that specific parameter.
U = The compound was not detected.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

TABLE 7: GROUNDWATER ELEVATION DATA

Facility Name: 7-Eleven Store No. 34786 **Facility ID No.: 59/9045623**

WELL NO.	MW-1			MW-2			MW-3			MW-5			MW-6					
DIAMETER (inches)	2			2			8			2			2					
WELL DEPTH (ft bls)	16			15			15			15			15					
SCREEN INTERVAL (ft)	6-16			5-15			5-15			5-15			5-15					
TOC ELEVATION (ft)	100.17			100.03			99.84			100.00			98.78					
DATE	DTW	ELE	FP	DTW	ELE	FP	DTW	ELE	FP	DTW	ELE	FP	DTW	ELE	FP	DTW	ELE	FP
04/15/13	9.42	90.75	-	9.48	90.55	-	9.42	90.42	-	9.58	90.42	-	-	-	-			
04/25/13	8.81	91.36	-	8.75	91.28	-	8.48	91.36	-	9.11	90.89	-	-	-	-			
07/15/13	7.25	92.92	-	6.85	93.18	-	7.00	92.84	-	7.55	92.45	-	6.40	92.38	-			

Notes:

ft = foot or feet
bls = below land surface
DTW = Depth to Water
ELE = Elevation
FP = Free Product

FIGURES



REFERENCE:

7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP, CASSELBERRY, FLORIDA, DATED 1999.

SHAW ENVIRONMENTAL, INC.

1228 WINTER GARDEN VINELAND ROAD
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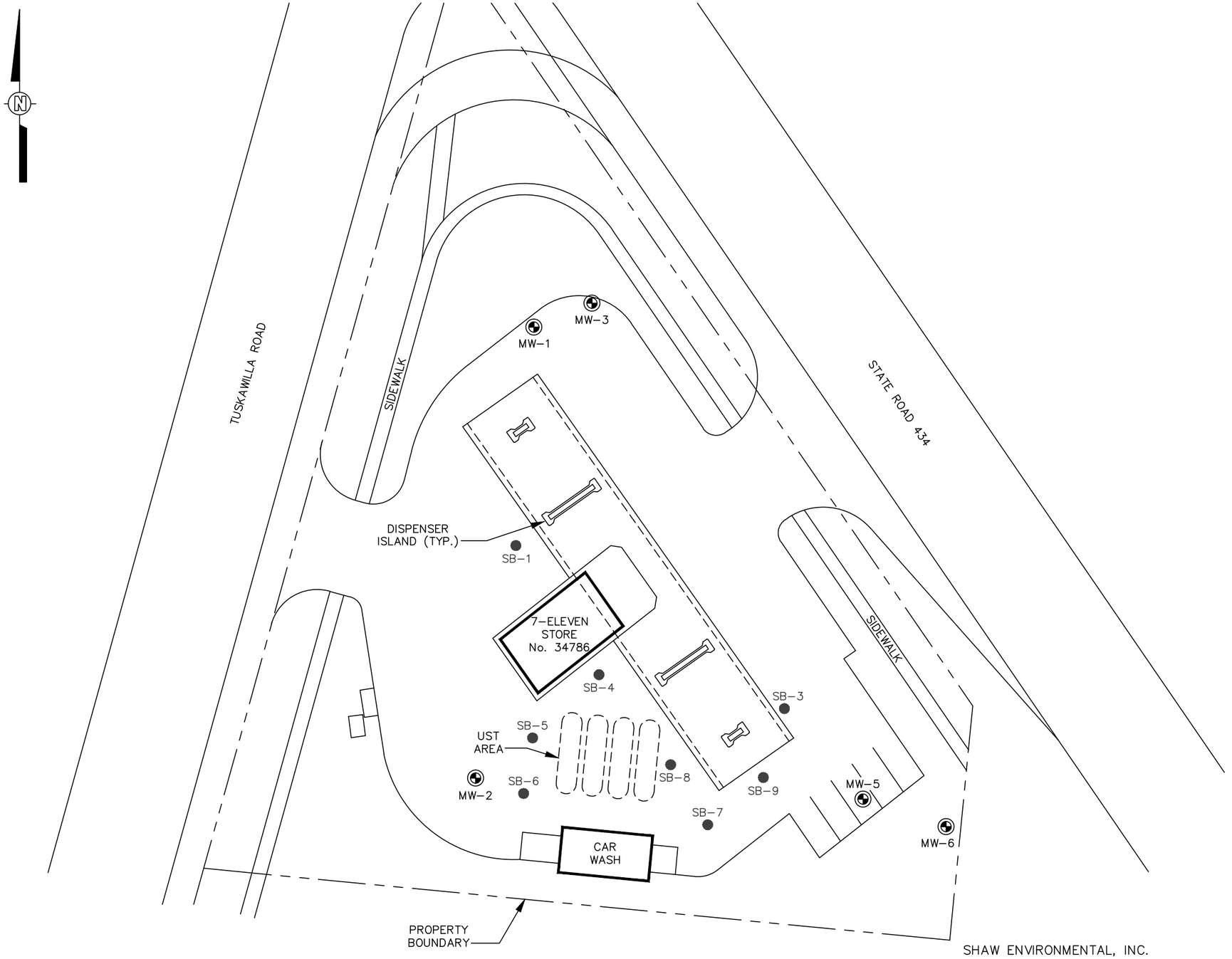
OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	7-22-13	9035A1

SITE LOCATION MAP

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434
WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	1



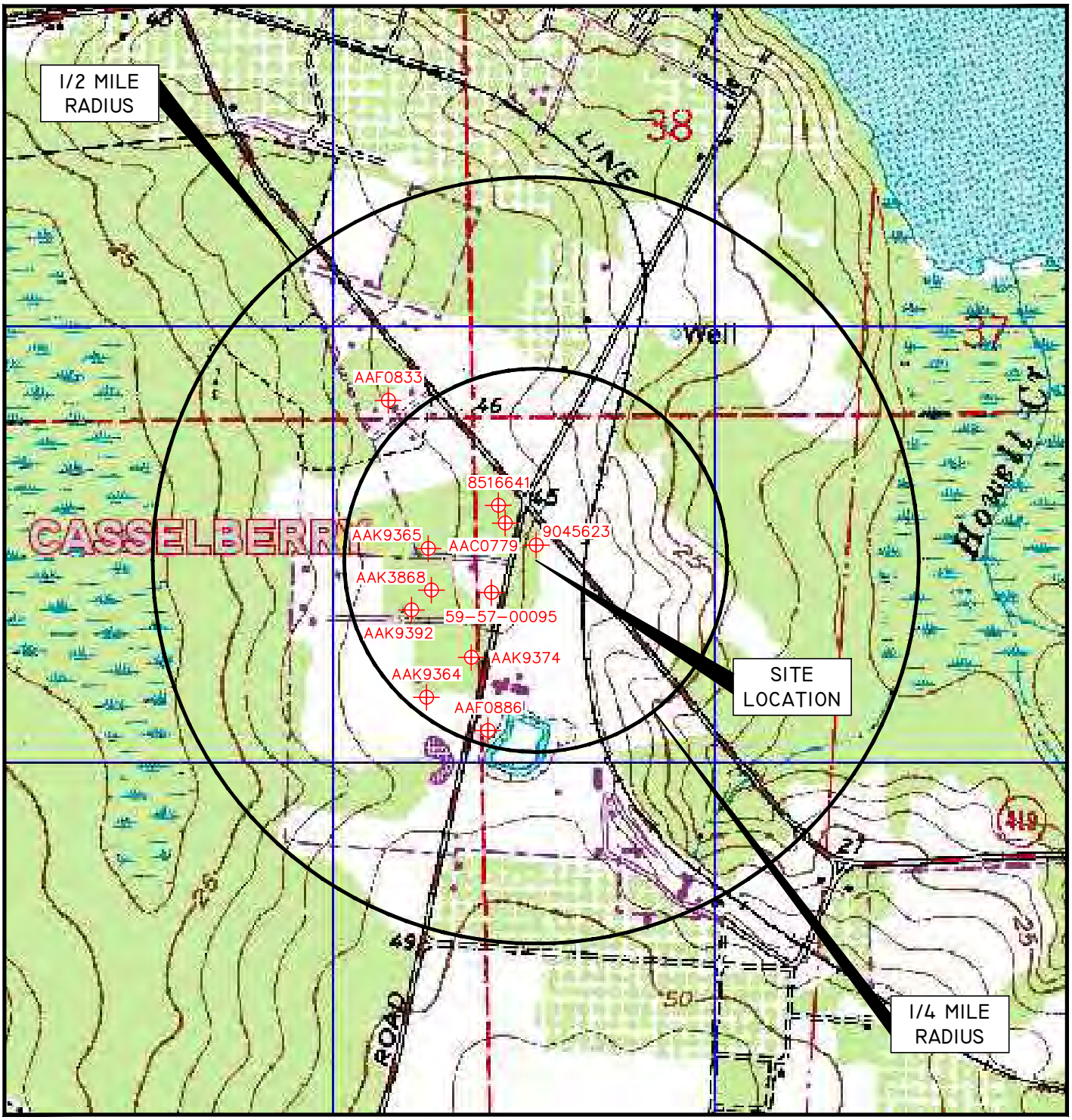
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OFFICE: WINTER GARDEN	DATE: 7-22-13	ACAD FILE: 9035B1

SITE MAP

CLIENT: 7-ELEVEN, INC. STORE No. 34786	PM: DM
LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA	

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	2



LEGEND:

SUPPLY WELL LOCATION

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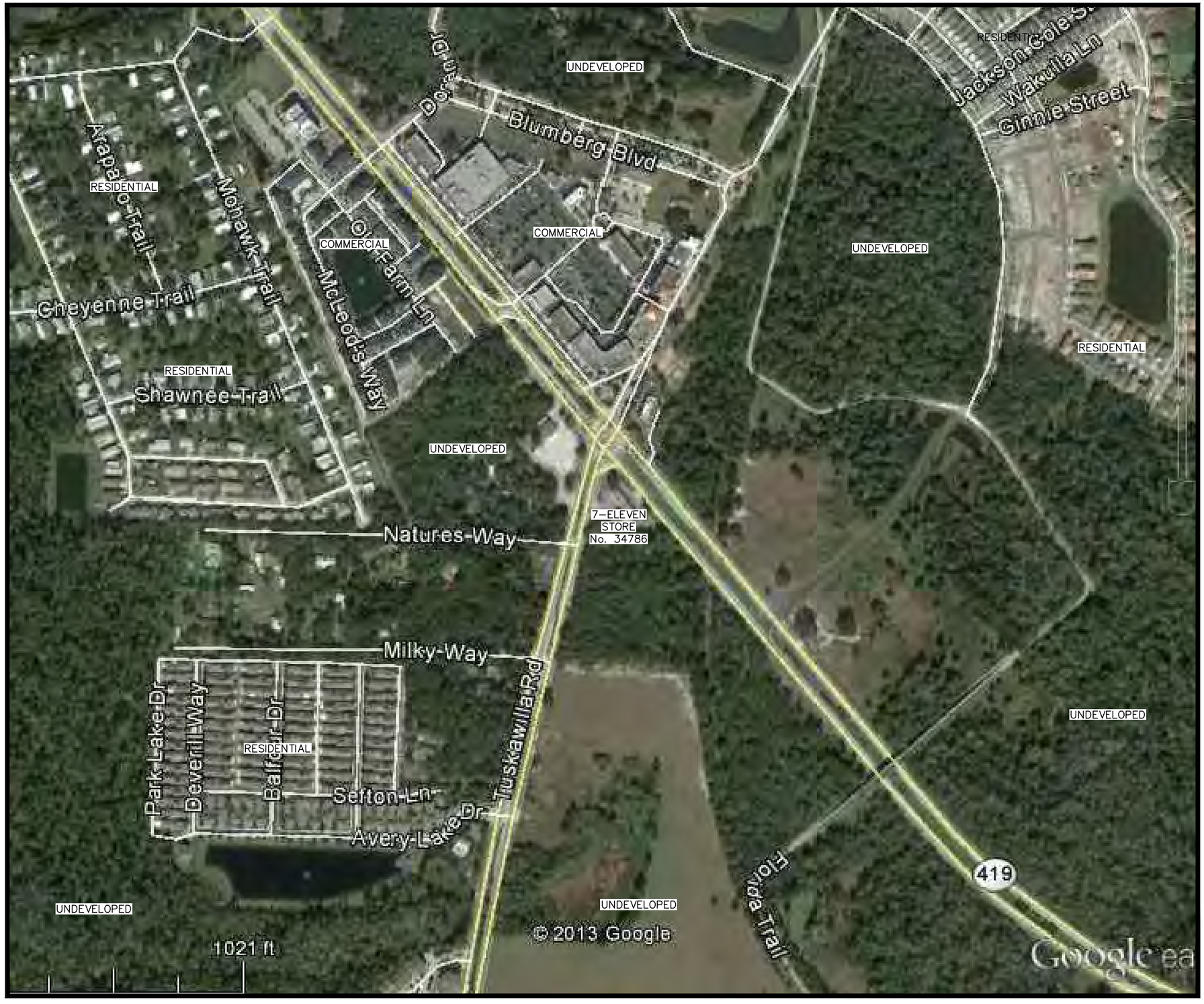
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WINTER GARDEN	7-22-13	9035A2

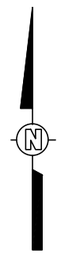
SUPPLY WELL AND FACILITIES SURVEY MAP

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434
WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	3





SCALE (FEET)

0 400 800

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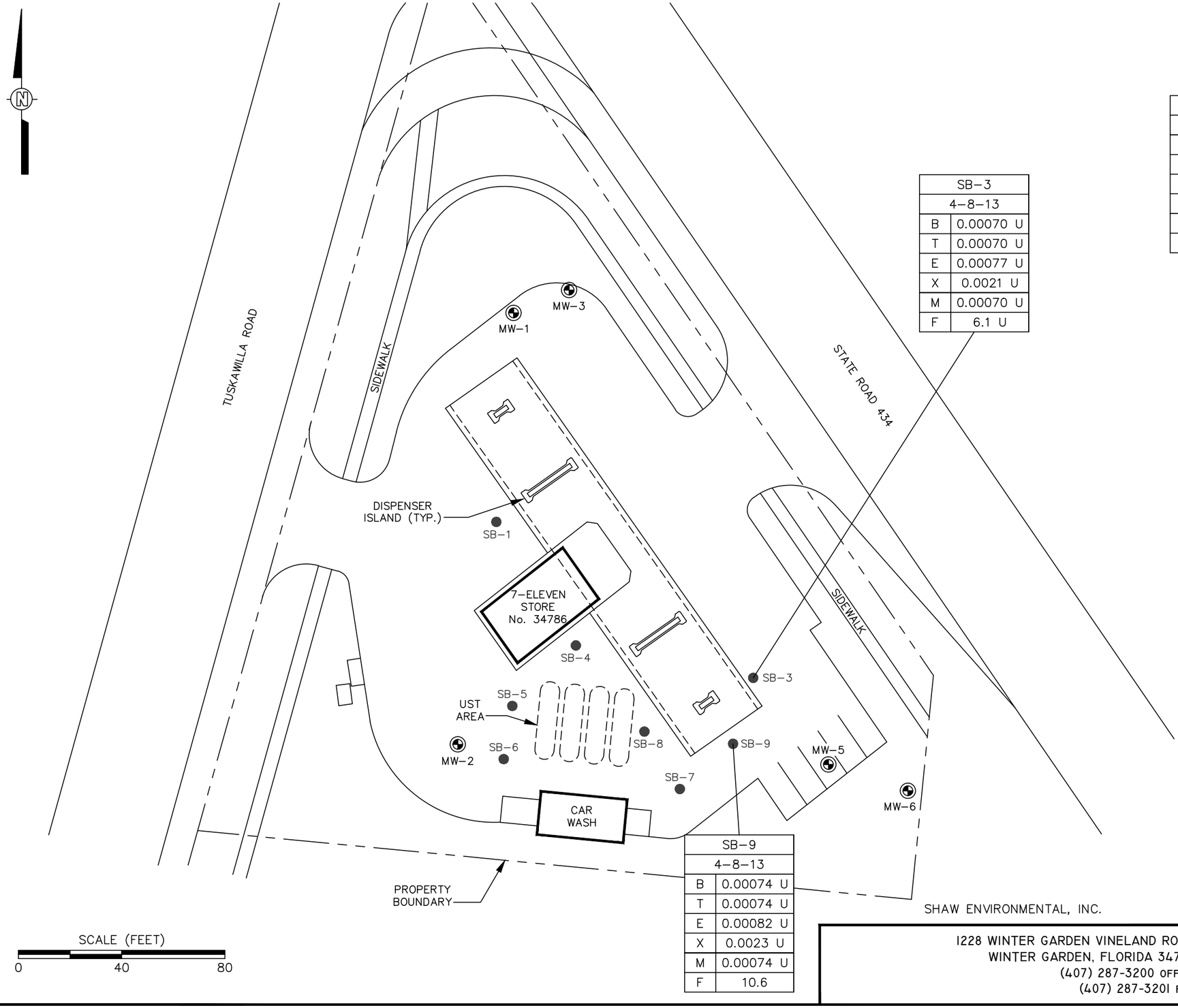
OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	7-22-13	9035B7

AREA LAND USE MAP

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434
WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	4



LEGEND:

- MONITORING WELL LOCATION
- SOIL BORING LOCATION

SB-3	WELL IDENTIFICATION
4-8-13	DATE OF SAMPLE
B 0.00070 U	BENZENE CONCENTRATION (mg/kg)
T 0.00070 U	TOLUENE CONCENTRATION (mg/kg)
E 0.00077 U	ETHYLBENZENE CONC. (mg/kg)
X 0.0021 U	TOTAL XYLENES CONC. (mg/kg)
M 0.00070 U	MTBE CONCENTRATION (mg/kg)
F 6.1 U	TRPH CONCENTRATION (mg/kg)

U — ANALYTE BELOW METHOD DETECTION LIMIT

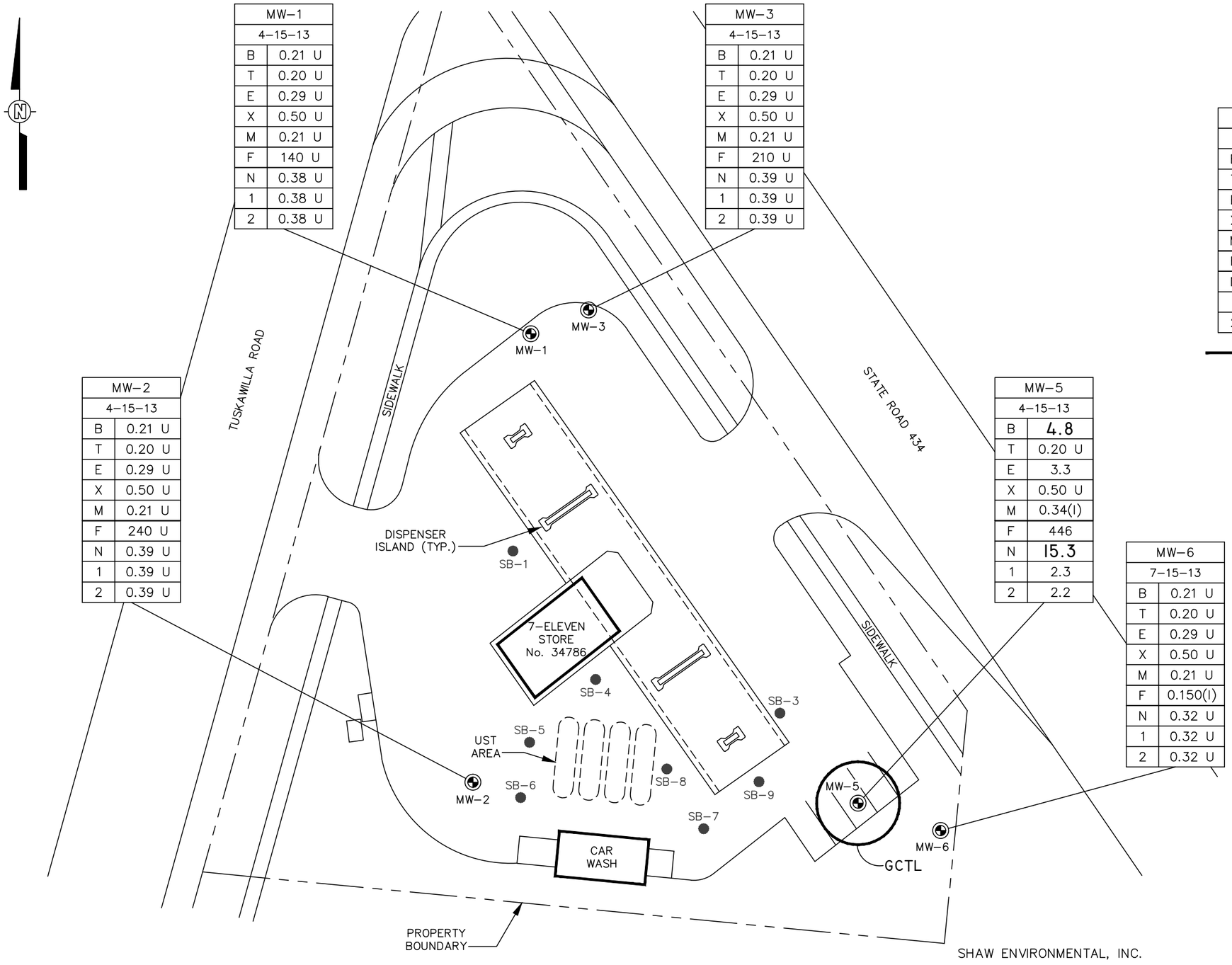
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OFFICE: WINTER GARDEN	DATE: 7-22-13	ACAD FILE: 9035B2

SOIL ANALYTICAL SUMMARY APRIL 8, 2013

CLIENT: 7-ELEVEN, INC. STORE No. 34786	PM: DM
LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA	

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	5



MW-1	
4-15-13	
B	0.21 U
T	0.20 U
E	0.29 U
X	0.50 U
M	0.21 U
F	140 U
N	0.38 U
1	0.38 U
2	0.38 U

MW-3	
4-15-13	
B	0.21 U
T	0.20 U
E	0.29 U
X	0.50 U
M	0.21 U
F	210 U
N	0.39 U
1	0.39 U
2	0.39 U

MW-2	
4-15-13	
B	0.21 U
T	0.20 U
E	0.29 U
X	0.50 U
M	0.21 U
F	240 U
N	0.39 U
1	0.39 U
2	0.39 U

MW-5	
4-15-13	
B	4.8
T	0.20 U
E	3.3
X	0.50 U
M	0.34(I)
F	446
N	15.3
1	2.3
2	2.2

MW-6	
7-15-13	
B	0.21 U
T	0.20 U
E	0.29 U
X	0.50 U
M	0.21 U
F	0.150(I)
N	0.32 U
1	0.32 U
2	0.32 U

LEGEND:

- MONITORING WELL LOCATION
- SOIL BORING LOCATION

MW-3	
4-15-13	
B	0.21 U
T	0.20 U
E	0.29 U
X	0.50 U
M	0.21 U
F	210 U
N	0.39 U
1	0.39 U
2	0.39 U

- WELL IDENTIFICATION
- DATE OF SAMPLE
- BENZENE CONCENTRATION (ug/L)
- TOLUENE CONCENTRATION (ug/L)
- ETHYLBENZENE CONCENTRATION (ug/L)
- TOTAL XYLENES CONCENTRATION (ug/L)
- MTBE CONCENTRATION (ug/L)
- TRPH CONCENTRATION (ug/L)
- NAPHTHALENE CONCENTRATION (ug/L)
- 1-METHYLNAPHTHALENE CONC. (ug/L)
- 2-METHYLNAPHTHALENE CONC. (ug/L)

GCTL — GCTL EXCEEDANCE CONTOUR

U — ANALYTE BELOW METHOD DETECTION LIMIT

(I) — RESULT IS GREATER THAN OR EQUAL TO METHOD DETECTION LIMIT (MDL) BUT LESS THAN THE REPORTING LIMIT (RL)

SCALE (FEET)
0 40 80

SHAW ENVIRONMENTAL, INC.
1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

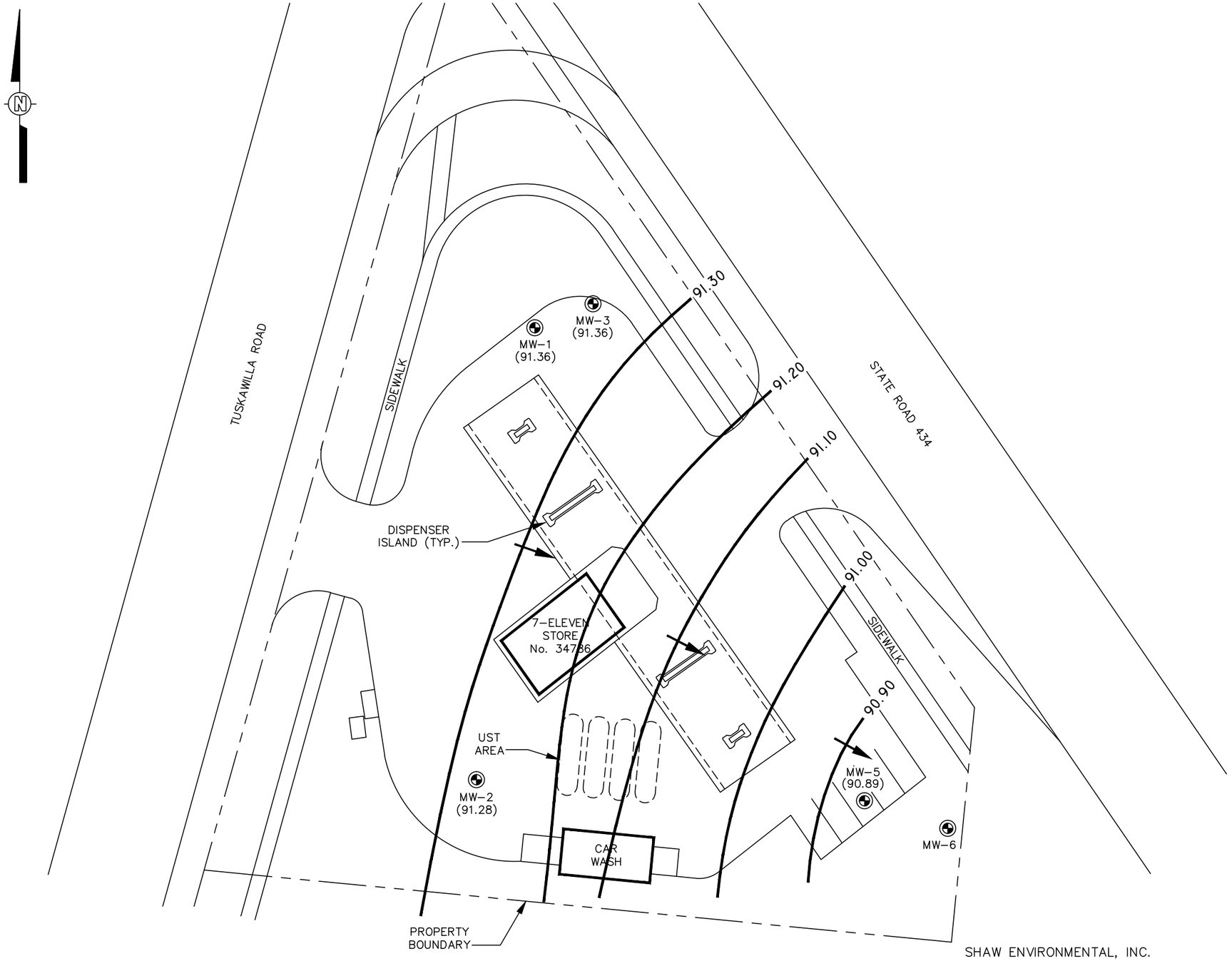
OFFICE: WINTER GARDEN	DATE: 7-29-13	ACAD FILE: 9035B3

GROUNDWATER ANALYTICAL MAP APRIL 15 AND JULY 15, 2013

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	6



LEGEND:

- MONITORING WELL LOCATION
- (90.89) GROUNDWATER ELEVATION (FEET)
- 91.30 GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

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1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

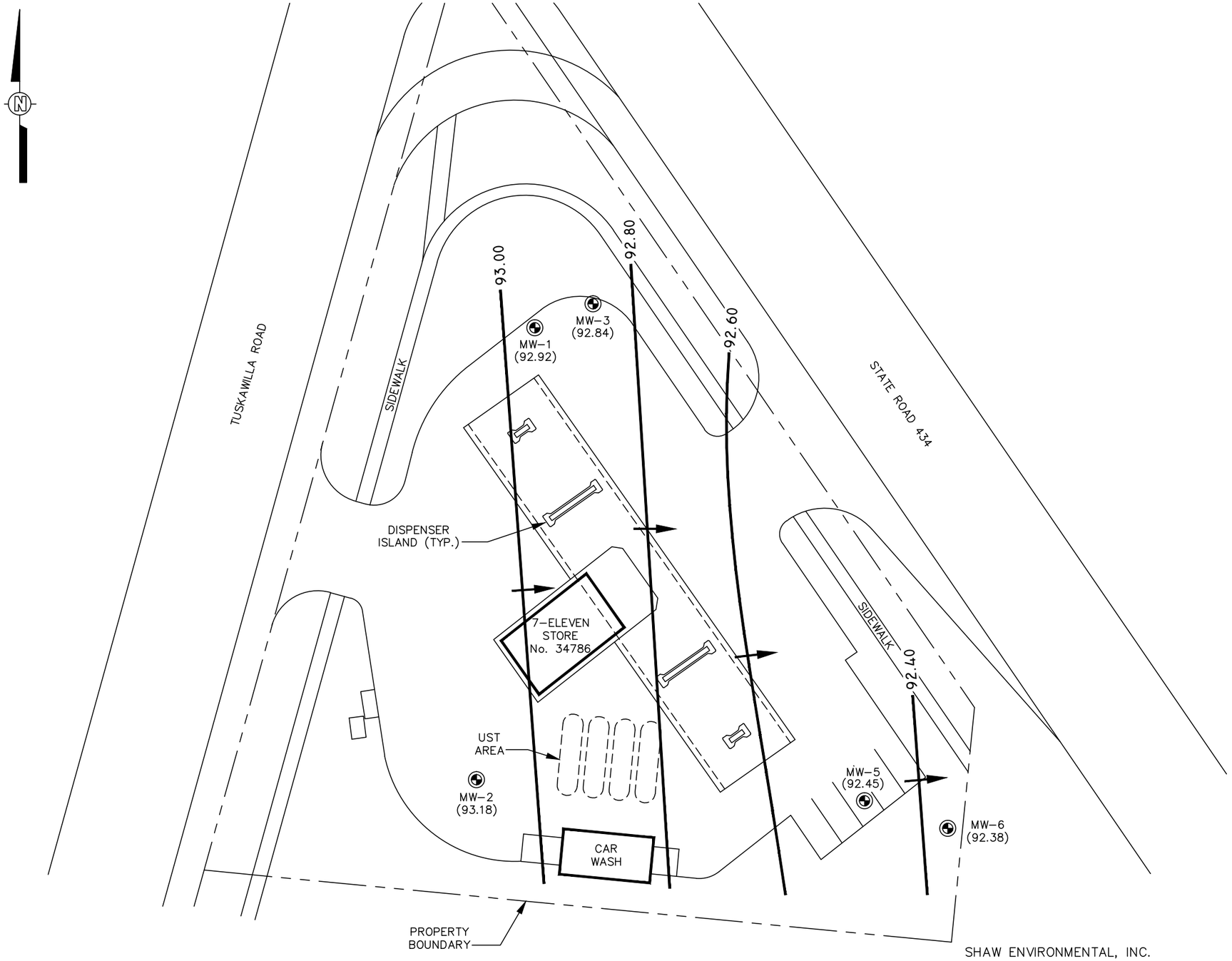
OFFICE: WINTER GARDEN	DATE: 7-22-13	ACAD FILE: 9035B4

GROUNDWATER ELEVATION CONTOUR MAP APRIL 25, 2013

CLIENT:	PM:
7-ELEVEN, INC. STORE No. 34786	DM

LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	7



LEGEND:

- ⊕ MONITORING WELL LOCATION
- (92.38) GROUNDWATER ELEVATION (FEET)
- —92.60— GROUNDWATER ELEVATION CONTOUR
- → GROUNDWATER FLOW DIRECTION

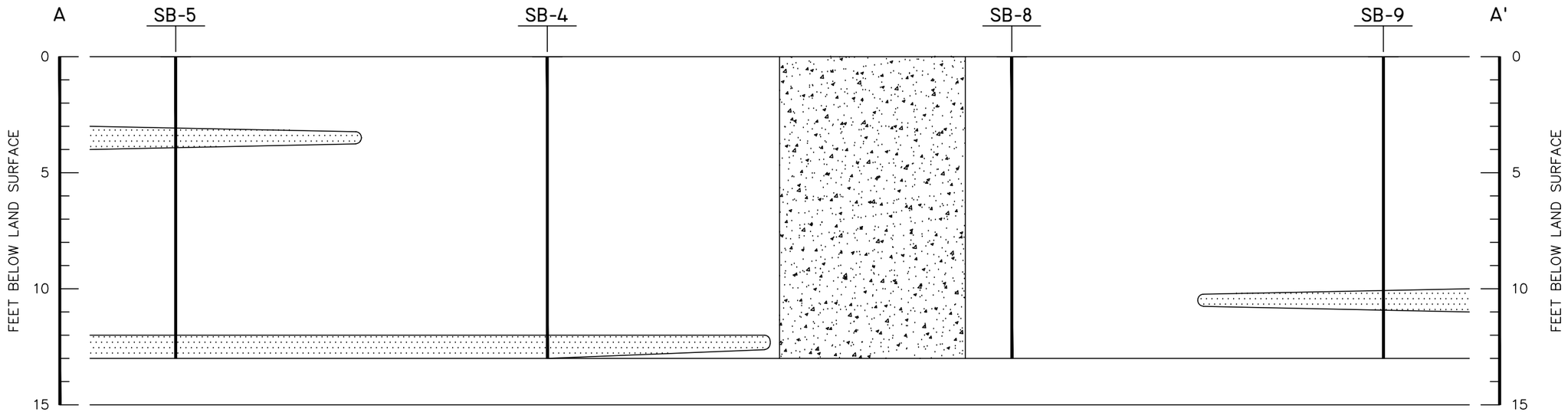
SHAW ENVIRONMENTAL, INC.
1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

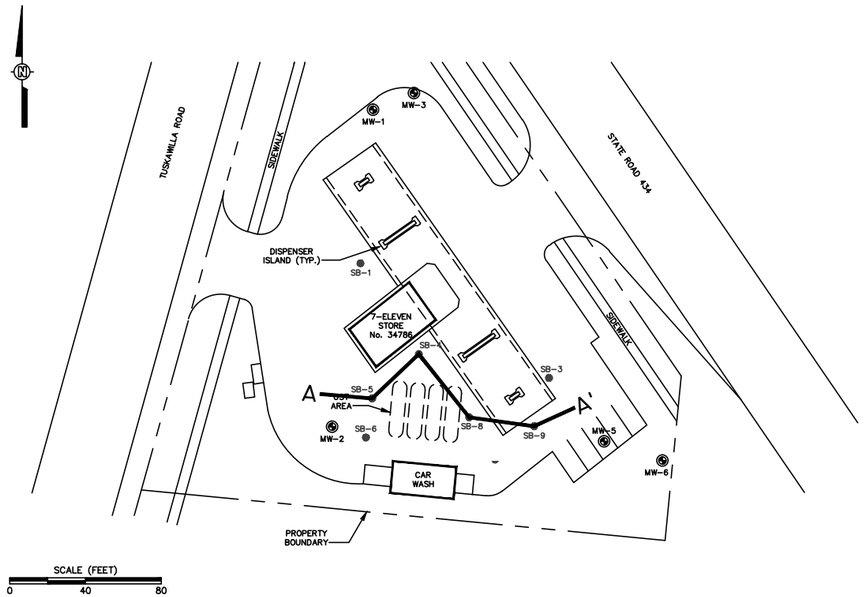
OFFICE: WINTER GARDEN	DATE: 7-22-13	ACAD FILE: 9035B5

GROUNDWATER ELEVATION CONTOUR MAP JULY 15, 2013

CLIENT: 7-ELEVEN, INC. STORE No. 34786	PM: DM
LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA	

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	8





LEGEND:

- SILTY SAND
- TANK PIT
- FINE SAND

HORIZONTAL SCALE

0 10 20 FEET

VERTICAL SCALE

0 5 10 FEET

SHAW ENVIRONMENTAL, INC.

1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

OFFICE: WINTER GARDEN	DATE: 7-29-13	ACAD FILE: 9035B1

LITHOLOGICAL CROSS-SECTION A-A' APRIL 8, 2013

CLIENT: 7-ELEVEN, INC. STORE No. 34786	PM: DM
LOCATION: 1205 EAST STATE ROAD 434 WINTER SPRINGS, FLORIDA	

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	149035	9

APPENDIX A
DISCHARGE REPORTING FORM

Florida Department of Environmental Regulation

Twin Towers Office Bldg. 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

NOT ON PLT006 11 2-2-94 3-14-94

Discharge Reporting Form

#0333

Use this form to notify the Department of Environmental Regulation of:

1. Results of tank tightness testing that exceed allowable tolerances within ten days of receipt of test result.
2. Petroleum discharges exceeding 25 gallons on pervious surfaces as described in Section 17-761.460 F.A.C. within one working day of discovery.
3. Hazardous substance (CERCLA regulated) discharges exceeding applicable reportable quantities established in 17-761.460(2) F.A.C., within one working day of the discovery.
4. Within one working day of discovery of suspected releases confirmed by: (a) released regulated substances or pollutants discovered in the surrounding area, (b) unusual and unexplained storage system operating conditions, (c) monitoring results from a leak detection method or from a tank closure assessment that indicate a release may have occurred, or (d) manual tank gauging results for tanks of 550 gallons or less, exceeding ten gallons per weekly test or five gallons averaged over four consecutive weekly tests.

Mail to the DER District Office in your area listed on the reverse side of this form.

PLEASE PRINT OR TYPE

Complete all applicable blanks

1. DER Facility ID Number: 599045623 2. Tank Number: _____ 3. Date: 5/3/92 3/94 4/94
4. Facility Name: MOBIL OIL CORPORATION 02-Q8M

   Facility Owner or Operator: MOBIL OIL CORPORATION

   Facility Address: 1205 STATE ROAD WINTER SPRINGS 32708

   Telephone Number: 407,366-3793 County: SEMINOLE

   Mailing Address: 3225 Gallows Road ZM. Fairfax, VA 22037
5. Date of receipt of test results or discovery: 4/26/93 month/day/year
6. Method of initial discovery. (circle one only)
   - A. Liquid detector (automatic or manual)
   - B. Vapor detector (automatic or manual)
   - C. Tightness test (underground tanks only).
   - D. Emptying and inspection.
   - E. Inventory control.
   - (F) Vapor/or visible signs of a discharge in the vicinity
   - G. Closure: _____ (explain)
   - H. Other: _____
7. Estimated number of gallons discharged: UNKNOWN AMOUNT OF FREE PRODUCT IN M/WEL
8. What part of storage system has leaked? (circle all that apply) A. Dispenser B. Pipe C. Fitting D. Tank (E) Unknown
9. Type of regulated substance discharged. (circle one)
   - A. leaded gasoline
   - (B) unleaded gasoline
   - C. gasohol
   - D. vehicular diesel
   - F. aviation gas
   - G. jet fuel
   - L. used/waste oil
   - M. diesel
   - O. new/lube oil
   - V. hazardous substance includes pesticides, ammonia, chlorine and derivatives (write in name or Chemical Abstract Service CAS number) _____
   - Z. other (write in name) _____
10. Cause of leak. (circle all that apply)
    - (A) Unknown
    - B. Split
    - C. Loose connection
    - D. Corrosion
    - E. Puncture
    - F. Installation failure
    - G. Spill _____
    - H. Overfill
    - I. Other (specify) _____
11. Type of financial responsibility. (circle one)
    - A. Third party insurance provided by the state insurance contractor
    - (B) Self-insurance pursuant to Chapter 17-769.500 F.A.C.
    - C. Not applicable
    - D. None

    5/3 CS
12. To the best of my knowledge and belief all information submitted on this form is true, accurate, and complete:

    MOBIL OIL CORPORATION
    Printed Name of Owner, Operator or Authorized Representative

    Robin A. Burns
    Signature of Owner-Operator or Authorized Representative

APPENDIX B
SOIL BORING LOGS,
WELL CONSTRUCTION AND DEVELOPMENT LOGS,
FDEP GROUNDWATER SAMPLING LOGS, AND
FIELD INSTRUMENT CALIBRATION RECORDS

March 24, 2020

David M. Press, P.G.
Environmental Protection Division
Orange County
3165 McCrory Place, Suite 200
Orlando, Florida 32803-3727

RE: Supplemental Site Assessment Report
Mobil- Winter Springs #731
1205 East State Road 434
Winter Springs, Seminole County, Florida
FDEP Facility ID #59/9045623

Dear Mr. Press:

FRS Environmental Remediation, Inc., dba Montrose Environmental Solutions (Montrose) has completed supplemental site assessment activities at the above referenced facility. Pertinent site features are depicted on Figure 1.

SITE HISTORY

On May 3, 1993, a Discharge Reporting Form (DRF) was filed indicating an unknown amount of free product was found in a monitoring well at the site.

A comprehensive Site Assessment Report (SAR) was submitted July 30, 2013 by Shaw Environmental, Inc. No OVA responses were detected above 0 ppm and no laboratory soil samples contained concentrations above Soil Cleanup Target Levels (SCTLs). Groundwater concentrations above Groundwater Cleanup Target Levels (GCTLs) was not identified with the exception of benzene (4.8 ug/L) in MW-5.

FIELD ACTIVITIES

Soil Boring Installation & Soil Screening

On March 13, 2020, Montrose personnel mobilized to the subject site and oversaw the advancement of three soil borings (SB-10 through SB-12). The soil borings were installed to eight feet below land surface (bls) utilizing a stainless-steel hand auger. SB-12 reached refusal at 4 feet bls. Soil samples from each boring were collected at two foot intervals and placed in 16 oz. glass (half-filled) mason jars and covered with aluminum foil. After allowing time for the organic vapors to accumulate in the headspace of each container, the samples were screened to determine the concentration of petroleum hydrocarbons with an Organic Vapor Analyzer equipped with a Photo-Ionization Detector

(OVA/PID). A summary of the organic vapor concentrations is presented in Table 1. The location of the soil borings and summary of organic vapor readings are depicted on Figure 2. Field notes and equipment calibration logs are included in Appendix A. Soil boring logs are included as Appendix B.

Monitoring Well Installation and Construction

On March 13, 2020, two shallow groundwater monitoring wells (MW-7 and MW-8) were installed at the locations shown on Figure 1. The monitoring wells were installed to a total depth of 15 feet bls and constructed with five feet of 2-inch diameter schedule 40 PVC well riser and ten feet of 2-inch diameter factory slotted well screen. After installation, the wells were purged onto an impervious surface until free of visible fines and completed flush to grade with a traffic rated manhole and a concrete well pad. A copy of the Well Construction and Development Logs are included with Appendix B.

Investigative Derived Waste (IDW) from monitoring wells was containerized in 55-gallon drums and transported offsite for disposal. Waste disposal documentation is provided in Appendix B. Prior to drum disposal, a preburn laboratory soil sample was collected for RCRA 4 metals. The laboratory analytical report is provided in Appendix C.

Soil Analytical Results

Three laboratory soil samples were collected during soil assessment activities. Soil samples were collected from SB-10 @ 2', SB-11 @ 2', and SB-12 @ 12' and submitted for laboratory analysis via EPA Method 8260 (BTEX/MTBE), EPA Method 8270 (PAHs), and FL-PRO (TRPH). Laboratory analytical results indicated that the concentration of all constituents were below SCTLs and/or laboratory Method Detection Limits (MDLs).

The soil laboratory results are summarized in Table 2. Laboratory analytical results are depicted on Figure 3. The laboratory analytical report and chain of custody are provided in Appendix C.

Monitoring Well Sampling

On March 18, 2020, Montrose personnel mobilized to the site and collected groundwater samples from monitoring wells MW-1 through MW-3, and MW-5 through MW-8. All sampling procedures were performed in accordance with the Department of Environmental Protection's Standard Operating Procedures for Groundwater Sampling (DEP-SOP-001/01, FS, 2200). All groundwater samples were collected using a peristaltic pump into laboratory supplied containers, placed on ice in a storage cooler, and transported to a certified lab for analysis. The groundwater samples were laboratory analyzed in accordance with EPA Method 8260 for BTEX/MTBE, EPA Method 8270 for PAHs, and FL-PRO for TRPH. Groundwater sampling logs and equipment calibration logs are included in Appendix A.

Groundwater Analytical Results

Groundwater analytical results indicated that all concentrations were below Groundwater Cleanup Target Levels (GCTLs) and/or laboratory Method Detection Limits (MDLs) during the March 18, 2020 groundwater sampling event. Analytical results are summarized on **Table 3** and are illustrated on **Figure 4**. A copy of the laboratory analytical report and chain of custody are included in **Appendix C**.

Water Table Measurements and Groundwater Flow

Montrose personnel collected depth-to-water measurements prior to groundwater sampling activities. The depth-to-water measurements and groundwater elevation calculations are summarized in **Table 4**. Based on the current data, groundwater flow in the surficial aquifer was generally to the southeast. A groundwater contour map is included as **Figure 5**.

CONCLUSIONS & RECOMMENDATIONS

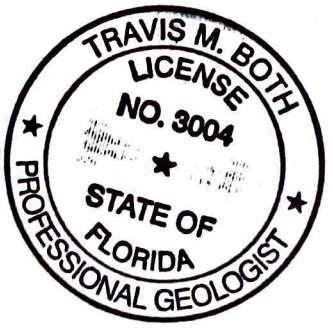
Based on soil and groundwater analytical results, the following conclusions and recommendations can be made regarding this site at this time:

- Soil contamination was not identified at the site.
- Groundwater impacts were not identified above GCTLs at the site. Previously impacted MW-5 has exhibited two consecutive clean rounds of groundwater sampling below GCTLs.
- At this time, the site qualifies for No Further Action. Montrose recommends submitting a change order to add in well abandonment to the current PO.

If you have any questions or comments, please contact this office at (813) 623-1557.

Sincerely,

Travis Both, P.G.
Project Manager
FL License No. 3004
Date: 3/25/2020



FIGURES

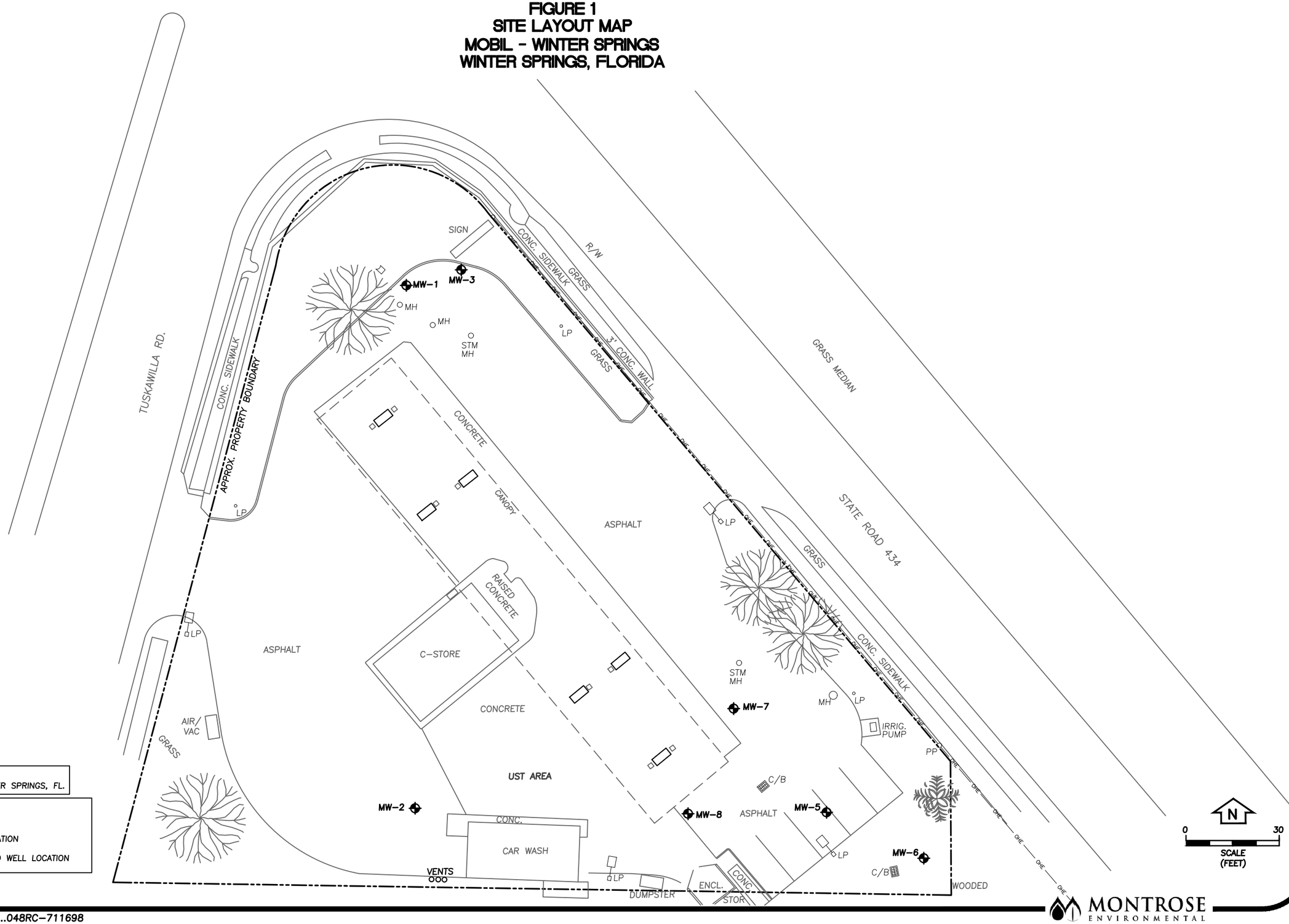
Florida Office
Environmental Solutions
120 E. Dr. MLK Jr. Blvd.
Tampa, FL 33603

T: 813.623.1557
F: 813.623.6320
info@montrose-env.com
www.montrose-env.com

Global Headquarters
1 Park Plaza
Suite 1000
Irvine, CA 92614

T: 949.988.3500
F: 949.988.3514
info@montrose-env.com
www.montrose-env.com

FIGURE 1
SITE LAYOUT MAP
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



FDEP FAC. ID #59/9045623
1205 EAST STATE ROAD 434, WINTER SPRINGS, FL.

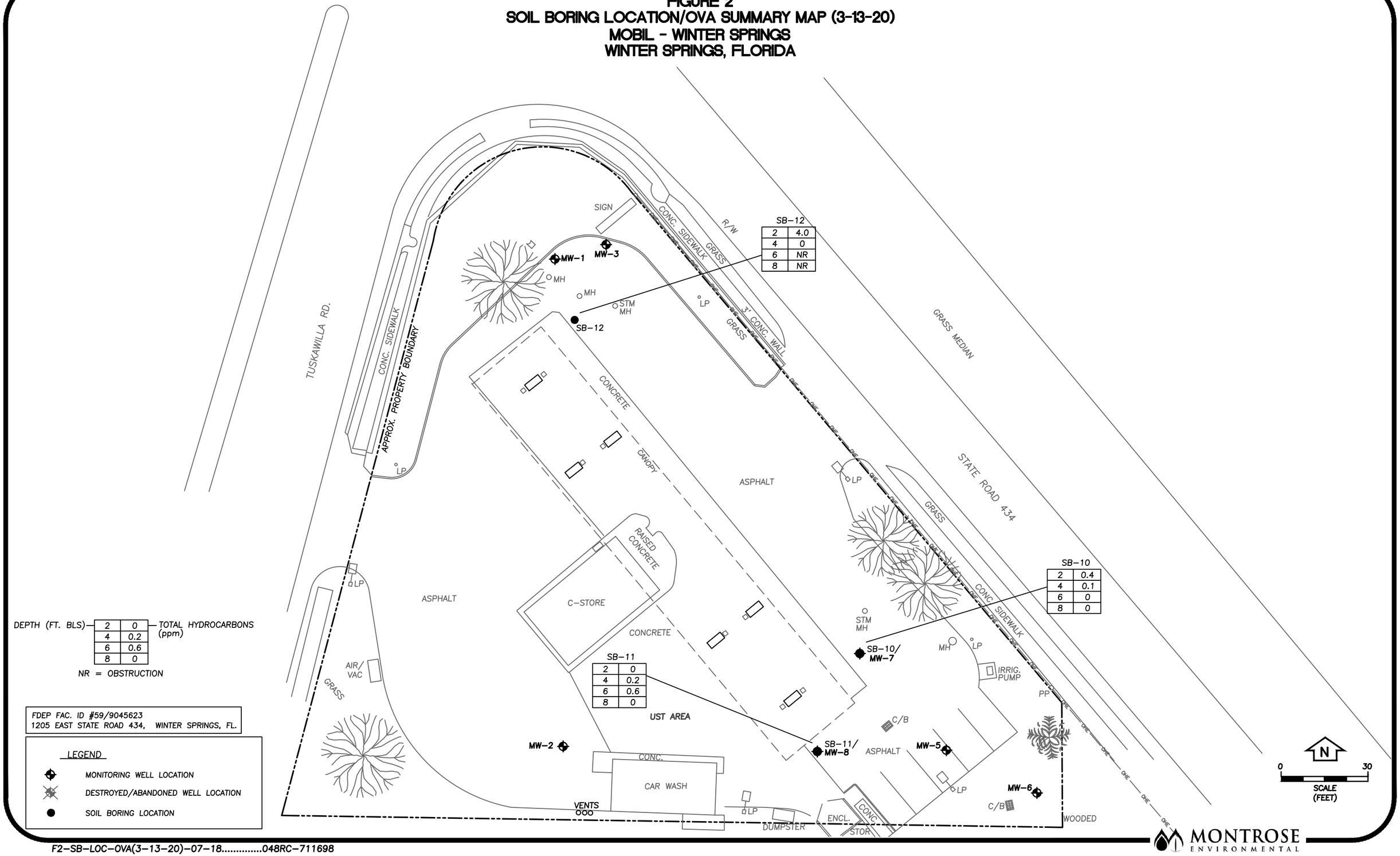
LEGEND

- MONITORING WELL LOCATION
- DESTROYED/ABANDONED WELL LOCATION

MONTROSE ENVIRONMENTAL

F1-SITELAY-07-18.....048RC-711698

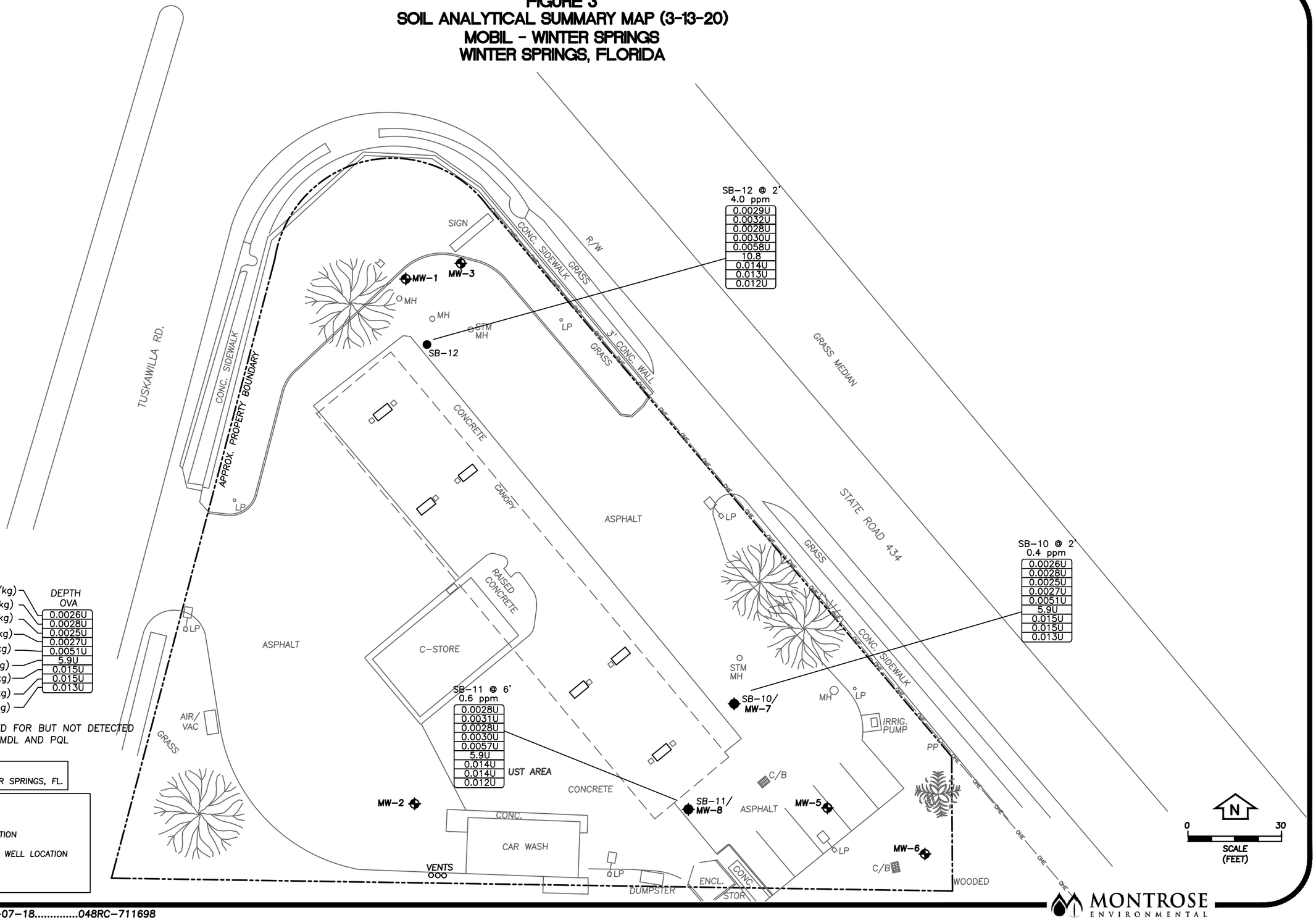
FIGURE 2
SOIL BORING LOCATION/OVA SUMMARY MAP (3-13-20)
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



F2-SB-LOC-OVA(3-13-20)-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

FIGURE 3
SOIL ANALYTICAL SUMMARY MAP (3-13-20)
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



	DEPTH OVA
BENZENE (mg/kg)	0.0026U
ETHYLBENZENE (mg/kg)	0.0028U
MTBE (mg/kg)	0.0025U
TOLUENE (mg/kg)	0.0027U
TOTAL XYLENES (mg/kg)	0.0051U
TRPH (mg/kg)	5.9U
1-METHYLNAPHTHALENE (mg/kg)	0.015U
2-METHYLNAPHTHALENE (mg/kg)	0.015U
NAPHTHALENE (mg/kg)	0.013U

U = THE COMPOUND WAS ANALYZED FOR BUT NOT DETECTED
(I) = THE COMPOUND IS BETWEEN MDL AND PQL

FDEP FAC. ID #59/9045623
1205 EAST STATE ROAD 434, WINTER SPRINGS, FL.

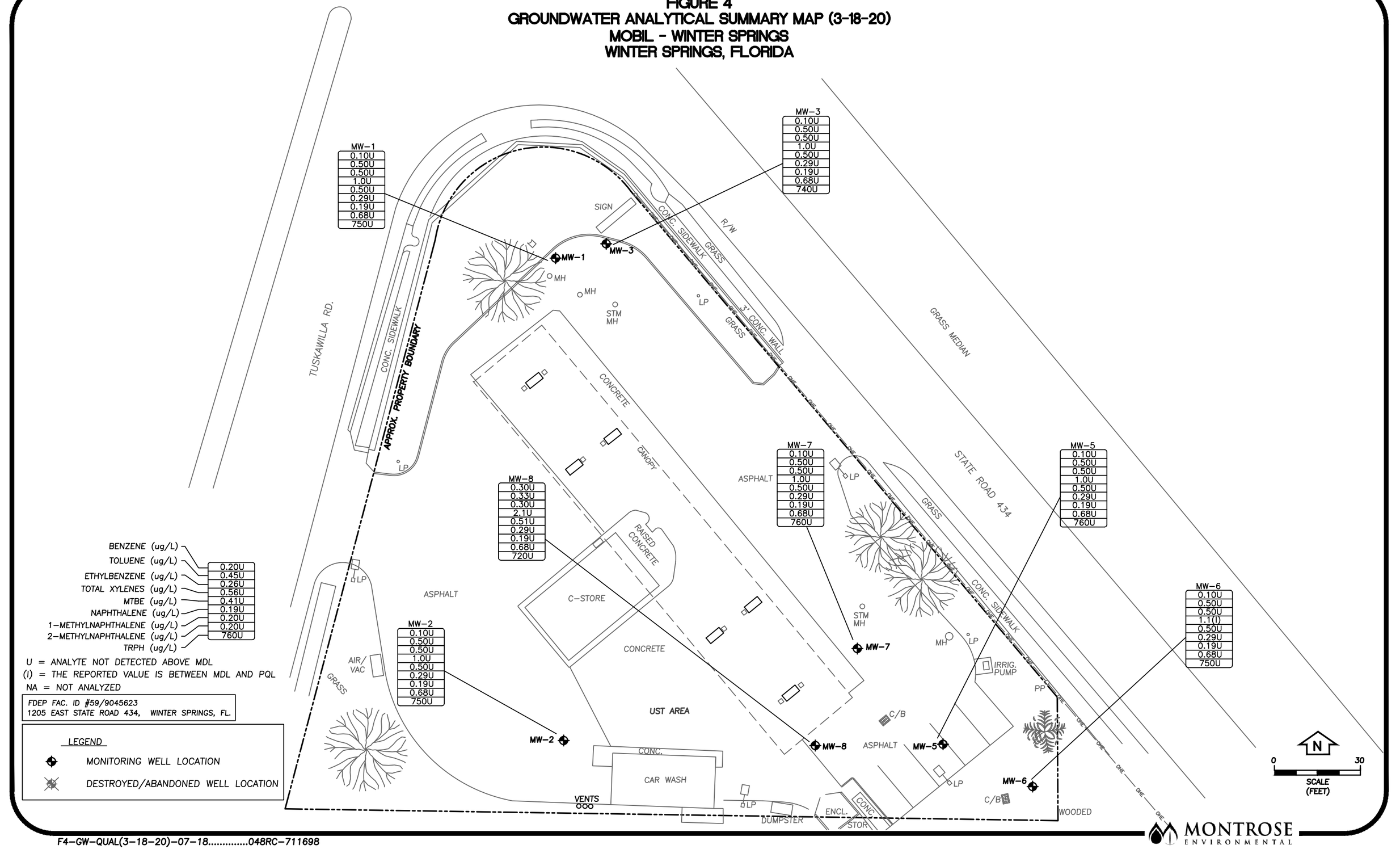
LEGEND

- MONITORING WELL LOCATION
- DESTROYED/ABANDONED WELL LOCATION
- SOIL BORING LOCATION

F3-SOIL-QUAL(3-13-20)-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

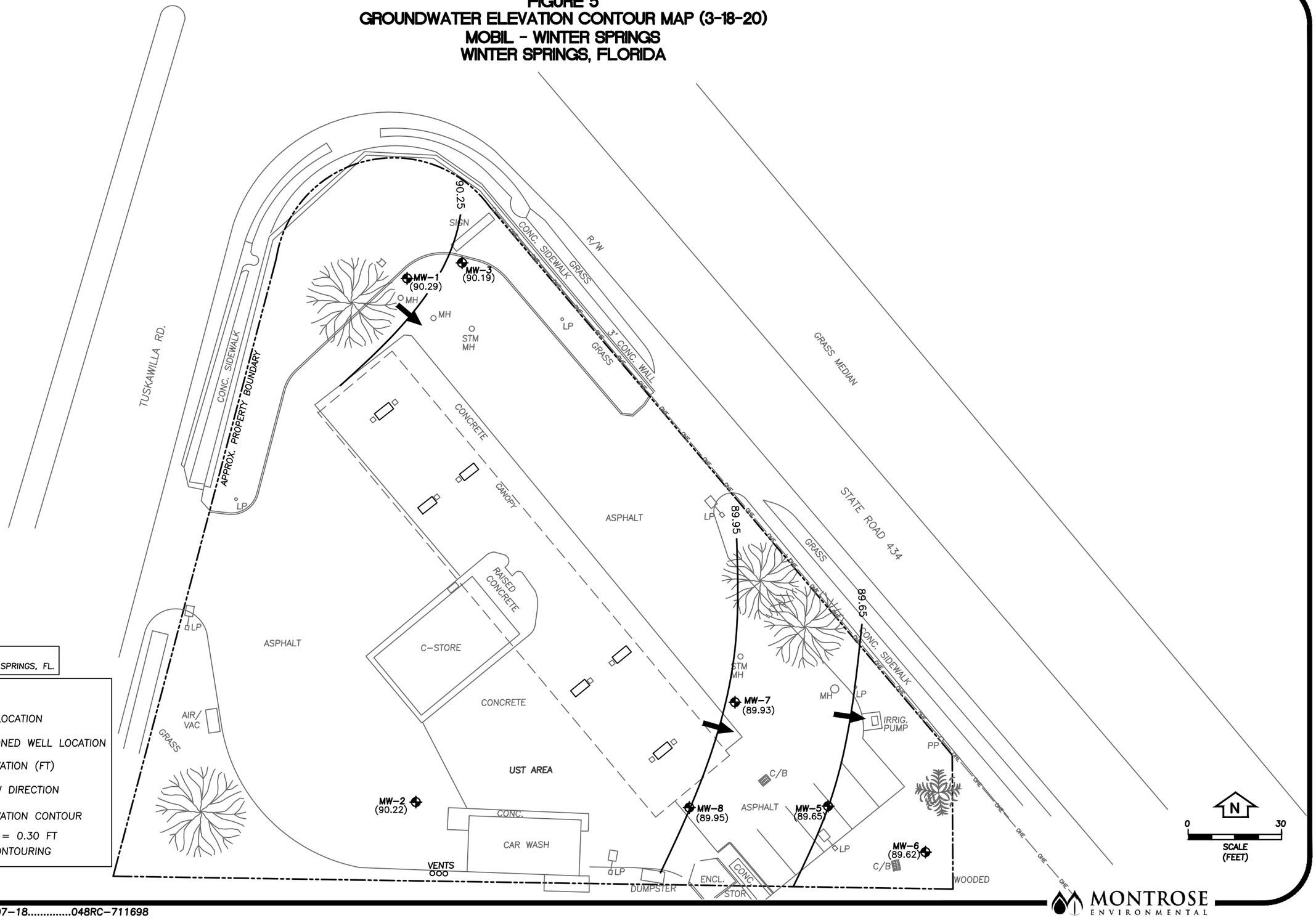
FIGURE 4
GROUNDWATER ANALYTICAL SUMMARY MAP (3-18-20)
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



F4-GW-QUAL(3-18-20)-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

FIGURE 5
GROUNDWATER ELEVATION CONTOUR MAP (3-18-20)
MOBIL - WINTER SPRINGS
WINTER SPRINGS, FLORIDA



F5-GW-ELEV(3-18-20)-07-18.....048RC-711698

MONTROSE ENVIRONMENTAL

TABLES

TABLE 1: SUMMARY OF OVA/PID FIELD SCREENING RESULTS

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

NQ=Not Qantifiable

Sample	Date	Depth (FBLS)	OVA/PID Screening Results* (ppm)	
			Total Hydrocarbons	Comments
SB-1	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	0.4	
		13	<1	
SB-3	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	NQ	
		12	NQ	
		13	43.0	
SB-4	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-5	4/8/2013	1	<1	
		2	0.5	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	

TABLE 1: SUMMARY OF OVA/PID FIELD SCREENING RESULTS

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

NQ=Not Qantifiable

Sample	Date	Depth (FBLS)	OVA/PID Screening Results* (ppm)	
			Total Hydrocarbons	Comments
SB-6	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-7	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-8	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-9	4/8/2013	1	<1	
		2	<1	
		3	<1	
		4	<1	
		5	<1	
		6	<1	
		7	<1	
		8	<1	
		9	<1	
		10	<1	
		11	<1	
		12	<1	
		13	<1	
SB-10	7/12/2013	1	<1	
		3	<1	
		5	<1	
		7		No Recovery
		9		No Recovery
		11	<1	
		13	<1	
		15	<1	
SB-10	3/13/2020	2	0.4	lab sample
		4	0.1	
		6	0	
		8	0	
SB-11	3/13/2020	2	0	
		4	0.2	
		6	0.6	lab sample
		8	0	

TABLE 1: SUMMARY OF OVA/PID FIELD SCREENING RESULTS

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

NQ=Not Qantifiable

Sample	Date	Depth (FBLS)	OVA/PID Screening Results* (ppm)	
			Total Hydrocarbons	Comments
SB-12	3/13/2020	2	4.0	lab sample
		4	0	
		6		Obstruction
		8		Obstruction

TABLE 2: SOIL SAMPLE ANALYTICAL SUMMARY

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

Analytical Results = mg/kg
The compound was analyzed for but not detected = U
The reported value is between the laboratory method detection limit and the laboratory practical quantitiation limit = I
No Results = NR
Not Analyzed = NA

Sample ID	Depth (ft)	OVA (ppm)	Date	Benzene	Ethylbenzene	MTBE	Toluene	Total xylenes	TRPH	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)flouranthene	Benzo(ghi)perylene	Benzo(k)flouranthene	Chrysene	Dibenzo(a,h)anthracene	Flouranthene	Flourene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene Equivalency
Soil Cleanup Target Levels (Direct Exp. Residential)				**1.2**	**1,500**	**4,400**	**7,500**	**130**	**460**	**200**	**210**	**2,400**	**1,800**	**21,000**	**#**	**0.1**	**#**	**2,500**	**#**	**#**	**#**	**3,200**	**2,600**	**#**	**55**	**2,200**	**2,400**	**0.1**
Soil Cleanup Target Levels (Leachability)				**0.007**	**0.6**	**0.09**	**0.5**	**0.2**	**340**	**3.1**	**8.5**	**2.1**	**27**	**2,500**	**0.8**	**8**	**2.4**	**32,000**	**24**	**77**	**0.7**	**1,200**	**160**	**6.6**	**1.2**	**250**	**880**	**0.7**
SB-3	12	NA	4/8/2013	0.00070 U	0.00077 U	0.00070 U	0.00070 U	0.0021 U	6.1 U	0.065 U	0.065 U	0.065 U	0.065 U	0.041 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.041 U	0.065 U	0.0081 U	0.065 U	0.041 U	0.041 U	NA
SB-9	4	<1	4/8/2013	0.00074 U	0.00082 U	0.00074 U	0.00074 U	0.0023 U	10.6	0.058 U	0.058 U	0.058 U	0.058 U	0.036 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U	0.036 U	0.058 U	0.0073 U	0.058 U	0.036 U	0.036 U	NA
SB-10	2	0.4	3/13/2020	0.0026 U	0.0028 U	0.0025 U	0.0027 U	0.0051 U	5.9 U	0.015 U	0.015 U	0.013 U	0.012 U	0.014 U	0.011 U	0.0096 U	0.010 U	0.0097 U	0.010 U	0.012 U	0.0089 U	0.013 U	0.014 U	0.0088 U	0.013 U	0.013 U	0.012 U	NA
SB-11	6	0.6	3/13/2020	0.0028 U	0.0031 U	0.0028 U	0.0030 U	0.0057 U	5.4 U	0.014 U	0.014 U	0.012 U	0.011 U	0.013 U	0.010 U	0.0089 U	0.0095 U	0.0090 U	0.0095 U	0.011 U	0.0082 U	0.012 U	0.013 U	0.0082 U	0.012 U	0.012 U	0.011 U	NA
SB-12	2	4.0	3/13/2020	0.0029 U	0.0032 U	0.0028 U	0.0030 U	0.0058 U	10.8	0.014 U	0.013 U	0.012 U	0.011 U	0.012 U	0.010 U	0.0087 U	0.0093 U	0.0088 U	0.0093 U	0.011 U	0.0080 U	0.011 U	0.012 U	0.0080 U	0.012 U	0.011 U	0.011 U	NA

 # = Concentration converted to benzo(a)pyrene equivalent column

TABLE 3: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY

Facility Name: Mobil-Winter Springs #731
Facility ID#: 59/9045623

Analytical Results = ug/L
NA = Not Analyzed
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
U = Compound was analyzed but not detected
J = Estimated Result

Sample Location	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	FL-PRO TRPH	Lead	EDB	1,2-DCA	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Phenanthrene	Pyrene
GCTLs		**1**	**40**	**30**	**20**	**20**	**5000**	**15**	**0.02**	**3**	**20**	**210**	**2100**	**0.05**	**0.2**	**0.05**	**210**	**0.5**	**4.8**	**0.005**	**280**	**280**	**0.05**	**14**	**28**	**28**	**210**	**210**
NADCs		**100**	**400**	**300**	**200**	**200**	**50000**	**150**	**2**	**300**	**200**	**2100**	**21000**	**5**	**20**	**5**	**2100**	**50**	**480**	**0.5**	**2800**	**2800**	**5**	**140**	**280**	**280**	**2100**	**2100**
MW-1	4/15/2013	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	140 U				0.38 U	0.38 U	0.24 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.24 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.24 U	0.24 U
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.19 U	0.20 U	0.20 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	750 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-2	4/15/2013	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	240 U				0.39 U	0.39 U	0.25 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.25 U	0.39 U	0.039 U	0.39 U	0.39 U	0.39 U	0.25 U	0.25 U	
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.18 U	0.19 U	0.19 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	750 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-3	4/15/2013	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	210 U				0.39 U	0.39 U	0.24 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.24 U	0.39 U	0.039 U	0.39 U	0.39 U	0.39 U	0.24 U	0.24 U	
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.18 U	0.19 U	0.18 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	740 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-5	4/15/2013	**4.8**	0.20 U	3.3	0.50 U	0.34 I	446				0.40 U	0.40 U	0.25 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.25 U	0.40 U	0.040 U	**15.3**	2.3	2.2	0.25 U	0.25 U	
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.18 U	0.19 U	0.18 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	760 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-6	7/15/2013	0.21 U	0.20 U	0.29 U	0.50 U	0.21 U	0.150 I				0.32 U	0.32 U	0.20 U	0.032 U	0.032 U	0.032 UV	0.032 U	0.032 UV	0.032 U	0.032 U	0.20 U	0.32 U	0.032 UV	0.32 U	0.32 U	0.32 U	0.20 U	0.20 U	
	8/23/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U																		0.18 U	0.19 U	0.19 U			
	3/18/2020	0.10 U	0.50 U	0.50 U	1.1 I	0.50 U	750 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-7	3/18/2020	0.10 U	0.50 U	0.50 U	1.0 U	0.50 U	760 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	
MW-8	3/18/2020	0.30 U	0.33 U	0.30 U	2.1 U	0.51 U	720 U				0.040 U	0.030 U	0.043 U	0.055 U	0.12 U	0.027 U	0.15 U	0.16 U	0.026 U	0.13 U	0.018 U	0.088 U	0.12 U	0.29 U	0.19 U	0.68 U	0.16 U	0.032 U	

TABLE 4: GROUNDWATER ELEVATION DATA

Facility Name: Mobil-Winter Springs #731
Facility ID: 59/9045623

All Measurements = Feet
FP = Free Product
UK = Unknown
NM= Not Measured

WELL NO.	MW-1		MW-2		MW-3		MW-5		MW-6	
DIAMETER	2	in.	2	in.	8	in.	2	in.	2	in.
WELL DEPTH	16.00	feet	15.00	feet	15.00	feet	15.00	feet	15.00	feet
SCREEN INTERVAL	6-16	feet	5-15	feet	5-15	feet	5-15	feet	5-15	feet
TOC ELEVATION	100.17	feet	100.03	feet	99.84	feet	100.00	feet	98.78	feet

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
4/15/2013	90.75	9.42		90.55	9.48		90.42	9.42		90.42	9.58				
4/25/2013	91.36	8.81		91.28	8.75		91.36	8.48		90.89	9.11				
7/15/2013	92.92	7.25		93.18	6.85		92.84	7.00		92.45	7.55		92.38	6.40	
3/18/2020	90.29	9.88		90.22	9.81		90.19	9.65		89.65	10.35		89.62	9.16	

WELL NO.	MW-7		MW-8												
DIAMETER	2	in.	2	in.		in.			in.			in.			in.
WELL DEPTH	15.00	feet	15.00	feet		feet			feet			feet			feet
SCREEN INTERVAL	5-15	feet	5-15	feet		feet			feet			feet			feet
TOC ELEVATION	100.24	feet	100.09	feet		feet			feet			feet			feet

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
3/18/2020	89.93	10.31		89.95	10.14										

WELL NO.															
DIAMETER			in.			in.			in.			in.			in.
WELL DEPTH			feet			feet			feet			feet			feet
SCREEN INTERVAL			feet			feet			feet			feet			feet
TOC ELEVATION			feet			feet			feet			feet			feet

DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP

APPENDIX A
Field Notes, Equipment Calibration Logs, and Groundwater Sampling Logs

Florida Office
Environmental Solutions
120 E. Dr. MLK Jr. Blvd.
Tampa, FL 33603

T: 813.623.1557
F: 813.623.6320
info@montrose-env.com
www.montrose-env.com

Global Headquarters
1 Park Plaza
Suite 1000
Irvine, CA 92614

T: 949.988.3500
F: 949.988.3514
info@montrose-env.com
www.montrose-env.com

Appendix iii

Sutton Crossing
Tuskawilla Rd & FL 434
Winter Springs, FL 32708

Inquiry Number: 7123398.2s
September 20, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Physical Setting Source Addendum	A-1
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

TUSKAWILLA RD & FL 434
WINTER SPRINGS, FL 32708

COORDINATES

Latitude (North):	28.6950110 - 28ˆ 41' 42.03''
Longitude (West):	81.2620680 - 81ˆ 15' 43.44''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	474399.5
UTM Y (Meters):	3174049.8
Elevation:	43 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	11610138 CASSELBERRY, FL
Version Date:	2018
East Map:	11610186 OVIEDO, FL
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20151017, 20150806
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
TUSKAWILLA RD & FL 434
WINTER SPRINGS, FL 32708

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	TOWN CENTER S.E.E.D.		BROWNFIELDS	Same	1 ft.
Reg	FORMER CENTRAL FLORI		BROWNFIELDS	Same	1107, 0.210, SSE
A1	EXXON MOBIL CORPORAT	1205 E STATE ROAD 43	EDR Hist Auto	Higher	1 ft.
A2	MOBIL R/S #10918	1205 E STATE ROAD 43	RGA LUST	Higher	1 ft.
A3	7-ELEVEN STORE #3478	1205 E STATE ROAD 43	RGA LUST	Higher	1 ft.
A4	MOBIL OIL CORP SS #Q	1205 E SR 434	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
A5	MOBIL #02-Q8M	1205 E HWY 434	RGA LUST	Higher	1 ft.
A6	MOBIL #02-Q8M	1205 E SR 434	RGA LUST	Higher	1 ft.
A7	MOBIL R/S # 10918	1205 E HWY 434	RGA LUST	Higher	1 ft.
A8	MOBIL-WINTER SPRINGS	1205 E STATE ROAD 43	LUST, UST, CLEANUP SITES, DWM CONTAM, Financial...	Higher	1 ft.
A9	FOREIGN CAR PARTS SE	1207 E STATE ROAD 43	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
A10		1205 STATE ROAD 434	HMIRS	Lower	1 ft.
11	1212 E. SR 434 DEBRI	1212 E. SR 434	SWF/LF	Lower	108, 0.020, NE
B12	SCRIMSHER PARCEL	E SR 434	DWM CONTAM, RESP PARTY	Lower	272, 0.052, SE
B13	WINTER SPRINGS CITY	80 MICHAEL BLAKE BLV	AST, Financial Assurance, NPDES	Lower	274, 0.052, ESE
14	HANDY WAY FOOD STORE	170 TUSCAWILLA RD	LUST, UST, DWM CONTAM, Financial Assurance	Higher	342, 0.065, NW
15	HI FLAVOR MEATS	315 TUSKAWILLA RD	RCRA NonGen / NLR, FINDS, ECHO	Lower	746, 0.141, SSW
16	2950 RAILROAD	2950 RAILROAD AVE	BROWNFIELDS, ASBESTOS	Lower	1018, 0.193, South
C17	PUBLIX SUPER MARKET	1160 E SR 434	AST	Higher	1121, 0.212, NNW
C18	PUBLIX SUPER MARKET	1160 E STATE ROAD 43	RCRA-VSQG	Higher	1121, 0.212, NNW
19	VACANT CHURCH AND WA	395 TUSKAWILLA RD. &	SWF/LF, ASBESTOS	Higher	1724, 0.327, SSW
20	WINTER SPRINGS CITY-	1126 E HWY 434	LUST, UST, AST, DWM CONTAM, Financial Assurance	Lower	2118, 0.401, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

Lists of state- and tribal hazardous waste facilities

SHWS ---------- Florida's State-Funded Action Sites

Lists of state and tribal leaking storage tanks

LAST ---------- Leaking Aboveground Storage Tank Listing
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FF TANKS ---------- Federal Facilities Listing
FEMA UST ---------- Underground Storage Tank Listing
INDIAN UST ---------- Underground Storage Tanks on Indian Land
TANKS ---------- Storage Tank Facility List

State and tribal institutional control / engineering control registries

ENG CONTROLS ---------- Institutional Controls Registry
INST CONTROL ---------- Institutional Controls Registry

Lists of state and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Sites
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY ---------- Recycling Centers
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
PRIORITYCLEANERS ---------- Priority Ranking List
Fl Sites ---------- Sites List
US CDL ---------- National Clandestine Laboratory Register
AQUEOUS FOAM ---------- Former Fire Training Facility Assessments Listing
PFAS ---------- PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid

Local Land Records

LIENS 2 ---------- CERCLA Lien Information

EXECUTIVE SUMMARY

Records of Emergency Release Reports

SPILLS	Oil and Hazardous Materials Incidents
SPILLS 90	SPILLS 90 data from FirstSearch
SPILLS 80	SPILLS 80 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
AIRS	Permitted Facilities Listing
ASBESTOS	ASBESTOS
DEDB	Ethylene Dibromide Database Results
DRYCLEANERS	Drycleaning Facilities
FL Cattle Dip. Vats	Cattle Dipping Vats
HW GEN	Hazardous Waste Generators
SITE INV SITES	Site Investigation Section Sites Listing
TIER 2	Tier 2 Facility Listing
UIC	Underground Injection Wells Database Listing
NPDES	Wastewater Facility Regulation Database
MINES MRDS	Mineral Resources Data System

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner---------- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS---------- Recovered Government Archive State Hazardous Waste Facilities List
RGA LF---------- Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 06/20/2022 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PUBLIX SUPER MARKET EPA ID:: FLR000242453	1160 E STATE ROAD 43	NNW 1/8 - 1/4 (0.212 mi.)	C18	68

EXECUTIVE SUMMARY

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Environmental Protection's Facility Directory (Solid Waste Facilities).

A review of the SWF/LF list, as provided by EDR, has revealed that there are 2 SWF/LF sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VACANT CHURCH AND WA	***395 TUSKAWILLA RD. &***	***SSW 1/4 - 1/2 (0.327 mi.)***	***19***	***72***
Database: SWF/LF, Date of Government Version: 04/11/2022				
Facility-Site Id: 104855				
Class Status: INACTIVE (I)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
1212 E. SR 434 DEBRI	1212 E. SR 434	NE 0 - 1/8 (0.020 mi.)	11	45
Database: SWF/LF, Date of Government Version: 04/11/2022				
Facility-Site Id: 98367				
Class Status: PRE-AUTHORIZED (B)				

Lists of state and tribal leaking storage tanks

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's PCTO1--Petroleum Contamination Detail Report.

A review of the LUST list, as provided by EDR, and dated 04/25/2022 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***
Discharge Cleanup Status: RA - RA ONGOING				
Facility Status: OPEN				
Facility-Site Id: 9045623				
HANDY WAY FOOD STORE	***170 TUSCAWILLA RD***	***NW 0 - 1/8 (0.065 mi.)***	***14***	***51***
Discharge Cleanup Status: NFA - NFA COMPLETE				
Facility Status: CLOSED				
Facility-Site Id: 8516641				

Lower Elevation	Address	Direction / Distance	Map ID	Page
WINTER SPRINGS CITY-	***1126 E HWY 434***	***NNW 1/4 - 1/2 (0.401 mi.)***	***20***	***73***
Discharge Cleanup Status: NFA - NFA COMPLETE				
Facility Status: OPEN				
Facility-Site Id: 8731664				

Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. Shortly after the September 11 event, the DEP was instructed to remove the detail about some of the storage tank facilities in the state from their reports. Federal-owned facilities and bulk storage facilities are included in that set.

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***
Database: UST, Date of Government Version: 05/05/2022 Tank Status: B Tank Status: U Facility-Site Id: 9045623 Facility Status: OPEN				
HANDY WAY FOOD STORE	***170 TUSCAWILLA RD***	***NW 0 - 1/8 (0.065 mi.)***	***14***	***51***
Database: UST, Date of Government Version: 05/05/2022 Tank Status: B Facility-Site Id: 8516641 Facility Status: CLOSED				

AST: Shortly after the Sept 11 event, the DEP was instructed to remove the detail about some of the storage tank facilities in the state from their reports. Federal-owned facilities and bulk storage facilities are included in that set.

A review of the AST list, as provided by EDR, has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PUBLIX SUPER MARKET	1160 E SR 434	NNW 1/8 - 1/4 (0.212 mi.)	C17	67
Database: AST, Date of Government Version: 05/05/2022 Facility-Site Id: 9809815 Facility Status: OPEN Facility Status: OPEN				

Lower Elevation	Address	Direction / Distance	Map ID	Page
WINTER SPRINGS CITY	***80 MICHAEL BLAKE BLV***	***ESE 0 - 1/8 (0.052 mi.)***	***B13***	***49***
Database: AST, Date of Government Version: 05/05/2022 Facility-Site Id: 9818667 Facility Status: OPEN Facility Status: OPEN				

Lists of state and tribal brownfield sites

BROWNFIELDS: Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

A review of the BROWNFIELDS list, as provided by EDR, has revealed that there are 3 BROWNFIELDS sites

within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOWN CENTER S.E.E.D.		0 - 1/8 (0.000 mi.)	0	8
Database: BROWNFIELDS AREAS, Date of Government Version: 12/07/2021				
FORMER CENTRAL FLORI		SSE 1/8 - 1/4 (0.210 mi.)	0	8
Database: BROWNFIELDS AREAS, Date of Government Version: 12/07/2021				

Lower Elevation	Address	Direction / Distance	Map ID	Page
2950 RAILROAD	***2950 RAILROAD AVE***	***S 1/8 - 1/4 (0.193 mi.)***	***16***	***65***
Database: BROWNFIELDS, Date of Government Version: 01/11/2022				
Database: BSRA, Date of Government Version: 02/28/2022				
Site Id: BF590702001				
Facility-Site Id: BF590702000				
Site Id: BF590702001				

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

HMIRS: The Hazardous Materials Incident Report System contains hazardous material spill incidents reported to the Department of Transportation. The source of this database is the U.S. EPA.

A review of the HMIRS list, as provided by EDR, and dated 03/21/2022 has revealed that there is 1 HMIRS site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1205 STATE ROAD 434	0 - 1/8 (0.000 mi.)	A10	44

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/20/2022 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL CORP SS #Q	***1205 E SR 434***	***0 - 1/8 (0.000 mi.)***	***A4***	***9***
EPA ID:: FLD984205518				
FOREIGN CAR PARTS SE	***1207 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A9***	***40***
EPA ID:: FLD981748007				

Lower Elevation	Address	Direction / Distance	Map ID	Page
HI FLAVOR MEATS	***315 TUSKAWILLA RD***	***SSW 1/8 - 1/4 (0.141 mi.)***	***15***	***60***

EXECUTIVE SUMMARY

EPA ID:: FLR000057604

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 05/13/2022 has revealed that there are 2 FINDS sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL CORP SS #Q Registry ID:: 110006386534	***1205 E SR 434***	***0 - 1/8 (0.000 mi.)***	***A4***	***9***
FOREIGN CAR PARTS SE Registry ID:: 110005991579	***1207 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A9***	***40***

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 04/02/2022 has revealed that there are 2 ECHO sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL CORP SS #Q Registry ID: 110006386534	***1205 E SR 434***	***0 - 1/8 (0.000 mi.)***	***A4***	***9***
FOREIGN CAR PARTS SE Registry ID: 110005991579	***1207 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A9***	***40***

CLEANUP SITES: This listing includes the locations of waste cleanup sites from various programs. The source of the cleanup site data includes Hazardous Waste programs, Site Investigation Section, Compliance and Enforcement Tracking, Drycleaning State Funded Cleanup Program (possibly other state funded cleanup), Storage Tank Contamination Monitoring.

A review of the CLEANUP SITES list, as provided by EDR, and dated 08/22/2022 has revealed that there is 1 CLEANUP SITES site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS DEP Cleanup Site Key: 72642594	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***

DWM CONTAM: A listing of active or known sites. The listing includes sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and drycleaning).

A review of the DWM CONTAM list, as provided by EDR, and dated 11/30/2021 has revealed that there are 4 DWM CONTAM sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS Program Site Id: 9045623	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***
HANDY WAY FOOD STORE Program Site Id: 8516641	***170 TUSCAWILLA RD***	***NW 0 - 1/8 (0.065 mi.)***	***14***	***51***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCRIMSHER PARCEL Program Site Id: ERIC_11188	***E SR 434***	***SE 0 - 1/8 (0.052 mi.)***	***B12***	***46***
WINTER SPRINGS CITY- Program Site Id: 8731664	***1126 E HWY 434***	***NNW 1/4 - 1/2 (0.401 mi.)***	***20***	***73***

A list of hazardous waste facilities required to provide financial assurance under RCRA.

A review of the Financial Assurance list, as provided by EDR, has revealed that there is 1 Financial Assurance site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL-WINTER SPRINGS Database: Financial Assurance 3, Date of Government Version: 05/03/2022 Facility Status: OPEN Facility ID: 9045623	***1205 E STATE ROAD 43***	***0 - 1/8 (0.000 mi.)***	***A8***	***14***

RESP PARTY: Open, inactive and closed responsible party sites

A review of the RESP PARTY list, as provided by EDR, and dated 06/27/2022 has revealed that there is 1 RESP PARTY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCRIMSHER PARCEL Site Status: CLOSED	***E SR 434***	***SE 0 - 1/8 (0.052 mi.)***	***B12***	***46***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR

researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXON MOBIL CORPORAT	1205 E STATE ROAD 43	0 - 1/8 (0.000 mi.)	A1	8

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST: The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

A review of the RGA LUST list, as provided by EDR, has revealed that there are 5 RGA LUST sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL R/S #10918 Facility ID: 9045623	1205 E STATE ROAD 43	0 - 1/8 (0.000 mi.)	A2	9
7-ELEVEN STORE #3478 Facility ID: 9045623	1205 E STATE ROAD 43	0 - 1/8 (0.000 mi.)	A3	9
MOBIL #02-Q8M Facility ID: 9045623	1205 E HWY 434	0 - 1/8 (0.000 mi.)	A5	13
MOBIL #02-Q8M Facility ID: 9045623	1205 E SR 434	0 - 1/8 (0.000 mi.)	A6	13
MOBIL R/S # 10918 Facility ID: 9045623	1205 E HWY 434	0 - 1/8 (0.000 mi.)	A7	14

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
UPRIGHT RECYCLING/BRUCE G BECK	SWF/LF

OVERVIEW MAP - 7123398.2S



0 1/4 1/2 1 Miles

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Sutton Crossing	CLIENT:	Native Geoscience, Inc.
ADDRESS:	Tuskawilla Rd & FL 434 Winter Springs FL 32708	CONTACT:	Clinton Wilhelm
		INQUIRY #:	7123398.2s
LAT/LONG:	28.695011 / 81.262068	DATE:	September 20, 2022 1:04 pm

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DETAIL MAP - 7123398.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Sutton Crossing	CLIENT:	Native Geoscience, Inc.
ADDRESS:	Tuskawilla Rd & FL 434 Winter Springs FL 32708	CONTACT:	Clinton Wilhelm
		INQUIRY #:	7123398.2s
LAT/LONG:	28.695011 / 81.262068	DATE:	September 20, 2022 1:05 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal hazardous waste facilities								
SHWS	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		1	0	1	NR	NR	2
Lists of state and tribal leaking storage tanks								
LUST	0.500		2	0	1	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FF TANKS	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		2	0	NR	NR	NR	2
AST	0.250		1	1	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
TANKS	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		1	2	0	NR	NR	3
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
Fl Sites	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		1	NR	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
SPILLS 80	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	1	NR	NR	NR	3
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		2	NR	NR	NR	NR	2
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		2	NR	NR	NR	NR	2
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
CLEANUP SITES	0.001		1	NR	NR	NR	NR	1
DEDB	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
DWM CONTAM	0.500		3	0	1	NR	NR	4
Financial Assurance	0.001		1	NR	NR	NR	NR	1
FL Cattle Dip. Vats	0.250		0	0	NR	NR	NR	0
HW GEN	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RESP PARTY	0.500		1	0	0	NR	NR	1
SITE INV SITES	0.500		0	0	0	NR	NR	0
TIER 2	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		5	NR	NR	NR	NR	5
- Totals --		0	26	5	3	0	0	34

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

TOWN CENTER S.E.E.D. / BROWNFIELD **BROWNFIELDS** **S109353651**
< 1/8 **N/A**
1 ft. **CITY OF WINTER SPRINGS, FL**

BROWNFIELDS AREAS:

Name:	TOWN CENTER S.E.E.D. / BROWNFIELD
Address:	Not reported
City,State,Zip:	CITY OF WINTER SPRINGS, FL
Area id:	BF590803000
District:	CENTRAL
Acreage:	2220603.5
Resolution:	2008-36
Resolution Date:	09/04/2008
Source:	CITY OF WINTER SPRINGS
Object Id:	201
Method:	PAPER
Area:	2220603.49
XCoord:	666787.081
YCoord:	524645.8859

SSE **FORMER CENTRAL FLORIDA DRUM FACILITY** **BROWNFIELDS** **S108946006**
1/8-1/4 **N/A**
1107 ft. **WINTER SPRINGS, FL**

BROWNFIELDS AREAS:

Name:	FORMER CENTRAL FLORIDA DRUM FACILITY
Address:	Not reported
City,State,Zip:	WINTER SPRINGS, FL
Area id:	BF590702000
District:	Central
Acreage:	6.15871000
Resolution:	2007-R-233
Resolution Date:	12/11/2007
Source:	Seminole County
Object Id:	225
Method:	PAPER
Area:	24923.4045
XCoord:	667230.890
YCoord:	523359.9865

A1 **EXXON MOBIL CORPORATION** **EDR Hist Auto** **1020699800**
1205 E STATE ROAD 434 **N/A**
< 1/8 **WINTER SPRINGS, FL 32708**
1 ft.

Site 1 of 10 in cluster A

Relative: EDR Hist Auto
Higher

Actual:
43 ft.

Year:	Name:	Type:
1999	MOBILE ORLANDO JAWAD INC	Gasoline Service Stations
2002	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations
2003	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations
2004	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations
2005	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations, NEC
2006	EXXONMOBIL OIL CORPORATION	Gasoline Service Stations, NEC
2007	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2008	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2009	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC

EXXON MOBIL CORPORATION (Continued) **1020699800**

2010	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2011	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2012	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2013	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC
2014	EXXON MOBIL CORPORATION	Gasoline Service Stations, NEC

A2 **MOBIL R/S #10918** **RGA LUST** **S115188214**
1205 E STATE ROAD 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 2 of 10 in cluster A

Relative: RGA LUST:
Higher

2010	MOBIL R/S #10918	1205 E STATE ROAD 434
2009	MOBIL R/S #10918	1205 E STATE ROAD 434

Actual:
43 ft.

A3 **7-ELEVEN STORE #34786** **RGA LUST** **S115159657**
1205 E STATE ROAD 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 3 of 10 in cluster A

Relative: RGA LUST:
Higher

2012	7-ELEVEN STORE #34786	1205 E STATE ROAD 434
2011	7-ELEVEN STORE #34786	1205 E STATE ROAD 434

Actual:
43 ft.

A4 **MOBIL OIL CORP SS #Q8M** **RCRA NonGen / NLR** **1000702716**
1205 E SR 434 **FINDS** **FLD984205518**
< 1/8 **WINTER SPRINGS, FL 32708** **ECHO**
1 ft.

Site 4 of 10 in cluster A

Relative: RCRA NonGen / NLR:
Higher

Date Form Received by Agency:		20111012
Handler Name:	MOBIL OIL CORP SS #Q8M	
Handler Address:		1205 E SR 434
Handler City,State,Zip:		WINTER SPRINGS, FL 32708
EPA ID:		FLD984205518
Contact Name:		DAN HORTON
Contact Address:		GALLOWS RD
Contact City,State,Zip:		FAIRFAX, VA 22037-0002
Contact Telephone:		703-849-3330
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		04
Land Type:		Private
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		FL
State District:		CD
Mailing Address:		GALLOWS RD

Actual:
43 ft.

MOBIL OIL CORP SS #Q8M (Continued) **1000702716**

Mailing City,State,Zip:		FAIRFAX, VA 22037-0002
Owner Name:	DAN HORTON	
Owner Type:		Private
Operator Name:	DONNA HYMES	
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Not reported
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported
202 GPRA Corrective Action Baseline:		No
Corrective Action Workload Universe:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:		No
TSDFs Only Subject to CA under Discretionary Auth Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Operating TSDF Universe:		Not reported
Full Enforcement Universe:		Not reported
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No
Financial Assurance Required:		Not reported
Handler Date of Last Change:		20130606
Recognized Trader-Importer:		No
Recognized Trader-Exporter:		No
Importer of Spent Lead Acid Batteries:		No
Exporter of Spent Lead Acid Batteries:		No

MOBIL OIL CORP SS #Q8M (Continued) **1000702716**

Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Hazardous Waste Summary:
Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: D018
Waste Description: BENZENE

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: DAN HORTON
Legal Status: Private
Date Became Current: 20000209
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: DONNA HYMES
Legal Status: Private
Date Became Current: 20111027
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: MOBIL OIL CORP SS # Q8M
Legal Status: Private
Date Became Current: 19910615
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: HORTON DAN
Legal Status: Private
Date Became Current: 20000209
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037

MOBIL OIL CORP SS #Q8M (Continued) **1000702716**

Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: DAN HORTON
Legal Status: Private
Date Became Current: 20000209
Date Ended Current: Not reported
Owner/Operator Address: 3225 GALLOWS RD
Owner/Operator City,State,Zip: FAIRFAX, VA 22037
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19910802
Handler Name: MOBIL OIL CORP SS #Q8M
Federal Waste Generator Description: Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20111012
Handler Name: MOBIL OIL CORP SS #Q8M
Federal Waste Generator Description: Not a generator, verified
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 562998
NAICS Description: ALL OTHER MISCELLANEOUS WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

MOBIL OIL CORP SS #Q8M (Continued) **1000702716**

FINDS:
Registry ID: 110006386534

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000702716
Registry ID:	110006386534
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110006386534
Name:	MOBIL OIL CORP SS #Q8M
Address:	1205 E SR 434
City,State,Zip:	WINTER SPRINGS, FL 32708

A5 **MOBIL #02-Q8M** **RGA LUST** **S115187952**
1205 E HWY 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 5 of 10 in cluster A

Relative: Higher
Actual: 43 ft.

RGA LUST:

2004	MOBIL #02-Q8M	1205 E HWY 434
2003	MOBIL #02-Q8M	1205 E HWY 434
2002	MOBIL #02-Q8M	1205 E HWY 434
2001	MOBIL #02-Q8M	1205 E HWY 434
2000	MOBIL #02-Q8M	1205 E HWY 434
1999	MOBIL #02-Q8M	1205 E HWY 434
1998	MOBIL #02-Q8M	1205 E HWY 434

A6 **MOBIL #02-Q8M** **RGA LUST** **S115187953**
1205 E SR 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 6 of 10 in cluster A

Relative: Higher
Actual: 43 ft.

RGA LUST:

1997	MOBIL #02-Q8M	1205 E SR 434

A7 **MOBIL R/S # 10918** **RGA LUST** **S115188147**
1205 E HWY 434 **N/A**
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 7 of 10 in cluster A

Relative: RGA LUST:
Higher

2008	MOBIL R/S # 10918	1205 E HWY 434
2007	MOBIL R/S # 10918	1205 E HWY 434
2006	MOBIL R/S # 10918	1205 E HWY 434
2005	MOBIL R/S # 10918	1205 E HWY 434

Actual:
43 ft.

A8 **MOBIL-WINTER SPRINGS #731** **LUST** **U004130541**
1205 E STATE ROAD 434 **UST** **N/A**
< 1/8 **WINTER SPRINGS, FL 32708** **CLEANUP SITES**
1 ft. **DWM CONTAM**

Site 8 of 10 in cluster A **Financial Assurance**

Relative: LUST:
Higher

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	STATE
Facility Id:	9045623
Facility Status:	OPEN
Facility Type:	A - Retail Station
Facility Phone:	(813)681-4279
Facility Cleanup Rank:	4871
District:	Central District
Lat/Long (dms):	28 41 44.6788 / 81 15 43.9905
Section:	31
Township:	20S
Range:	31E
Feature:	Not reported
Method:	DPHO
Datum:	0
Score:	46
Score Effective Date:	2008-02-29 00:00:00
Score When Ranked:	30
Operator:	RICK HERWEH
Name Update:	2013-10-28 00:00:00
Address Update:	2018-10-25 00:00:00

Actual:
43 ft.

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	ONGO - ONGOING
Contact:	BILL MCKNIGHT | RICK HERWEH
Contact Company:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Contact Address:	PO BOX 1110
Contact City/State/Zip:	Brandon, FL 33509
Phone:	(813)681-4279
Bad Address Ind:	N
State:	FL
Zip:	32708, 2811
Score:	46
Score Effective Date:	2008-02-29 00:00:00
Related Party ID:	922
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	2013-10-28
RP Zip:	1110
RP Extension:	211

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Discharge Cleanup Summary:

Discharge Date:	4/26/1993
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	5/10/2013
Cleanup Work Status:	ACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

Petroleum Cleanup Program Eligibility:

Facility ID:	9045623
Discharge Date:	4/26/1993
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	5/10/2013
Cleanup Work Status:	INACTIVE
Information Source:	Not reported
Other Source Description:	Not reported
Application Received Date:	Not reported
Cleanup Program:	P - PETROLEUM LIABILITY AND RESTORATION INSURANCE PROGRAM
Eligibility Status:	Not reported
Elig Status Date:	Not reported
Letter Of Intent Date:	Not reported
Redetermined:	Not reported
Inspection Date:	Not reported
Site Manager:	PRESS_DM
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV
Deductible Amount:	Not reported
Deductible Paid To Date:	Not reported
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	Not reported
Cap Amount:	1200000

Contaminated Media:

Discharge Date:	4/26/1993
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	5/10/2013
Cleanup Work Status:	INACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	Yes
Contaminated Soil:	No
Contaminated Surface Water:	No
Contaminated Ground Water:	No

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Pollutant:	B - Unleaded Gas
Pollutant Other Description:	Not reported
Gallons Discharged:	25

Task Information:

District:	CD
Facility ID:	9045623
Facility Status:	OPEN
Facility Type:	A - Retail Station -
County:	SEMINOLE
County ID:	59
Cleanup Eligibility Status:	E
Source Effective Date:	Not reported
Discharge Date:	04-26-1993
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	05-10-2013
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	INACTIVE
Site Mgr:	PRESS_DM
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - Orange County
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	84141
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	89795

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

RA Cleanup Responsible: -
RA Funding Eligibility Type: -
RA Years to Complete: Not reported
RA Actual Cost: Not reported

Click here for Florida Oculus:

UST:
Facility ID: 9045623
Name: MOBIL-WINTER SPRINGS #731
Address: 1205 E STATE ROAD 434
City,State,Zip: WINTER SPRINGS, FL 32708
Facility Phone: 8136814279
Facility Status: OPEN
Facility Type: A
Type Description: Retail Station
Depco: P
Region: STATE
Positioning Method: DPHO
Latitude/Longitude: 28 41 45.5900000 / 81 15 43.8500000

UST:
Tank ID: 2
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 10/01/2008
Install Date: 11/1/1989
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5
Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Piping Description: Double wall

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 5
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 3
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 10/01/2008
Install Date: 11/1/1989
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5
Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F
Piping Description: Double wall

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 5
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 4
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 10/01/2008
Install Date: 11/1/1989
Substance: B
Content Description: Unleaded Gas

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Piping:

Tank ID:	5
Piping Category:	K
Piping Description:	Dispenser liners
Tank ID:	6
Piping Category:	K
Piping Description:	Dispenser liners
Tank ID:	5
Piping Category:	C
Piping Description:	Fiberglass
Tank ID:	5
Piping Category:	F
Piping Description:	Double wall
Tank ID:	5
Piping Category:	J
Piping Description:	Pressurized piping system
Tank ID:	6
Piping Category:	C
Piping Description:	Fiberglass
Tank ID:	6
Piping Category:	F
Piping Description:	Double wall
Tank ID:	6
Piping Category:	J
Piping Description:	Pressurized piping system

Monitoring:

Tank ID:	5
Petro Monitoring Category:	F
Monitoring Description:	Monitor dbl wall tank space
Tank ID:	5
Petro Monitoring Category:	G
Monitoring Description:	Electronic line leak detector
Tank ID:	5
Petro Monitoring Category:	K
Monitoring Description:	Monitor dbl wall pipe space
Tank ID:	6
Petro Monitoring Category:	F
Monitoring Description:	Monitor dbl wall tank space
Tank ID:	6
Petro Monitoring Category:	G
Monitoring Description:	Electronic line leak detector
Tank ID:	6
Petro Monitoring Category:	K

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Tank Capacity: 20000
Tank Location: UNDERGROUND
Tank Status: U
Status Date: 10/01/2008
Install Date: 10/1/2008
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F
Piping Description: Double wall

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 5
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 6
Tank Capacity: 20000
Tank Location: UNDERGROUND
Tank Status: U
Status Date: 10/01/2008
Install Date: 10/1/2008
Substance: D
Content Description: Vehicular Diesel
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5
Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F
Piping Description: Double wall

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 5
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 1
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 10/01/2008
Install Date: 11/1/1989
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 922
Owner Name: AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address: PO BOX 1110
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: Brandon, FL 33509
Owner Contact: BILL MCKNIGHT | RICK HERWEH
Owner Phone: 8136814279

Construction:
Tank ID: 5
Construction Category: E
Construction Description: Fiberglass

Tank ID: 5
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 5
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 5
Construction Category: I
Construction Description: Double wall

Tank ID: 6
Construction Category: E
Construction Description: Fiberglass

Tank ID: 6
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 6
Construction Category: N
Construction Description: Flow shut-Off

Tank ID: 6
Construction Category: I
Construction Description: Double wall

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Tank ID: 6
Construction Category: L
Construction Description: Compartmented

Tank ID: 5
Construction Category: O
Construction Description: Tight fill

Tank ID: 6
Construction Category: O
Construction Description: Tight fill

Piping:
Tank ID: 5
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 6
Piping Category: K
Piping Description: Dispenser liners

Tank ID: 5
Piping Category: C
Piping Description: Fiberglass

Tank ID: 5
Piping Category: F
Piping Description: Double wall

Tank ID: 5
Piping Category: J
Piping Description: Pressurized piping system

Tank ID: 6
Piping Category: C
Piping Description: Fiberglass

Tank ID: 6
Piping Category: F
Piping Description: Double wall

Tank ID: 6
Piping Category: J
Piping Description: Pressurized piping system

Monitoring:
Tank ID: 5
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 5
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 5
Petro Monitoring Category: K

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Monitoring Description: Monitor dbl wall pipe space

Tank ID: 6
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 6
Petro Monitoring Category: G
Monitoring Description: Electronic line leak detector

Tank ID: 6
Petro Monitoring Category: K
Monitoring Description: Monitor dbl wall pipe space

Tank ID: 5
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 5
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 5
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: L
Monitoring Description: Automatic tank gauging - USTs

Tank ID: 6
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Tank ID: 6
Petro Monitoring Category: 2
Monitoring Description: Visual inspect pipe sumps

Tank ID: 6
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

Tank ID: 5
Petro Monitoring Category: 4
Monitoring Description: Visual inspect dispenser liners

CLEANUP SITES:
Name: MOBIL-WINTER SPRINGS #731
Address: 1205 E STATE ROAD 434
City,State,Zip: WINTER SPRINGS, FL 32708
DEP Cleanup Site Key: 72642594
Source Database Name: Storage Tank Contamination Monitoring
Source Database Id: 9045623
CPAC Program Area Id: TK
CLLC Cleanup Category Key: PETRO

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

RSC2 Remediation Status Key:	ACTIVE
Data Load Date:	08/22/2022
OC3 Office Id:	CD
Physical Address Line 2:	Not reported
OIC Object Of Interest Id:	FACIL
PC2 Proximity Id:	EXACT
Calc Coordinates Accuracy Level Id:	4
CMC2 Coordinate Method Id:	Digital Aerial Photography With Ground Control
DC4 Datum Id:	High Accuracy Reference Network
VSC1 Verification Status:	REVIEWED
Collect Username:	PERRY_JF59
Collect Date:	07/23/2003
Collect Affiliation:	CONTRACTOR
Map Source:	1994 doqs
Map Source Scale:	1010
Interpolation Scale:	Not reported
Verifier Username:	WOEBER_A
Verifier Affiliation:	DEPARTMENT OF ENVIRONMENTAL PR
Verification Date:	06/09/2005
Verified Coordinate Method Id:	Digital Aerial Photography With Ground Control
Source Database Name Code:	STCM
CMC2 Coordinate Method ID Code:	DPHO
DC4 Datum ID Code:	HARN
Verified Coordinate Method ID Code:	DPHO
Comments:	Not reported
Latitude/Longitude (deg/min/sec):	28 41 / 81 15

DWM CONTAM:

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Program Site Id:	9045623
Lat DD:	28
Lat MM:	41
Lat SS:	45.59
Long DD:	81
Long MM:	15
Long SS:	43.85
Office/ District:	CD
Program Area:	STORAGE TANKS
Priority Score:	46
Datum:	Not reported
Method:	DPHO
Facility Status:	OPEN
Facility Type:	A - Retail Station
Score Effective Date:	2008-02-29 00:00:00
Score When Ranked:	30
Rank:	4871
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	922
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	10/28/2013
RP Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
RP Address1:	PO BOX 1110

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

RP Address2:	ATTN: STORAGE TANK REGIS
RP City:	BRANDON
RP State:	FL
RP Zip5:	33509
RP Zip4:	1110
Contact:	BILL MCKNIGHT | RICK HERWEH
RP Phone:	(813)681-4279
RP Extension:	211
Site Manager:	PRESS_DM

FL Financial Assurance 3:

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	ANCON INSURANCE CO INC
Effective Date:	04/30/2010
Expire Date:	04/29/2011
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	ILLINOIS UNION
Effective Date:	04/30/2011
Expire Date:	04/30/2012
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	IRONSHORE SPECIALTY INSURANCE CO
Effective Date:	12/18/2012
Expire Date:	12/18/2013
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	LIBERTY SURPLUS INSURANCE CORP
Effective Date:	12/31/2013
Expire Date:	12/31/2014
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	LIBERTY SURPLUS INSURANCE CORP
Effective Date:	12/31/2014
Expire Date:	12/31/2015
Owner ID:	922

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	LIBERTY SURPLUS INSURANCE CORP
Effective Date:	12/31/2015
Expire Date:	12/31/2016
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	NAUTILUS INSURANCE COMPANY
Effective Date:	01/01/2017
Expire Date:	12/31/2017
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	SCOTTSDALE
Effective Date:	12/31/2017
Expire Date:	12/31/2018
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	LETTER OF CREDIT
Insurance Company:	Not reported
Effective Date:	01/31/2019
Expire Date:	01/31/2020
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	LETTER OF CREDIT
Insurance Company:	Not reported
Effective Date:	01/31/2020
Expire Date:	01/31/2021
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	LETTER OF CREDIT
Insurance Company:	Not reported
Effective Date:	01/31/2021
Expire Date:	01/31/2022
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	LETTER OF CREDIT
Insurance Company:	Not reported
Effective Date:	05/31/2018
Expire Date:	05/31/2019
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279
Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P

MOBIL-WINTER SPRINGS #731 (Continued) **U004130541**

Finaincial Responsibility:	SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company:	Not reported
Effective Date:	05/01/2008
Expire Date:	04/30/2009
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

Name:	MOBIL-WINTER SPRINGS #731
Address:	1205 E STATE ROAD 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	9045623
Facility Phone:	8136814279
Facility Status:	OPEN
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company:	Not reported
Effective Date:	05/01/2009
Expire Date:	04/30/2010
Owner ID:	922
Onwer Name:	AUTOMATED PETROLEUM & ENERGY CO INC (APEC)
Owner Address:	PO BOX 1110
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	Brandon, FL 33509
Contact:	BILL MCKNIGHT | RICK HERWEH
Resp Party Phone:	8136814279

A9 **FOREIGN CAR PARTS SERVICE** **RCRA NonGen / NLR** **1000202983**
1207 E STATE ROAD 434 **FINDS** **FLD981748007**
< 1/8 **WINTER SPRINGS, FL 32708** **ECHO**
1 ft.

Site 9 of 10 in cluster A

Relative: **Higher**
Actual: **44 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	20121019
Handler Name:	FOREIGN CAR PARTS SERVICE
Handler Address:	1207 E STATE ROAD 434
Handler City,State,Zip:	WINTER SPRINGS, FL 32708-2811
EPA ID:	FLD981748007
Contact Name:	WAYNE NORMAN
Contact Address:	E STATE ROAD 434
Contact City,State,Zip:	WINTER SPRINGS, FL 32708-2811
Contact Telephone:	305-699-4505
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	04
Land Type:	Private
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported

FOREIGN CAR PARTS SERVICE (Continued) **1000202983**

Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		FL
State District:		CD
Mailing Address:		E STATE ROAD 434
Mailing City,State,Zip:		WINTER SPRINGS, FL 32708-2811
Owner Name:	WAYNE NORMAN	
Owner Type:		Private
Operator Name:	Not reported	
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Not reported
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported
202 GPRA Corrective Action Baseline:		No
Corrective Action Workload Universe:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:		No
TSDFs Only Subject to CA under Discretionary Auth Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Operating TSDF Universe:		Not reported
Full Enforcement Universe:		Not reported
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No
Financial Assurance Required:		Not reported

FOREIGN CAR PARTS SERVICE (Continued) **1000202983**

Handler Date of Last Change:	20130305
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: WAYNE NORMAN	
Legal Status:	Private
Date Became Current:	20000925
Date Ended Current:	Not reported
Owner/Operator Address:	1207 E STATE ROAD 434
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-2811
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: NORMAN WAYNE	
Legal Status:	Private
Date Became Current:	20000925
Date Ended Current:	Not reported
Owner/Operator Address:	1207 E STATE ROAD 434
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-2811
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: WAYNE NORMAN	
Legal Status:	Private
Date Became Current:	20000925
Date Ended Current:	Not reported
Owner/Operator Address:	1207 E STATE ROAD 434
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-2811
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20121019
Handler Name: FOREIGN CAR PARTS SERVICE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	FL
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No

FOREIGN CAR PARTS SERVICE (Continued) **1000202983**

Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19870114
Handler Name: FOREIGN CAR PARTS SERVICE
Federal Waste Generator Description: Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110005991579

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000202983
Registry ID: 110005991579
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005991579
Name: FOREIGN CAR PARTS SERVICE
Address: 1207 E STATE ROAD 434
City,State,Zip: WINTER SPRINGS, FL 32708

A10 **HMIRS** **2002033772**
N/A

1205 STATE ROAD 434 EAST
< 1/8 **WINTER SPRINGS, FL**
1 ft.

Site 10 of 10 in cluster A

Relative: HMIRS:
Lower

Actual: Report #: 2002030877
42 ft. Site location: 1205 STATE ROAD 434 EAST
WINTER SPRINGS, FL
Place of origin: 9919 SOUTH ORANGE AVENUE
TAFT, FL 32824
Destination: EXXON MOBIL CHEMICAL CO
1205 STATE ROAD 434 EAST
WINTER SPRINGS, FL 32869
Carrier ID: 15472
Carrier reporting #: Not reported
Carrier: MC KENZIE TANK LINES INC
Carrier address: 122 APPLEYARD DRIVE
TALLAHASSEE, FL 32304
Shipper ID: 89722
Shipper name: KINDER MORGAN
Shipper address: 9919 SOUTH ORANGE AVENUE
TAFT, FL 32824
Shipping paper number: 793084
Consignee ID: 94895
Consignee name: EXXON MOBIL CHEMICAL CO
Consignee addess: 1205 STATE ROAD 434 EAST
WINTER SPRINGS, FL 32869
General cause: 20
Transportation mode: 4
Date: 03/02/2002
Commodity name: GASOLINE
Trade name: GASOLINE
Amount: 5.00 GAL
Result: Spillage
Hazard Class: 30
ID Number: UN1203
Hazardous: False
R.Q. met: False
Misc. info: 110 100
Vehicle Type: Cargo
Trans. phase: 263
Land use: 272
Community: 282
Accident/Derailment: False
Estimated speed: F
Highway type: 999
number of lanes: 0
Number evacuated: 0
Major injuries: 0
Minor injuries: 0
Fatalities: 0
Product loss: 5
Carrier damage: 0
Pvt/Pub damage: 0
Cleanup cost: 0
Other damage: 0
Reported damage: 5

(Continued) **2002033772**

Incident damage: 0

Inner and Outer Container Information:
Container type: MC307
Container capacity: 9500.00 GAL
Number failed: 1
Number in shipment: 1
Container gauge: Not reported
Manufacture's ID: 14196
Manuf. name: HEIL COMPANY
UNKNOWN, XX
Tank serial #: A3A7B417H5
Label: FLAM
Registration #: Not reported
Inspection date: 05/17/2001
Exemption #: Not reported
Contributing cause: NO RESPONSE
Contributing Object: NO RESPONSE
Contributing failure: NO RESPONSE
Affected side: NO RESPONSE
Other contributing cause: NO RESPONSE
Capacity container code: 0
Number failed code: 0
Shipment code number: 0

Remarks:
DRIVER WAS DROPPING REGULAR GASOLINE, CLAIMED THERE WAS A VAPOR BACK UP,
SPILLING APPROXIMATELY 5 GALLONS ON THE GROUND. DRIVER CLEANED UP AREA
WITH ABSORBENT PADS.

11
NE
< 1/8
0.020 mi.
108 ft.

1212 E. SR 434 DEBRIS STAGING AREA **SWF/LF** **S109689106**
1212 E. SR 434 **N/A**
CITY OF WINTER SPRINGS, FL 32708

Relative:
Lower

Actual:
40 ft.

SWF/LF:
Name: 1212 E. SR 434 DEBRIS STAGING AREA
Address: 1212 E. SR 434
City,State,Zip: CITY OF WINTER SPRINGS, FL 32708
Facility ID: 98367
District: CD
Lat/Long: 28:41:41 / 81:15:35
Class Type: 910
Classification: DISASTER DEBRIS MANAGEMENT SITE
Class Status: PRE-AUTHORIZED (B)
Section: Not reported
Township: Not reported
Range: Not reported
Responsible Authority Name: Not reported
Responsible Authority Address: Not reported
Responsible Authority City,St,Zip: Not reported
Responsible Authority Phone: Not reported
EMail Address1: Not reported
EMail Address2: Not reported

1212 E. SR 434 DEBRIS STAGING AREA (Continued) **S109689106**

Site Supervisor Name:	Not reported
Site Supervisor Addr:	Not reported
Site Supervisor City/State/Zip:	Not reported
Site Supervisor Telephone:	Not reported
Land Owner Name:	Not reported
Land Owner Address:	Not reported
Land Owner City/State/Zip:	Not reported
Land Owner Telephone:	Not reported

Click here for Florida Oculus:

B12 **SCRIMSHER PARCEL** **DWM CONTAM** **S118895025**
SE **E SR 434** **RESP PARTY** **N/A**
< 1/8 **WINTER SPRINGS,, FL 32708**
0.052 mi.
272 ft. **Site 1 of 2 in cluster B**

Relative: **Lower**
Actual: **34 ft.**

DWM CONTAM:

Name:	SCRIMSHER PARCEL
Address:	E SR 434
City,State,Zip:	WINTER SPRINGS,, FL
Program Site Id:	ERIC_11188
Lat DD:	28
Lat MM:	41
Lat SS:	37.4926
Long DD:	81
Long MM:	15
Long SS:	38.2828
Office/ District:	CD
Program Area:	RESPONSPARTY
Priority Score:	Not reported
Datum:	NAD83
Method:	DPHO
Facility Status:	Closed
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported
RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	George Houston

SCRIMSHER PARCEL (Continued) **S118895025**

RESP PARTY:

Name:	SCRIMSHER PARCEL
Address:	E SR 434
City,State,Zip:	WINTER SPRINGS,, FL 32708
District:	Central District
Site Id:	346911
Project Id:	352812
Site Status:	CLOSED
Project Manager:	HOUSTON_G
OGC Case Number:	Not reported
Initial Date Received:	08/23/2016
Contaminants:	Not reported
Offsite Cont Impact:	N
Priority Score:	Not reported
Datum:	NAD83
Method ID:	DPHO
Feature:	Not reported
Object Of Interest:	CAP_RAP SITE
Proximity To Object:	EXACT
Collect Username:	HOUSTON_G
Collect Affiliation:	Florida Department of Environmental Protection
Collect Program Id:	CR
Collect Date:	08/24/2016
Map Series Used:	IMAGERY_11_13
Map Source Scale:	12000
Interpolation Scale:	12000
Coordinate Accuracy Id:	3
Verify Method Id:	DPHO
Verifier Username:	HOUSTON_G
Verifier Affiliation:	Florida Department of Environmental Protection
Verifying Program Id:	CR
Verification Date:	08/24/2016
Decode for District:	Central District
Decode for Datum:	North American Datum of 1983
Decode for Method:	Digital Aerial Photography With Ground Control
Decode for Off Site COC:	No, the best available evidence (such as completed SAR) demonstrates that contamination above applicable standards or criteria DOES NOT extend offsite.
Decode for V_Method:	Digital Aerial Photography With Ground Control
Latitude/Longitude (deg/min/sec):	28 41 / 81 15
Source Facility Name:	Not reported
Source Facility ID:	Not reported
Program:	Not reported
Program Type:	Not reported
Program Status:	Not reported
WMD:	Not reported
ICR Indicator:	Not reported
Discharge Date:	Not reported
GIS ALBX:	Not reported
GIS ALBY:	Not reported
Site Manager:	Not reported
Site Phase Description:	Not reported
Offsite Contamination Key:	Not reported
Documents:	Not reported
Objectid:	Not reported

Name: SCRIMSHER PARCEL

SCRIMSHER PARCEL (Continued) **S118895025**

Address:	E SR 434
City,State,Zip:	WINTER SPRINGS,, FL 32708
District:	Central District
Site Id:	ERIC_11188
Project Id:	Not reported
Site Status:	CLOSED
Project Manager:	Not reported
OGC Case Number:	Not reported
Initial Date Received:	Not reported
Contaminants:	Not reported
Offsite Cont Impact:	Not reported
Priority Score:	Not reported
Datum:	NAD83
Method ID:	DPHO
Feature:	Not reported
Object Of Interest:	CAP_R
Proximity To Object:	EXACT
Collect Username:	HOUSTON_G
Collect Affiliation:	Not reported
Collect Program Id:	Not reported
Collect Date:	Not reported
Map Series Used:	IMAGERY_11_13
Map Source Scale:	12000
Interpolation Scale:	12000
Coordinate Accuracy Id:	3
Verify Method Id:	Not reported
Verifier Username:	Not reported
Verifier Affiliation:	Not reported
Verifying Program Id:	Not reported
Verification Date:	Not reported
Decode for District:	Central District
Decode for Datum:	North American Datum of 1983
Decode for Method:	Digital Aerial Photography With Ground Control
Decode for Off Site COC:	Not reported
Decode for V_Method:	Not reported
Latitude/Longitude (deg/min/sec):	28 41 / 81 15
Source Facility Name:	SCRIMISHER PARCEL
Source Facility ID:	138637
Program:	Responsible Party Cleanup
Program Type:	RESPONSPARTY
Program Status:	COMPLETE
WMD:	SJRWMD
ICR Indicator:	N
Discharge Date:	Not reported
GIS ALBX:	667143.17000000004
GIS ALBY:	523807.98999999999
Site Manager:	George Houston
Site Phase Description:	Phase 2 - Full Assessment
Offsite Contamination Key:	NOCONTAM
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/ERIC_11188/gis-facility!search
Objectid:	4185

B13 **WINTER SPRINGS CITY - LIFT STATION** **AST** **S125296873**
ESE **80 MICHAEL BLAKE BLVD** **Financial Assurance** **N/A**
< 1/8 **WINTER SPRINGS, FL 32708** **NPDES**
0.052 mi.
274 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
36 ft.

AST:

Facility ID:	9818667
Name:	WINTER SPRINGS CITY - LIFT STATION
Address:	80 MICHAEL BLAKE BLVD
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	C
Type Description:	Fuel user/Non-retail
Depco:	P
Region:	STATE
Positioning Method:	Not reported
Latitude/Longitude:	Not reported

Tank:

Tank ID:	1
Tank Capacity:	631
Tank Location:	ABOVEGROUND
Tank Status:	U
Status Date:	08/01/2021
Install Date:	8/1/2021
Substance:	G
Content Description:	Emerg Generator Diesel
Vessel Indicator:	TANK
DEP Contractor:	P

Piping:

Tank ID:	1
Piping Category:	N
Piping Description:	Approved synthetic material
Tank ID:	1
Piping Category:	A
Piping Description:	Abv, no soil contact

Monitoring:

Tank ID:	1
Petro Monitoring Category:	Q
Monitoring Description:	Visual inspection of ASTs
Tank ID:	1
Petro Monitoring Category:	F
Monitoring Description:	Monitor dbl wall tank space
Tank ID:	1
Petro Monitoring Category:	1
Monitoring Description:	Continuous electronic sensing

Owner:

Owner ID:	24225
Owner Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address 2:	ATTN: STORAGE TANK REGIS

WINTER SPRINGS CITY - LIFT STATION (Continued) **S125296873**

Owner City,State,Zip: WINTER SPRINGS, FL 32708
Owner Contact: IAN FLETCHER
Owner Phone: 4073271800

Construction:
Tank ID: 1
Construction Category: C
Construction Description: Steel

Tank ID: 1
Construction Category: P
Construction Description: Level gauges/alarms

Tank ID: 1
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 1
Construction Category: I
Construction Description: Double wall

FL Financial Assurance 3:
Name: WINTER SPRINGS CITY - LIFT STATION
Address: 80 MICHAEL BLAKE BLVD
City,State,Zip: WINTER SPRINGS, FL 32708
Region: 3
Facility ID: 9818667
Facility Phone: 4073271800
Facility Status: OPEN
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY INSURANCE CO
Effective Date: 11/09/2021
Expire Date: 11/09/2022
Owner ID: 24225
Onwer Name: WINTER SPRINGS CITY
Owner Address: 1126 E SR 434
Owner Address2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: WINTER SPRINGS, FL 32708
Contact: IAN FLETCHER
Resp Party Phone: 4073271800

WASTEWATER:
Name: WINTER SPRINGS RETIREMENT RESIDENCE
Address: 80 MICHAEL BLAKE BLVD
City,State,Zip: WINTER SPRINGS, FL
Facility ID: FLR10SS01
Facility Type: Construction Stormwater GP
Status: Active - Existing, permitted facility/site for which effluent, reclaimed water or wastewater residual discharge into the environment and/or monitoring is taking place.
District Office: TLST

WINTER SPRINGS CITY - LIFT STATION (Continued) **S125296873**

NPDES Permitted Site:	Not reported
Environmental Interest:	Not reported
Owner Type:	Private
Permit Capacity:	Not reported
Party Name:	James C Hall, PMTE
Company Name:	James C. Hall Company Inc.
RP Address:	225 Old Sanford Oviedo Rd
RP Address 2:	Not reported
RP City,Stat,Zip:	Winter Springs FL 32708-2651
Telephone:	4073274930
Email:	crystal@hallcompanyinc.com
Issue Date:	05/17/2019
Effective Date:	05/17/2019
Expiration Date:	05/16/2024
DOC Description:	Generic Permit
Latitude Degrees:	28
Latitude Minutes:	41
Latitude Seconds:	38.52
Longitude Degrees:	81
Longitude Minutes:	15
Longitude Seconds:	36.72
Treatment:	Not reported
Decode For Fstatus:	Active

14
NW
< 1/8
0.065 mi.
342 ft.

HANDY WAY FOOD STORE #3333
170 TUSCAWILLA RD
WINTER SPRINGS, FL 32708

LUST **U003334173**
UST **N/A**
DWM CONTAM
Financial Assurance

Relative:
Higher

Actual:
45 ft.

LUST:

Name:	HANDY WAY FOOD STORE #3333
Address:	170 TUSCAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	STATE
Facility Id:	8516641
Facility Status:	CLOSED
Facility Type:	A - Retail Station
Facility Phone:	(904)327-1217
Facility Cleanup Rank:	556
District:	Central District
Lat/Long (dms):	28 41 47.7907 / 81 15 47.2791
Section:	36
Township:	20
Range:	30
Feature:	Not reported
Method:	DPHO
Datum:	0
Score:	56
Score Effective Date:	2013-02-01 00:00:00
Score When Ranked:	76
Operator:	BRENT PUZAK
Name Update:	Not reported
Address Update:	2000-08-29 00:00:00

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	CMPL - COMPLETED
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Contact Company:	THE PANTRY INC
Contact Address:	305 GREGSON DR
Contact City/State/Zip:	CARY, NC 27511
Phone:	(919)774-6700
Bad Address Ind:	N
State:	FL
Zip:	32708, 3715
Score:	56
Score Effective Date:	2013-02-01 00:00:00
Related Party ID:	10563
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	1999-05-03
RP Zip:	6496
RP Extension:	6549

Discharge Cleanup Summary:

Discharge Date:	8/7/2000
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV
Discharge Date:	9/28/1987
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

Petroleum Cleanup Program Eligibility:

Facility ID:	8516641
Discharge Date:	8/7/2000
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	Not reported
Other Source Description:	Not reported
Application Received Date:	Not reported
Cleanup Program:	S - SITE REHABILITATION FUNDING AGREEMENT
Eligibility Status:	Not reported
Elig Status Date:	Not reported
Letter Of Intent Date:	Not reported
Redetermined:	Not reported

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Inspection Date:	Not reported
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV
Deductible Amount:	Not reported
Deductible Paid To Date:	Not reported
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	Not reported
Cap Amount:	0
Facility ID:	8516641
Discharge Date:	9/28/1987
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	Not reported
Other Source Description:	Not reported
Application Received Date:	Not reported
Cleanup Program:	E - EARLY DETECTION INCENTIVE
Eligibility Status:	Not reported
Elig Status Date:	Not reported
Letter Of Intent Date:	Not reported
Redetermined:	Not reported
Inspection Date:	Not reported
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV
Deductible Amount:	Not reported
Deductible Paid To Date:	Not reported
Co-Pay Amount:	Not reported
Co-Pay Paid To Date:	Not reported
Cap Amount:	0

Contaminated Media:

Discharge Date:	8/7/2000
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	Not reported
Contaminated Monitoring Well:	Not reported
Contaminated Soil:	Not reported
Contaminated Surface Water:	Not reported
Contaminated Ground Water:	Yes
Pollutant:	B - Unleaded Gas
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported
Discharge Date:	9/28/1987
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10/2/2013
Cleanup Work Status:	COMPLETED
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	PRESS_DM
Site Mgr End Date:	9/10/2013
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	Yes
Pollutant:	A - Leaded Gas
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported

Task Information:

District:	CD
Facility ID:	8516641
Facility Status:	CLOSED
Facility Type:	A - Retail Station -
County:	SEMINOLE
County ID:	59
Cleanup Eligibility Status:	E
Source Effective Date:	07-10-2013
Discharge Date:	08-07-2000
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10-02-2013
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	06-19-2013
SRC Review Date:	07-10-2013
SRC Completion Status:	A - APPROVED
SRC Issue Date:	10-02-2013
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	PRESS_DM
Site Mgr End Date:	09-10-2013
Tank Office:	PCLP48 - Orange County
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

SA Task ID:	91160
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	90612
RA Cleanup Responsible:	ST - STATE
RA Funding Eligibility Type:	-
RA Years to Complete:	0
RA Actual Cost:	Not reported
District:	CD
Facility ID:	8516641
Facility Status:	CLOSED
Facility Type:	A - Retail Station -
County:	SEMINOLE
County ID:	59
Cleanup Eligibility Status:	E
Source Effective Date:	07-10-2013
Discharge Date:	09-28-1987
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	NFA - NFA COMPLETE
Disch Cleanup Status Date:	10-02-2013
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	06-19-2013
SRC Review Date:	07-10-2013
SRC Completion Status:	A - APPROVED
SRC Issue Date:	10-02-2013
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	PRESS_DM
Site Mgr End Date:	09-10-2013
Tank Office:	PCLP48 - Orange County
SR Task ID:	23271
SR Cleanup Responsible:	RP - RESPONSIBLE PARTY
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Y
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Y
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

SA Task ID:	23272
SA Cleanup Responsible:	RP - RESPONSIBLE PARTY
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	01-17-1997
SA Payment Date:	Not reported
RAP Task ID:	23273
RAP Cleanup Responsible ID:	RP - RESPONSIBLE PARTY
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	23274
RA Cleanup Responsible:	ST - STATE
RA Funding Eligibility Type:	-
RA Years to Complete:	0
RA Actual Cost:	Not reported

Click here for Florida Oculus:

UST:

Facility ID:	8516641
Name:	HANDY WAY FOOD STORE #3333
Address:	170 TUSCAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility Phone:	9043271217
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
Depco:	P
Region:	STATE
Positioning Method:	DPHO
Latitude/Longitude:	28 41 47.9799999 / 81 15 47.0200000

UST:

Tank ID:	1
Tank Capacity:	10000
Tank Location:	UNDERGROUND
Tank Status:	B
Status Date:	03/27/1995
Install Date:	5/1/1982
Substance:	B
Content Description:	Unleaded Gas
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	10563
Owner Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address 2:	ATTN: STORAGE TANK REGIS
Owner City,State,Zip:	CARY, NC 27511
Owner Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone:	9197746700

Tank ID: 2

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 03/27/1995
Install Date: 5/1/1982
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone: 9197746700

Tank ID: 4
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 03/27/1995
Install Date: 5/1/1982
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone: 9197746700

Tank ID: 5
Tank Capacity: 10000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 07/01/2000
Install Date: 4/1/1995
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

Owner Phone: 9197746700

Tank ID: 3
Tank Capacity: 12000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 07/01/2000
Install Date: 4/1/1995
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone: 9197746700

DWM CONTAM:
Name: HANDY WAY FOOD STORE #3333
Address: 170 TUSCAWILLA RD
City,State,Zip: WINTER SPRINGS, FL
Program Site Id: 8516641
Lat DD: 28
Lat MM: 41
Lat SS: 47.98
Long DD: 81
Long MM: 15
Long SS: 47.02
Office/ District: CD
Program Area: STORAGE TANKS
Priority Score: 56
Datum: Not reported
Method: DPHO
Facility Status: CLOSED
Facility Type: Not reported
Score Effective Date: Not reported
Score When Ranked: Not reported
Rank: Not reported
Operator: Not reported
Phone: Not reported
Name Changed: Not reported
Addr Changed: Not reported
Related Party ID: Not reported
Primary RP Role: Not reported
RP Begin Date: Not reported
RP Name: Not reported
RP Address1: Not reported
RP Address2: Not reported
RP City: Not reported

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	Not reported

Name:	HANDY WAY FOOD STORE #3333
Address:	170 TUSCAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL
Program Site Id:	8516641
Lat DD:	28
Lat MM:	41
Lat SS:	47.98
Long DD:	81
Long MM:	15
Long SS:	47.02
Office/ District:	CD
Program Area:	STORAGE TANKS
Priority Score:	56
Datum:	Not reported
Method:	DPHO
Facility Status:	CLOSED
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported
RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	Not reported

FL Financial Assurance 3:

Name:	HANDY WAY FOOD STORE #3333
Address:	170 TUSCAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8516641
Facility Phone:	9043271217
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station

HANDY WAY FOOD STORE #3333 (Continued) **U003334173**

DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	FPLIPA
Effective Date:	04/09/1990
Expire Date:	04/09/1991
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700

Name:	HANDY WAY FOOD STORE #3333
Address:	170 TUSCAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8516641
Facility Phone:	9043271217
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFIC
Insurance Company:	Not reported
Effective Date:	Not reported
Expire Date:	Not reported
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700

15
SSW
1/8-1/4
0.141 mi.
746 ft.

HI FLAVOR MEATS
315 TUSKAWILLA RD
WINTER SPRINGS, FL 32708

RCRA NonGen / NLR **1001487207**
FINDS **FLR000057604**
ECHO

Relative:
Lower

Actual:
40 ft.

RCRA NonGen / NLR:

Date Form Received by Agency:		20110615
Handler Name:	HI FLAVOR MEATS	
Handler Address:		315 TUSKAWILLA RD
Handler City,State,Zip:		WINTER SPRINGS, FL 32708-3710
EPA ID:		FLR000057604
Contact Name:		ROBBIE ONDICK
Contact Address:		TUSKAWILLA RD
Contact City,State,Zip:		WINTER SPRINGS, FL 32708-3710
Contact Telephone:		407-365-5661
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		OWNER SEC
EPA Region:		04
Land Type:		Private
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		X

HI FLAVOR MEATS (Continued) **1001487207**

Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		FL
State District:		CD
Mailing Address:		TUSKAWILLA RD
Mailing City,State,Zip:		WINTER SPRINGS, FL 32708-3710
Owner Name:	ONDICK	
Owner Type:		Private
Operator Name:	HI FLAVOR MEATS	
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Not reported
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported
202 GPRA Corrective Action Baseline:		No
Corrective Action Workload Universe:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:		No
TSDFs Only Subject to CA under Discretionary Auth Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Operating TSDF Universe:		Not reported
Full Enforcement Universe:		Not reported
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No

HI FLAVOR MEATS (Continued) **1001487207**

Financial Assurance Required:	Not reported
Handler Date of Last Change:	20151230
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: HI FLAVOR MEATS INC	
Legal Status:	Private
Date Became Current:	20000217
Date Ended Current:	Not reported
Owner/Operator Address:	315 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: HI FLAVOR MEATS	
Legal Status:	Private
Date Became Current:	19990629
Date Ended Current:	Not reported
Owner/Operator Address:	315 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-3710
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: ONDICK	
Legal Status:	Private
Date Became Current:	20000217
Date Ended Current:	20000218
Owner/Operator Address:	201 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: HI FLAVOR MEATS	
Legal Status:	Private
Date Became Current:	19990629
Date Ended Current:	Not reported
Owner/Operator Address:	315 TUSKAWILLA RD
Owner/Operator City,State,Zip:	WINTER SPRINGS, FL 32708-3710
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported

HI FLAVOR MEATS (Continued) **1001487207**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: HI FLAVOR MEATS INC
Legal Status: Private
Date Became Current: 20000217
Date Ended Current: Not reported
Owner/Operator Address: 315 TUSKAWILLA RD
Owner/Operator City,State,Zip: WINTER SPRINGS, FL 32708
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: ONDICK
Legal Status: Private
Date Became Current: 20000217
Date Ended Current: 20000218
Owner/Operator Address: 201 TUSKAWILLA RD
Owner/Operator City,State,Zip: WINTER SPRINGS, FL 32708
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20110615
Handler Name: HI FLAVOR MEATS
Federal Waste Generator Description: Not a generator, verified
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20000217
Handler Name: HI FLAVOR MEATS
Federal Waste Generator Description: Conditionally Exempt Small Quantity Generator
State District Owner: FL
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 311612

HI FLAVOR MEATS (Continued) **1001487207**

NAICS Description: MEAT PROCESSED FROM CARCASSES

NAICS Code: 42447
NAICS Description: MEAT AND MEAT PRODUCT MERCHANT WHOLESALERS

NAICS Code: 42511
NAICS Description: BUSINESS TO BUSINESS ELECTRONIC MARKETS

NAICS Code: 42512
NAICS Description: WHOLESALE TRADE AGENTS AND BROKERS

NAICS Code: 44521
NAICS Description: MEAT MARKETS

Facility Has Received Notices of Violation:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 19990615
Evaluation Responsible Agency: State

HI FLAVOR MEATS (Continued) **1001487207**

Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	J P
Evaluation Responsible Sub-Organization:	CD
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

FINDS:
Registry ID: 110005657128

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Florida Environmental System Today Application (FIESTA) Data Maintenance (FDM) system maintains entity, environmental interest and affiliation data for the State of Florida.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001487207
Registry ID:	110005657128
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005657128
Name:	HI FLAVOR MEATS
Address:	315 TUSKAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708

16
South
1/8-1/4
0.193 mi.
1018 ft.

2950 RAILROAD **BROWNFIELDS S116348626**
2950 RAILROAD AVE **ASBESTOS N/A**
WINTER SPRINGS, FL 32708

Relative:
Lower

Actual:
40 ft.

BROWNFIELDS:

Name:	FORMER CENTRAL FLORIDA DRUM FACILITY
Address:	2950 (M-1 ZONING AREA ONLY) AND 2960 RAILROAD AVENUE
City,State,Zip:	WINTER SPRINGS, FL 32708
Site Id:	BF590702001
Object Id:	56
County Code:	59
Area Id:	BF590702000
Area Name:	Former Central Florida Drum Facility
SRCO Date:	05/03/2019
District:	Central
Acreage:	6.15871099
Remediation:	AWAITING CLEANUP

2950 RAILROAD (Continued) **S116348626**

BSRA Date:	12/27/2007
X Coordinate:	667217.022
Y Coordinate:	523396.5232
Latitude:	28.6896972
Longitude:	-81.2598369
Lat DD:	28
Lat MM:	41
Lat SS:	24.12
Long DD:	-81
Long MM:	15
Long SS:	35.89
Source:	Seminole County
Method:	PAPER
Verification:	DPHO
Date Verification:	01/17/2008
Comment:	aka L.D. Plante, Inc.
User Name:	CLARKE_C
Datestamp:	12/20/2007

BSRA:

Name:	FORMER CENTRAL FLORIDA DRUM FACILITY
Address:	2950 (M-1 ZONING AREA ONLY) AND 2960 RAILROAD AVENUE
City,State,Zip:	WINTER SPRINGS, FL 32708
Area Id:	BF590702000
District:	Central
Acreage:	6.45
Site Id:	BF590702001
Executed Date:	12/27/2007
Issue Date:	05/03/2019
ERIC ID:	ERIC_11104
Conditional or Unconditional Closure:	C
Latitude:	28.6896972
Longitude:	-81.2598369

ASBESTOS:

Name:	2950 RAILROAD
Address:	2950 RAILROAD AVE
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility ID:	AS11701467
Notification ID:	87482
Notification Type:	ORIGINAL
Project Type:	DEMOLITION
Notification Status:	REVIEWED
Site Name:	2950 RAILROAD
Ordered Demolition?:	Not reported
Annual Notification:	Not reported
Owner Name:	STANARD PACIFIC
Contractor Name:	BOYKIN CONSTRUCTION
Start Date:	05/02/2016
Finish Date:	05/31/2016
Cementitious RACM:	Not reported
Cementitious SF:	0
Floor RACM:	Not reported
Floor SF:	0
Pipe RACM:	Not reported
Pipe SF:	0

2950 RAILROAD (Continued) **S116348626**

CF RACM:	0
Roof RACM:	Not reported
Roof SF:	0
Surface Mat RACM:	Not reported
Surface Mat SF:	0
Waste Disposal Site:	KEENE ROAD LANDFILL - CLASS III
Waste Disposal Address:	255 W. KEENE ROAD
Waste Disposal City:	APOPKA
Waste Disposal State:	FL
Waste Disposal Zip:	32703
Transporter Name:	Not reported
Contractor is Transporter:	Y
Waste Disp ID:	22321
Waste Disp Source:	W
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	Not reported
Transporter Zip:	Not reported
Date Receive:	Not reported

C17 **PUBLIX SUPER MARKET #62** **AST** **A100318088**
NNW **1160 E SR 434** **N/A**
1/8-1/4 **WINTER SPRINGS, FL 32708**
0.212 mi.
1121 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
46 ft.

AST:

Facility ID:	9809815
Name:	PUBLIX SUPER MARKET #62
Address:	1160 E SR 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility Phone:	4073279725
Facility Status:	OPEN
Facility Type:	C
Type Description:	Fuel user/Non-retail
Depco:	P
Region:	STATE
Positioning Method:	Not reported
Latitude/Longitude:	Not reported

Tank:

Tank ID:	1
Tank Capacity:	1000
Tank Location:	ABOVEGROUND
Tank Status:	U
Status Date:	11/01/2007
Install Date:	11/1/2007
Substance:	G
Content Description:	Emerg Generator Diesel
Vessel Indicator:	TANK
DEP Contractor:	P

Piping:

Tank ID:	1
Piping Category:	A
Piping Description:	Abv, no soil contact
Tank ID:	1
Piping Category:	I

PUBLIX SUPER MARKET #62 (Continued) **A100318088**

Piping Description: Suction piping system

Monitoring:
Tank ID: 1
Petro Monitoring Category: Q
Monitoring Description: Visual inspection of ASTs

Tank ID: 1
Petro Monitoring Category: F
Monitoring Description: Monitor dbl wall tank space

Tank ID: 1
Petro Monitoring Category: 1
Monitoring Description: Continuous electronic sensing

Owner:
Owner ID: 25164
Owner Name: PUBLIX SUPER MARKETS INC - ENVIRONMENTAL
Owner Address: PO BOX 407
Owner Address 2: ATTN: ESP STORAGE TANK REGIS
Owner City,State,Zip: LAKELAND, FL 33802
Owner Contact: BRENDA WILLIAMS EXT-55017
Owner Phone: 8636881188

Construction:
Tank ID: 1
Construction Category: C
Construction Description: Steel

Tank ID: 1
Construction Category: I
Construction Description: Double wall

Tank ID: 1
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 1
Construction Category: P
Construction Description: Level gauges/alarms

C18 **PUBLIX SUPER MARKET #62** **RCRA-VSQG** **1027096185**
NNW **1160 E STATE ROAD 434** **FLR000242453**
1/8-1/4 **WINTER SPRINGS, FL 32708**
0.212 mi.
1121 ft. **Site 2 of 2 in cluster C**

Relative:
Higher

Actual:
46 ft.

RCRA-VSQG:
Date Form Received by Agency: 20201221
Handler Name: PUBLIX SUPER MARKET #62
Handler Address: 1160 E STATE ROAD 434
Handler City,State,Zip: WINTER SPRINGS, FL 32708-2715
EPA ID: FLR000242453
Contact Name: BRENDA WILLIAMS

PUBLIX SUPER MARKET #62 (Continued) **1027096185**

Contact Address:	3300 PUBLIX CORPORATE PARKWAY
Contact City,State,Zip:	LAKELAND, FL 33811-3311
Contact Telephone:	863-688-1188
Contact Fax:	Not reported
Contact Email:	BRENDA.WILLIAMS@PUBLIX.COM
Contact Title:	MGR ENVIRONMENTAL COMPLIANCE
EPA Region:	04
Land Type:	Private
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	FL
State District:	CD
Mailing Address:	1160 E STATE ROAD 434
Mailing City,State,Zip:	WINTER SPRINGS, FL 32708-2715
Owner Name:	WINTER SPRINGS STATION LLC
Owner Type:	Private
Operator Name:	PUBLIX SUPER MARKETS INC
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking

PUBLIX SUPER MARKET #62 (Continued) **1027096185**

Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220415
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D010
Waste Description:	SELENIUM
Waste Code:	D016
Waste Description:	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
Waste Code:	D035
Waste Description:	METHYL ETHYL KETONE
Waste Code:	P001
Waste Description:	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
Waste Code:	P075
Waste Description:	NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	PUBLIX SUPER MARKETS INC
Legal Status:	Private

PUBLIX SUPER MARKET #62 (Continued) **1027096185**

Date Became Current:	20021107
Date Ended Current:	Not reported
Owner/Operator Address:	3300 PUBLIX CORP PKWY
Owner/Operator City,State,Zip:	LAKELAND, FL 33811-0000
Owner/Operator Telephone:	863-688-1188
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	WINTER SPRINGS STATION LLC
Legal Status:	Private
Date Became Current:	20171020
Date Ended Current:	Not reported
Owner/Operator Address:	11501 NORTHLAKE DR
Owner/Operator City,State,Zip:	CINCINNATI, OH 45249-0000
Owner/Operator Telephone:	513-554-1110
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20201221
Handler Name:	PUBLIX SUPER MARKET #62
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
State District Owner:	FL
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	445110
NAICS Description:	SUPERMARKETS AND OTHER GROCERY RETAILERS (EXCEPT CONVENIENCE RETAILERS)

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

19
SSW
1/4-1/2
0.327 mi.
1724 ft.

VACANT CHURCH AND WAREHOUSE
395 TUSKAWILLA RD. & 2950 RAILROAD AVE.
WINTER SPRINGS, FL 32708

SWF/LF
ASBESTOS

S120042590
N/A

Relative:
Higher

Actual:
47 ft.

SWF/LF:

Name:	TUSKAWILLA CROSSINGS DISASTER DEBRIS MANAGEMENT SITE
Address:	395 TUSKAWILLA RD
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility ID:	104855
District:	CD
Lat/Long:	28:41:24.79 / 81:15:48.91
Class Type:	910
Classification:	DISASTER DEBRIS MANAGEMENT SITE
Class Status:	INACTIVE (I)
Section:	Not reported
Township:	Not reported
Range:	Not reported
Responsible Authority Name:	Not reported
Responsible Authority Address:	Not reported
Responsible Authority City,St,Zip:	Not reported
Responsible Authority Phone:	Not reported
EMail Address1:	Not reported
EMail Address2:	Not reported
Site Supervisor Name:	Not reported
Site Supervisor Addr:	Not reported
Site Supervisor City/State/Zip:	Not reported
Site Supervisor Telephone:	Not reported
Land Owner Name:	Not reported
Land Owner Address:	Not reported
Land Owner City/State/Zip:	Not reported
Land Owner Telephone:	Not reported

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ASBESTOS:

Name:	VACANT CHURCH AND WAREHOUSE
Address:	395 TUSKAWILLA RD. & 2950 RAILROAD AVE.
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility ID:	AS11701468
Notification ID:	87645
Notification Type:	ORIGINAL
Project Type:	RENOVATION
Notification Status:	REVIEWED
Site Name:	CHURCH AND WAREHOUSE
Ordered Demolition?:	N
Annual Notification:	Not reported
Owner Name:	STANDARD PACIFIC OF FLORIDA
Contractor Name:	CROSS CONSTRUCTION SERVICES, INC.
Start Date:	05/11/2016
Finish Date:	05/17/2016
Cementitious RACM:	Not reported
Cementitious SF:	600
Floor RACM:	Not reported
Floor SF:	250
Pipe RACM:	Not reported
Pipe SF:	Not reported
CF RACM:	Not reported

VACANT CHURCH AND WAREHOUSE (Continued) **S120042590**

Roof RACM:	Not reported
Roof SF:	Not reported
Surface Mat RACM:	Not reported
Surface Mat SF:	1150
Waste Disposal Site:	ACMS CLASS I LANDFILL
Waste Disposal Address:	1032 CR 529A
Waste Disposal City:	LAKE PANASOFFKEE
Waste Disposal State:	FL
Waste Disposal Zip:	33538
Transporter Name:	Not reported
Contractor is Transporter:	Y
Waste Disp ID:	85764
Waste Disp Source:	W
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	FL
Transporter Zip:	Not reported
Date Receive:	Not reported

20
NNW
1/4-1/2
0.401 mi.
2118 ft.

WINTER SPRINGS CITY-CITY HALL **LUST** **U001374552**
1126 E HWY 434 **UST** **N/A**
WINTER SPRINGS, FL 32708 **AST**
DWM CONTAM
Financial Assurance

Relative:
Lower

Actual:
42 ft.

LUST:

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	STATE
Facility Id:	8731664
Facility Status:	OPEN
Facility Type:	H - Local Government
Facility Phone:	(407)327-1800
Facility Cleanup Rank:	6627
District:	Central District
Lat/Long (dms):	28 42 6.6917 / 81 15 56.1041
Section:	36
Township:	20S
Range:	30E
Feature:	Not reported
Method:	DPHO
Datum:	0
Score:	26
Score Effective Date:	2005-02-07 00:00:00
Score When Ranked:	26
Operator:	KIP LOCKCUFF
Name Update:	2009-09-15 00:00:00
Address Update:	2011-07-22 00:00:00

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	CMPL - COMPLETED
Contact:	IAN FLETCHER
Contact Company:	WINTER SPRINGS CITY
Contact Address:	1126 E SR 434
Contact City/State/Zip:	WINTER SPRINGS, FL 32708
Phone:	(407)327-1800
Bad Address Ind:	N

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

State: FL
Zip: 32708, 2715
Score: 26
Score Effective Date: 2005-02-07 00:00:00
Related Party ID: 24225
Primary RP Role: ACCOUNT OWNER
RP Begin Date: 1987-01-02
RP Zip: 2799
RP Extension: 320

Discharge Cleanup Summary:
Discharge Date: 5/15/2003
PCT Discharge Combined: Not reported
Cleanup Required: R - CLEANUP REQUIRED
Discharge Cleanup Status: NFA - NFA COMPLETE
Disch Cleanup Status Date: 10/3/2008
Cleanup Work Status: COMPLETED
Information Source: D - DISCHARGE NOTIFICATION
Other Source Description: Not reported
Eligibility Indicator: I - INELIGIBLE
Site Manager: SCHMIDT_JD
Site Mgr End Date: 12/10/2008
Tank Office: PCLP59 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

Contaminated Media:
Discharge Date: 5/15/2003
Pct Discharge Combined With: Not reported
Cleanup Required: R - CLEANUP REQUIRED
Discharge Cleanup Status: NFA - NFA COMPLETE
Disch Cleanup Status Date: 10/3/2008
Cleanup Work Status: COMPLETED
Information Source: D - DISCHARGE NOTIFICATION
Other Source Description: COMPLIANCE INSPECTION
Elig Indicator: I - INELIGIBLE
Site Manager: SCHMIDT_JD
Site Mgr End Date: 12/10/2008
Tank Office: PCLP59 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells: Not reported
Contaminated Monitoring Well: Yes
Contaminated Soil: Not reported
Contaminated Surface Water: Not reported
Contaminated Ground Water: Not reported
Pollutant: B - Unleaded Gas
Pollutant Other Description: DAMAGE TO THE FILL PORT AREA, RECENT CONSTRUCTION
Gallons Discharged: Not reported

Task Information:
District: CD
Facility ID: 8731664
Facility Status: OPEN
Facility Type: H - Local Government -
County: SEMINOLE
County ID: 59
Cleanup Eligibility Status: I
Source Effective Date: 09-19-2008
Discharge Date: 05-15-2003
Cleanup Required: R - CLEANUP REQUIRED
Discharge Cleanup Status: NFA - NFA COMPLETE

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Disch Cleanup Status Date:	10-03-2008
SRC Action Type:	NFA - NO FURTHER ACTION
SRC Submit Date:	09-16-2008
SRC Review Date:	09-19-2008
SRC Completion Status:	A - APPROVED
SRC Issue Date:	10-03-2008
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	SCHMIDT_JD
Site Mgr End Date:	12-10-2008
Tank Office:	PCLP59 - Seminole County
SR Task ID:	82753
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	10-22-2003
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Y
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	24
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	82754
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	83785
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	83531
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	0
RA Actual Cost:	Not reported

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UST:

Facility ID:	8731664
Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Type Description:	Local Government
Depco:	P
Region:	STATE
Positioning Method:	DPHO
Latitude/Longitude:	28 42 6.41999999 / 81 15 58.2000000

UST:

Tank ID:	1
Tank Capacity:	10000
Tank Location:	UNDERGROUND
Tank Status:	B
Status Date:	09/17/2007
Install Date:	4/1/1985
Substance:	B
Content Description:	Unleaded Gas
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	24225
Owner Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address 2:	ATTN: STORAGE TANK REGIS
Owner City,State,Zip:	WINTER SPRINGS, FL 32708
Owner Contact:	IAN FLETCHER
Owner Phone:	4073271800

Construction:

Tank ID:	3
Construction Category:	C
Construction Description:	Steel
Tank ID:	3
Construction Category:	M
Construction Description:	Spill containment bucket
Tank ID:	3
Construction Category:	P
Construction Description:	Level gauges/alarms
Tank ID:	3
Construction Category:	R
Construction Description:	Double wall - tank jacket

Piping:

Tank ID:	3
Piping Category:	A
Piping Description:	Abv, no soil contact
Tank ID:	3
Piping Category:	D
Piping Description:	External protective coating
Tank ID:	3
Piping Category:	B
Piping Description:	Steel/galvanized metal

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Tank ID: 3
Piping Category: I
Piping Description: Suction piping system

Monitoring:
Tank ID: 3
Petro Monitoring Category: Q
Monitoring Description: Visual inspection of ASTs

Tank ID: 3
Petro Monitoring Category: R
Monitoring Description: Monitor tank bottom space

Tank ID: 2
Tank Capacity: 1000
Tank Location: UNDERGROUND
Tank Status: B
Status Date: 05/01/2009
Install Date: 4/1/1985
Substance: G
Content Description: Emerg Generator Diesel
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 24225
Owner Name: WINTER SPRINGS CITY
Owner Address: 1126 E SR 434
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: WINTER SPRINGS, FL 32708
Owner Contact: IAN FLETCHER
Owner Phone: 4073271800

Construction:
Tank ID: 3
Construction Category: C
Construction Description: Steel

Tank ID: 3
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 3
Construction Category: P
Construction Description: Level gauges/alarms

Tank ID: 3
Construction Category: R
Construction Description: Double wall - tank jacket

Piping:
Tank ID: 3
Piping Category: A
Piping Description: Abv, no soil contact

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Tank ID: 3
Piping Category: D
Piping Description: External protective coating

Tank ID: 3
Piping Category: B
Piping Description: Steel/galvanized metal

Tank ID: 3
Piping Category: I
Piping Description: Suction piping system

Monitoring:
Tank ID: 3
Petro Monitoring Category: Q
Monitoring Description: Visual inspection of ASTs

Tank ID: 3
Petro Monitoring Category: R
Monitoring Description: Monitor tank bottom space

AST:
Facility ID: 8731664
Name: WINTER SPRINGS CITY-CITY HALL
Address: 1126 E HWY 434
City,State,Zip: WINTER SPRINGS, FL 32708
Facility Phone: 4073271800
Facility Status: OPEN
Facility Type: H
Type Description: Local Government
Depco: P
Region: STATE
Positioning Method: DPHO
Latitude/Longitude: 28 42 6.41999999 / 81 15 58.2000000

Tank:
Tank ID: 3
Tank Capacity: 1000
Tank Location: ABOVEGROUND
Tank Status: U
Status Date: 05/01/2009
Install Date: 5/1/2009
Substance: G
Content Description: Emerg Generator Diesel
Vessel Indicator: TANK
DEP Contractor: P

Piping:
Tank ID: 3
Piping Category: A
Piping Description: Abv, no soil contact

Tank ID: 3
Piping Category: D
Piping Description: External protective coating

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Tank ID: 3
Piping Category: B
Piping Description: Steel/galvanized metal

Tank ID: 3
Piping Category: I
Piping Description: Suction piping system

Monitoring:
Tank ID: 3
Petro Monitoring Category: Q
Monitoring Description: Visual inspection of ASTs

Tank ID: 3
Petro Monitoring Category: R
Monitoring Description: Monitor tank bottom space

Owner:
Owner ID: 24225
Owner Name: WINTER SPRINGS CITY
Owner Address: 1126 E SR 434
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: WINTER SPRINGS, FL 32708
Owner Contact: IAN FLETCHER
Owner Phone: 4073271800

Construction:
Tank ID: 3
Construction Category: C
Construction Description: Steel

Tank ID: 3
Construction Category: M
Construction Description: Spill containment bucket

Tank ID: 3
Construction Category: P
Construction Description: Level gauges/alarms

Tank ID: 3
Construction Category: R
Construction Description: Double wall - tank jacket

DWM CONTAM:
Name: WINTER SPRINGS CITY-CITY HALL
Address: 1126 E HWY 434
City,State,Zip: WINTER SPRINGS, FL
Program Site Id: 8731664
Lat DD: 28
Lat MM: 42
Lat SS: 6.42
Long DD: 81
Long MM: 15

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Long SS:	58.2
Office/ District:	CD
Program Area:	STORAGE TANKS
Priority Score:	26
Datum:	Not reported
Method:	DPHO
Facility Status:	CLOSED
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported
RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	Not reported

FL Financial Assurance 3:

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2008
Expire Date:	11/09/2009
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2009
Expire Date:	11/09/2010
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2010
Expire Date:	11/09/2011
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2011
Expire Date:	11/09/2011
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2011
Expire Date:	11/09/2012
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2012
Expire Date:	11/09/2013
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2013
Expire Date:	11/09/2014
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2014
Expire Date:	11/09/2015
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	11/09/2015
Expire Date:	11/09/2016
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY INSURANCE CO
Effective Date:	11/09/2016
Expire Date:	11/09/2017
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY INSURANCE CO
Effective Date:	11/09/2017
Expire Date:	11/09/2018
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY INSURANCE CO
Effective Date:	11/09/2018

WINTER SPRINGS CITY-CITY HALL (Continued) **U001374552**

Expire Date:	11/09/2019
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Name:	WINTER SPRINGS CITY-CITY HALL
Address:	1126 E HWY 434
City,State,Zip:	WINTER SPRINGS, FL 32708
Region:	3
Facility ID:	8731664
Facility Phone:	4073271800
Facility Status:	OPEN
Facility Type:	H
Type Description:	Local Government
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY INSURANCE CO
Effective Date:	11/09/2019
Expire Date:	11/09/2020
Owner ID:	24225
Onwer Name:	WINTER SPRINGS CITY
Owner Address:	1126 E SR 434
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	WINTER SPRINGS, FL 32708
Contact:	IAN FLETCHER
Resp Party Phone:	4073271800

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WINTER SPRINGS	S127070084	UPRIGHT RECYCLING/BRUCE G BECK	600 OLD SANDFORD OVIEDO ROAD	32708	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/06/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/19/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 71

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/03/2022
Next Scheduled EDR Contact: 11/21/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/14/2022
Date Data Arrived at EDR: 06/15/2022
Date Made Active in Reports: 06/21/2022
Number of Days to Update: 6

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/15/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

SHWS: Florida's State-Funded Action Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 05/12/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-488-0190
Last EDR Contact: 08/18/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Semi-Annually

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 04/12/2022
Date Made Active in Reports: 07/01/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-922-7121
Last EDR Contact: 07/11/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST: Petroleum Contamination Detail Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/25/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/14/2022
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Listing

The file for Leaking Aboveground Storage Tanks. Please remember STCM does not track the source of the discharge so the agency provides a list of facilities with an aboveground tank and an open discharge split by facilities with aboveground tanks only and facilities with aboveground and underground tanks.

Date of Government Version: 04/25/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/14/2022
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8799
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/28/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 06/02/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 79

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/29/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

FF TANKS: Federal Facilities Listing
A listing of federal facilities with storage tanks.

Date of Government Version: 06/21/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 09/06/2022
Number of Days to Update: 77

Source: Department of Environmental Protection
Telephone: 850-245-8250
Last EDR Contact: 06/21/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Quarterly

UST: Storage Tank Facility Information
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/25/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

AST: Storage Tank Facility Information
Registered Aboveground Storage Tanks.

Date of Government Version: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/25/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 06/02/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 79

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/14/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/07/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/28/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

TANKS: Storage Tank Facility List

This listing includes storage tank facilities that do not have tank information. The tanks have either be closed or removed from the site, but the facilities were still registered at some point in history.

Date of Government Version: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/25/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8841
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENG CONTROLS: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to engineering controls. Engineering Controls encompass a variety of engineered remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. ECs include fences, signs, guards, landfill caps, provision of potable water, slurry walls, sheet pile (vertical caps), pumping and treatment of groundwater, monitoring wells, and vapor extraction systems.

Date of Government Version: 06/17/2022
Date Data Arrived at EDR: 06/27/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

Inst Control: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

Date of Government Version: 06/17/2022
Date Data Arrived at EDR: 06/27/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Sites
Listing of closed and active voluntary cleanup sites.

Date of Government Version: 04/12/2022
Date Data Arrived at EDR: 05/13/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 18

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS AREAS: Brownfields Areas Database
A "brownfield area" means a contiguous area of one or more brownfield sites, some of which may not be contaminated, that has been designated as such by a local government resolution. Such areas may include all or portions of community redevelopment areas, enterprise zones, empowerment zones, other such designated economically deprived communities and areas, and Environmental Protection Agency (EPA) designated brownfield pilot projects. This layer provides a polygon representation of the boundaries of these designated Brownfield Areas in Florida.

Date of Government Version: 12/07/2021
Date Data Arrived at EDR: 06/27/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

BROWNFIELDS: Brownfields Sites Database
Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

Date of Government Version: 01/11/2022
Date Data Arrived at EDR: 03/29/2022
Date Made Active in Reports: 06/23/2022
Number of Days to Update: 86

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 07/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

BSRA: Brownfield Site Rehabilitation Agreements Listing
The BSRA provides DEP and the public assurance that site rehabilitation will be conducted in accordance with Florida Statutes and DEP's Contaminated Site Cleanup Criteria rule. In addition, the BSRA provides limited liability protection for the voluntary responsible party. The BSRA contains various commitments by the voluntary responsible party, including milestones for completion of site rehabilitation tasks and submittal of technical reports and plans. It also contains a commitment by DEP to review technical reports according to an agreed upon schedule. Only those brownfield sites with an executed BSRA are eligible to apply for a voluntary cleanup tax credit incentive pursuant to Section 376.30781, Florida Statutes.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/29/2022
Date Made Active in Reports: 06/23/2022
Number of Days to Update: 86

Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 07/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/09/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Centers

A listing of recycling centers located in the state of Florida.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8718
Last EDR Contact: 07/07/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/12/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 04/30/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/18/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: No Update Planned

PRIORITYCLEANERS: Priority Ranking List

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a drycleaning facility.

Date of Government Version: 04/30/2022
Date Data Arrived at EDR: 05/12/2022
Date Made Active in Reports: 08/04/2022
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 08/08/2022
Next Scheduled EDR Contact: 11/21/2022
Data Release Frequency: Varies

FL SITES: Sites List

This summary status report was developed from a number of lists including the Eckhardt list, the Moffit list, the EPA Hazardous Waste Sites list, EPA's Emergency & Remedial Response information System list (RCRA Section 3012) & existing department lists such as the obsolete uncontrolled Hazardous Waste Sites list. This list is no longer updated.

Date of Government Version: 12/31/1989
Date Data Arrived at EDR: 05/09/1994
Date Made Active in Reports: 08/04/1994
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 03/24/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 04/30/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/18/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

DEP has conducted initial environmental assessments related to the historic and current use of chemicals found in aqueous film forming foam (AFFF) at fire training facilities throughout Florida

Date of Government Version: 02/11/2022
Date Data Arrived at EDR: 02/18/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 850-245-8690
Last EDR Contact: 08/30/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

PFAS: PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid
PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid, respectively. Both are fluorinated organic chemicals, part of a larger family of compounds referred to as perfluoroalkyl substances (PFASs).

Date of Government Version: 07/24/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 08/08/2022
Number of Days to Update: 14
Source: Department of Environmental Protection
Telephone: 850-245-8690
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/21/2022
Date Made Active in Reports: 06/14/2022
Number of Days to Update: 85
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

SPILLS: Oil and Hazardous Materials Incidents
Statewide oil and hazardous materials inland incidents.

Date of Government Version: 07/05/2022
Date Data Arrived at EDR: 07/06/2022
Date Made Active in Reports: 09/16/2022
Number of Days to Update: 72
Source: Department of Environmental Protection
Telephone: 850-245-2010
Last EDR Contact: 07/05/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/04/2013
Number of Days to Update: 60
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch
Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 09/01/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/11/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 73

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/03/2022
Next Scheduled EDR Contact: 11/21/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/21/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/29/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/04/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/12/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/18/2022
Date Data Arrived at EDR: 07/18/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 11

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/14/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/10/2022
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 69

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/04/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/23/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 04/14/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 89

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/29/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/24/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/03/2022
Date Data Arrived at EDR: 08/17/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 14

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/14/2022
Date Data Arrived at EDR: 06/15/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 68

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/13/2022
Date Data Arrived at EDR: 05/18/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 13

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/22/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/02/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 07/01/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/07/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 73

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Quarterly

AIRS: Permitted Facilities Listing

A listing of Air Resources Management permits.

Date of Government Version: 04/22/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/20/2022
Number of Days to Update: 85

Source: Department of Environmental Protection
Telephone: 850-921-9558
Last EDR Contact: 07/14/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-717-9086
Last EDR Contact: 08/09/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

CLEANUP SITES: DEP Cleanup Sites - Contamination Locator Map Listing

This listing includes the locations of waste cleanup sites from various programs. The source of the cleanup site data includes Hazardous Waste programs, Site Investigation Section, Compliance and Enforcement Tracking, Drycleaning State Funded Cleanup Program (possibly other state funded cleanup), Storage Tank Contamination Monitoring.

Date of Government Version: 08/22/2022
Date Data Arrived at EDR: 08/22/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 22

Source: Department of Environmental Protection
Telephone: 866-282-0787
Last EDR Contact: 08/22/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

DEDB: Ethylene Dibromide Database Results

Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells. The amount found exceeds the maximum contaminant level as stated in Chapter 62-550 or 520. It is a potential threat to public health when present in drinking water.

Date of Government Version: 06/13/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 06/27/2022
Number of Days to Update: 14

Source: Department of Environmental Protection
Telephone: 850-245-8335
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Facilities

The Drycleaners database, maintained by the Department of Environmental Protection, provides information about permitted dry cleaner facilities.

Date of Government Version: 04/18/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Semi-Annually

DWM CONTAM: DWM CONTAMINATED SITES

A listing of active or known sites. The listing includes sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and drycleaning).

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/21/2022
Number of Days to Update: 76

Source: Department of Environmental Protection
Telephone: 850-245-7503
Last EDR Contact: 07/05/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A list of hazardous waste facilities required to provide financial assurance under RCRA.

Date of Government Version: 04/03/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/14/2022
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8793
Last EDR Contact: 07/25/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Semi-Annually

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities.

Date of Government Version: 04/03/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/14/2022
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8743
Last EDR Contact: 07/25/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Semi-Annually

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for storage tanks sites.

Date of Government Version: 05/03/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 07/20/2022
Number of Days to Update: 76

Source: Department of Environmental Protection
Telephone: 850-245-8853
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

FL Cattle Dip. Vats: Cattle Dipping Vats

From the 1910's through the 1950's, these vats were filled with an arsenic solution for the control and eradication of the cattle fever tick. Other pesticides, such as DDT, were also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard.

Date of Government Version: 09/27/2019
Date Data Arrived at EDR: 01/10/2020
Date Made Active in Reports: 02/11/2020
Number of Days to Update: 32

Source: Department of Environmental Protection
Telephone: 850-245-4444
Last EDR Contact: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: No Update Planned

HW GEN: Hazardous Waste Generators

Small Quantity Hazardous Waste Generators are regulated under the federal Resource Conservation and Recovery Act (RCRA) and applicable state regulations as generators of hazardous wastes in quantities greater than 100 Kg but less than 1,000 Kg in any one calendar month. Large Quantity Generators of Hazardous Waste are tracked in this coverage based on their notification to the Department of Environmental Protection as to their handler status, or based on inspections conducted at their facilities. These facilities are regulated under the federal Resource Conservation and Recovery Act (RCRA) and applicable state regulations as generators of hazardous wastes in quantities equal to or greater than 1,000 Kg in any one calendar month.

Date of Government Version: 08/11/2021
Date Data Arrived at EDR: 12/17/2021
Date Made Active in Reports: 03/08/2022
Number of Days to Update: 81

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 06/24/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Quarterly

RESP PARTY: Responsible Party Sites Listing

Open, inactive and closed responsible party sites

Date of Government Version: 06/27/2022
Date Data Arrived at EDR: 06/27/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Quarterly

SITE INV SITES: Site Investigation Section Sites Listing

Statewide coverage of Site Investigation Section (SIS) sites. Site Investigation is a Section within the Bureau of Waste Cleanup, Division of Waste Management. SIS provides technical support to FDEP District Waste Cleanup Programs and conducts contamination assessments throughout the state.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8953
Last EDR Contact: 08/15/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Quarterly

TIER 2: Tier 2 Facility Listing

A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 06/08/2022
Date Made Active in Reports: 08/24/2022
Number of Days to Update: 77

Source: Department of Environmental Protection
Telephone: 850-413-9970
Last EDR Contact: 08/29/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

UIC: Underground Injection Wells Database Listing

A listing of Class I wells. Class I wells are used to inject hazardous waste, nonhazardous waste, or municipal waste below the lowermost USDW.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 04/21/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 850-245-8655
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

WASTEWATER: Wastewater Facility Regulation Database
Domestic and industrial wastewater facilities.

Date of Government Version: 05/02/2022
Date Data Arrived at EDR: 05/03/2022
Date Made Active in Reports: 07/20/2022
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 850-245-8600
Last EDR Contact: 08/01/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALACHUA COUNTY:

FACILITY LIST ALACHUA: Facility List
List of all regulated facilities in Alachua County.

Date of Government Version: 09/06/2022
Date Data Arrived at EDR: 09/07/2022
Date Made Active in Reports: 09/13/2022
Number of Days to Update: 6

Source: Alachua County Environmental Protection Department
Telephone: 352-264-6800
Last EDR Contact: 09/06/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Annually

BROWARD COUNTY:

AST BROWARD: Aboveground Storage Tanks
Aboveground storage tank locations in Broward County.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/03/2021
Number of Days to Update: 78

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

UST BROWARD: Underground Storage Tanks
All known regulated storage tanks within Broward County, including those tanks that have been closed

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/03/2021
Number of Days to Update: 78

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

HILLSBOROUGH COUNTY:

LF HILLSBOROUGH: Hillsborough County LF
Hillsborough county landfill sites.

Date of Government Version: 04/04/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 06/29/2022
Number of Days to Update: 85

Source: Hillsborough County Environmental Protection Commission
Telephone: 813-627-2600
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

MIAMI-DADE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DADE CO AP: Air Permit Sites
Facilities that release or have a potential to release pollutants.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

DADE CO AW: Agricultural Waste Listing
A listing of agricultural waste sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: Miami-Dade County Division of Environmental Resources Management
Telephone: 305-372-6715
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

DADE CO LF: Miami Dade County Landfill Solid Waste Sites listing.
Miami Dade County Landfill Solid Waste Sites listing.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/19/2022
Number of Days to Update: 84

Source: Miami Dade County Environmental Resources Management
Telephone: 305-372-6789
Last EDR Contact: 08/09/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

DADE CO LW: Liquid Waste Transporter List
The Liquid Waste Transporter permit regulates the transportation of various types of liquid and solid waste, including hazardous waste, waste oil and oily waste waters, septic and grease trap waste, biomedical waste, spent radiator fluid, photo chemical waste, dry sewage sludge, and other types of non-hazardous industrial waste. The Liquid Waste Transporter permits needed to protect the environment and the public from improperly handled and transported waste.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: DERM
Telephone: 305-372-6755
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

DADE MOP: Marine Facilities Operating Permit
What is this permit used for? Miami-Dade County Ordinance 89-104 and Section 24-18 of the Code of Miami-Dade County require the following types of marine facilities to obtain annual operating permits from DERM: All recreational boat docking facilities with ten (10) or more boat slips, moorings, davit spaces, and vessel tie-up spaces. All boat storage facilities contiguous to tidal waters in Miami-Dade County with ten (10) or more dry storage spaces including boatyards and boat manufacturing facilities.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

DADE MRE: Maimi River Enforcement
The Miami River Enforcement database files were created for facilities and in some instances vessels that were inspected by a workgroup within the Department that was identified as the Miami River Enforcement Group. The files do not all necessarily reflect enforcement cases and some were created for locations that were permitted by other Sections within the Department.

Date of Government Version: 06/05/2013
Date Data Arrived at EDR: 06/06/2013
Date Made Active in Reports: 08/06/2013
Number of Days to Update: 61

Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

DADE_IWP: Industrial Waste Permit Sites

Facilities that either generate more than 25,000 of wastewater per day to sanitary sewers or are pre-defined by EPA.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

ENF: Enforcement Case Tracking System Sites

Enforcement cases monitored by the Dade County Department of Environmental Resources Management.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 08/10/2022
Number of Days to Update: 78

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

SPILLS DADE: Fuel Spills Cases

DERM documents fuel spills of sites that are not in a state program.

Date of Government Version: 01/08/2009
Date Data Arrived at EDR: 01/13/2009
Date Made Active in Reports: 02/05/2009
Number of Days to Update: 23

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

UST DADE: Storage Tanks

A listing of aboveground and underground storage tank site locations.

Date of Government Version: 05/10/2020
Date Data Arrived at EDR: 08/19/2021
Date Made Active in Reports: 11/12/2021
Number of Days to Update: 85

Source: Department of Environmental Resource Management
Telephone: 305-372-6700
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

PALM BEACH COUNTY:

LF PALM BEACH: Palm Beach County LF

Palm Beach County Inventory of Solid Waste Sites.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/20/2011
Date Made Active in Reports: 10/10/2011
Number of Days to Update: 20

Source: Palm Beach County Solid Waste Authority
Telephone: 561-640-4000
Last EDR Contact: 09/09/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/08/2022
Date Data Arrived at EDR: 05/09/2022
Date Made Active in Reports: 07/28/2022
Number of Days to Update: 80

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/08/2022
Next Scheduled EDR Contact: 11/21/2022
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/29/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/06/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/10/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 08/29/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Department of Children & Families
Source: Provider Information
Telephone: 850-488-4900

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SUTTON CROSSING
TUSKAWILLA RD & FL 434
WINTER SPRINGS, FL 32708

TARGET PROPERTY COORDINATES

Latitude (North):	28.695011 - 28ˆ 41’ 42.04’’
Longitude (West):	81.262068 - 81ˆ 15’ 43.44’’
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	474399.5
UTM Y (Meters):	3174049.8
Elevation:	43 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	11610138 CASSELBERRY, FL
Version Date:	2018
East Map:	11610186 OVIEDO, FL
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

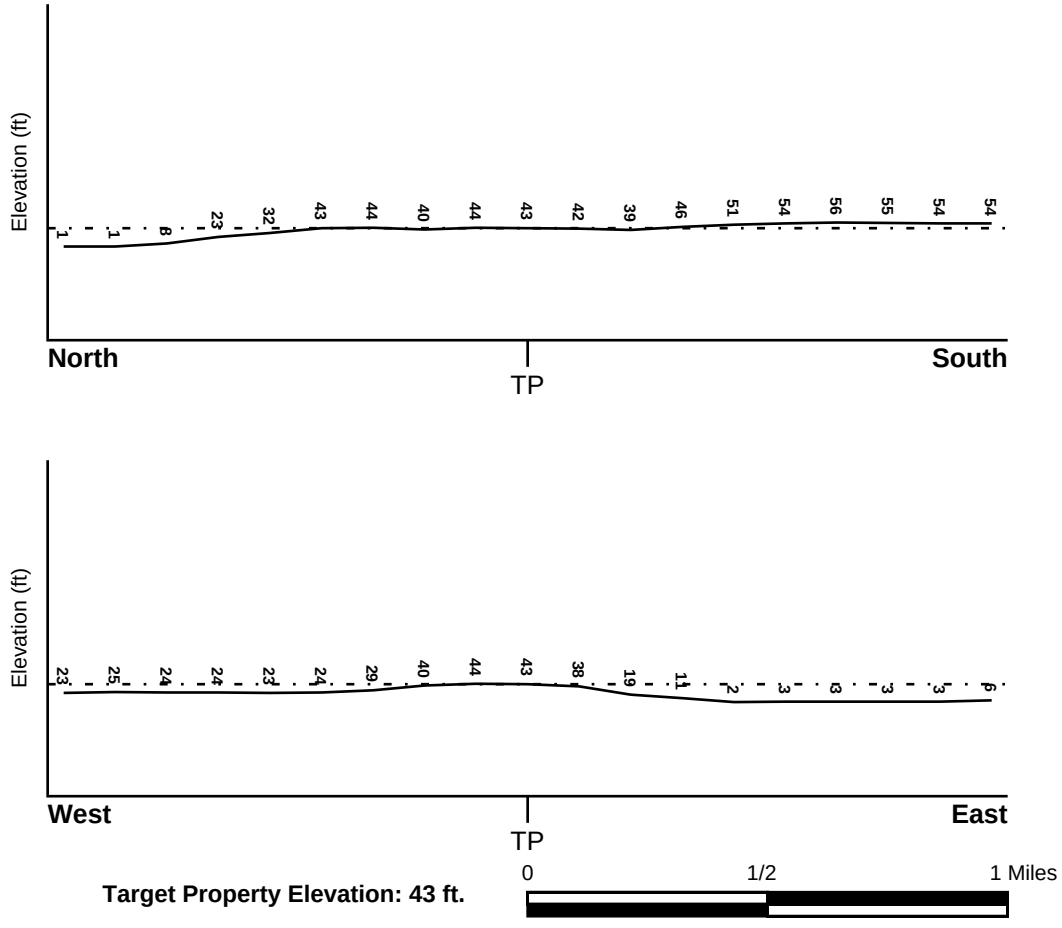
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 43 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
12117C0160F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
12117C0180F	FEMA FIRM Flood data
12117C0170F	FEMA FIRM Flood data
12117C0190F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CASSELBERRY	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Holocene
Code:	Qh *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	FLORIDANA
Soil Surface Texture:	mucky - fine sand
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	Very poorly. Soils are wet to the surface most of the time. Depth to water table is less than 1 foot, or is ponded.

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	21 inches	mucky - fine sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 8.40 Min: 4.50
2	21 inches	25 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 8.40 Min: 4.50
3	25 inches	80 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 0.20 Min: 0.00	Max: 8.40 Min: 4.50

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: muck
fine sand
loamy sand

Surficial Soil Types: muck
fine sand
loamy sand

Shallow Soil Types: fine sand
sand
loamy sand
sandy clay loam

Deeper Soil Types: sand
fine sand
fine sandy loam
sandy clay

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	FL3594152	0 - 1/8 Mile WSW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	FLSA12000019916	0 - 1/8 Mile WNW
A2	FLSA12000007433	0 - 1/8 Mile NNW
B4	FLSA12000075922	1/8 - 1/4 Mile SW
C5	FLSA12000073049	1/8 - 1/4 Mile West
6	FLSA12000019972	1/8 - 1/4 Mile SSW
B7	FLSA12000075919	1/8 - 1/4 Mile West
B8	FLSA12000075920	1/8 - 1/4 Mile West
C9	FLSA12000075908	1/8 - 1/4 Mile WNW
C10	FLSA12000075909	1/8 - 1/4 Mile WNW
B11	FLSA12000075914	1/8 - 1/4 Mile WSW
B12	FLSA12000075915	1/8 - 1/4 Mile WSW
C13	FLSA12000075918	1/8 - 1/4 Mile West
D14	FLSA12000019919	1/8 - 1/4 Mile NW
E15	FLSA12000075910	1/4 - 1/2 Mile West
E16	FLSA12000075911	1/4 - 1/2 Mile West
17	FLSA12000019915	1/4 - 1/2 Mile North
E18	FLSA12000077323	1/4 - 1/2 Mile West
D19	FLSA12000019917	1/4 - 1/2 Mile NW
F20	FLSA12000075917	1/4 - 1/2 Mile West
F21	FLSA12000075916	1/4 - 1/2 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E22	FLSA12000075913	1/4 - 1/2 Mile West
E23	FLSA12000075912	1/4 - 1/2 Mile West
D24	FLSA12000019918	1/4 - 1/2 Mile NW
G25	FLSJ12000008319	1/4 - 1/2 Mile SSE
G26	FLSJ12000002943	1/4 - 1/2 Mile SSE
27	FLSA12000070803	1/4 - 1/2 Mile SSW
G28	FLSA12000072526	1/4 - 1/2 Mile SSE
G29	FLSJ12000040794	1/4 - 1/2 Mile SSE
G30	FLSJ12000043733	1/4 - 1/2 Mile SSE
31	FLSA12000004734	1/4 - 1/2 Mile North
H32	FLSJ12000037721	1/4 - 1/2 Mile SSE
H33	FLSJ12000037783	1/4 - 1/2 Mile SSE
H34	FLSJ12000008652	1/4 - 1/2 Mile SSE
35	FLSA12000064025	1/4 - 1/2 Mile South
I36	FLSJ12000056986	1/2 - 1 Mile NW
I37	FLSJ12000064726	1/2 - 1 Mile NW
I38	FLSJ12000010560	1/2 - 1 Mile NW
I39	FLSJ12000031469	1/2 - 1 Mile NW
I40	FLSA12000004733	1/2 - 1 Mile NW
I41	FLSA12000000495	1/2 - 1 Mile NW
I42	FLSJ12000030056	1/2 - 1 Mile NW
I43	FLSJ12000067394	1/2 - 1 Mile NW
J44	FLSJ12000011406	1/2 - 1 Mile South
J45	FLSJ12000022387	1/2 - 1 Mile South
46	FLSA12000064030	1/2 - 1 Mile NNE
47	FLSJ12000027123	1/2 - 1 Mile NW
K48	FLSJ12000013757	1/2 - 1 Mile South
K49	FLSJ12000004844	1/2 - 1 Mile South
K50	FLSJ12000023531	1/2 - 1 Mile South
K51	FLSJ12000043780	1/2 - 1 Mile South
K52	FLSJ12000036643	1/2 - 1 Mile South
K53	FLSJ12000039018	1/2 - 1 Mile South
54	FLSJ12000055297	1/2 - 1 Mile South
K55	FLPUB1000007995	1/2 - 1 Mile South
K56	FLSA12000000489	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 7123398.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells
- Sink holes

SITE NAME:	Sutton Crossing	CLIENT:	Native Geoscience, Inc.
ADDRESS:	Tuskawilla Rd & FL 434 Winter Springs FL 32708	CONTACT:	Clinton Wilhelm
		INQUIRY #:	7123398.2s
LAT/LONG:	28.695011 / 81.262068	DATE:	September 20, 2022 1:05 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

A1
WNW
0 - 1/8 Mile
Higher

FL WELLS **FLSA12000019916**

Database:	Super Act Program Well Data	Well Name:	LAKE JESSUP ANIMAL HOSPITAL
Permit #:	0	Well Status:	ACTIVE
Well Type:	Limited Use PWS	Casing Material:	Black Steel
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported		

A2
NNW
0 - 1/8 Mile
Higher

FL WELLS **FLSA12000007433**

Database:	Super Act Program Well Data	Well Name:	PINCH A PENNY
Permit #:	0	Well Status:	INACTIVE
Well Type:	Limited Use PWS	Casing Material:	Black Steel
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported		

A3
WSW
0 - 1/8 Mile
Higher

FRDS PWS **FL3594152**

Epa region:	04	State:	FL
Pwsid:	FL3594152	Pwsname:	HANDY WAY #3333/CASSELBERRY
Cityserved:	Not Reported	Stateserved:	FL
Zipserved:	Not Reported	Fipscounty:	12117
Status:	Closed	Retpopsrvd:	26
Pwssvcconn:	1	Psource longname:	Groundwater
Pwstype:	TNCWS	Owner:	Private
Contact:	Not Reported	Contactorgname:	Not Reported
Contactphone:	407-327-1217	Contactaddress1:	CNR OF TUSKAWILLA & 434
Contactaddress2:	Not Reported	Contactcity:	WINTER SPRINGS
Contactstate:	FL	Contactzip:	32708
Pwsactivitycode:	I		

PWS ID:	FL3594152	PWS type:	System Owner/Responsible Party
PWS name:	MILLER ENTERPRISES, INC.	PWS address:	Not Reported
PWS city:	CRESCENT CITY	PWS state:	FL
PWS zip:	32112	PWS ID:	FL3594152
Activity status:	Active	Date system activated:	Not Reported
Date system deactivated:	Not Reported	Retail population:	00000026
System name:	HANDY WAY # 3333	System address:	Not Reported
System address:	CNR OF TUSKAWILLA & 434	System city:	WINTER SPRINGS
System state:	FL	System zip:	32708

Population served:	Under 101 Persons	Treatment:	Treated
Latitude:	284140	Longitude:	0811550
Latitude:	284140	Longitude:	0811550

B4
SW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075922**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

C5
West
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000073049**

Database:	Super Act Program Well Data	Well Name:	DONAHOE
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	BLACK STEEL
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

6
SSW
1/8 - 1/4 Mile
Lower

FL WELLS **FLSA12000019972**

Database:	Super Act Program Well Data	Well Name:	HI- FLAVOR MEATS [FORMERLY
Permit #:	0	Well Status:	ABANDONED
Well Type:	Non-Community PWS	Casing Material:	Galvanized
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

B7
West
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075919**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE

Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

B8
West
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075920**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320248401
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

C9
WNW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075908**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

C10
WNW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075909**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320247801
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B11
WSW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075914**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	RETAGGED
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320248101
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

B12
WSW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000075915**

Database:	Super Act Program Well Data	Well Name:	LOFROOS
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	GALVANIZED
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

C13
West
1/8 - 1/4 Mile
Lower

FL WELLS **FLSA12000075918**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

D14
NW
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA12000019919**

Database:	Super Act Program Well Data	Well Name:	CARL ROBERTS
Permit #:	0	Well Status:	INACTIVE
Well Type:	Private	Casing Material:	Galvanized
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE

Resident Type: Not Reported

E15
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075910**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320247901
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

E16
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075911**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

17
North
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000019915**

Database:	Super Act Program Well Data	Well Name:	VERN KINGSBURY
Permit #:	0	Well Status:	ABANDONED
Well Type:	Private	Casing Material:	Black Steel
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

E18
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000077323**

Database:	Super Act Program Well Data	Well Name:	RODENBURG
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	BLACK STEEL
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes

Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

D19
NW
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000019917**

Database:	Super Act Program Well Data	Well Name:	TERRY HILL
Permit #:	0	Well Status:	ABANDONED
Well Type:	Private	Casing Material:	Galvanized
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

F20
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075917**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320248201
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

F21
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075916**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

E22
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075913**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	Not Reported
Well Type:	Private	Casing Material:	Not Reported

Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	320248001
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

E23
West
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000075912**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

D24
NW
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000019918**

Database:	Super Act Program Well Data	Well Name:	MARK RICE
Permit #:	0	Well Status:	ABANDONED
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

G25
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSJ12000008319**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	67835	Official Permit ID:	8300
Permit Seq #:	3	Station Name:	1
Station Type:	Production Well	Monitoring:	N
Site ID:	25099	Site Name:	L. D. PLANTE INC.
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	L. D. Plante Inc.	Date Received:	06-SEP-00
Decision Made:	06-OCT-00	Permit Expiration:	Not Reported
Recommendation:	No Permit Required	Permit Status:	Never Issued
Project Acres:	136	Casing Diameter (in):	4
Casing Depth (ft):	102	Total Well Depth (ft):	160
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	25
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G26
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSJ12000002943**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3741	Official Permit ID:	8300
Permit Seq #:	2	Station Name:	1
Station Type:	Production Well	Monitoring:	N
Site ID:	4038	Site Name:	L. D. PLANTE INC.
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	L. D. Plante Inc.	Date Received:	14-APR-93
Decision Made:	07-SEP-93	Permit Expiration:	07-SEP-00
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	82	Casing Diameter (in):	4
Casing Depth (ft):	102	Total Well Depth (ft):	160
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	25
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

27
SSW
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000070803**

Database:	Super Act Program Well Data	Well Name:	LORD OF LIFE CHURCH
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	PVC
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	2	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER		

G28
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSA12000072526**

Database:	Super Act Program Well Data	Well Name:	PLANTE
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	BLACK STEEL
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	590088401
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	OWNER		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G29
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSJ12000040794**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	67835	Official Permit ID:	8300
Permit Seq #:	3	Station Name:	2
Station Type:	Production Well	Monitoring:	N
Site ID:	25099	Site Name:	L. D. PLANTE INC.
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	L. D. Plante Inc.	Date Received:	06-SEP-00
Decision Made:	06-OCT-00	Permit Expiration:	Not Reported
Recommendation:	No Permit Required	Permit Status:	Never Issued
Project Acres:	136	Casing Diameter (in):	8
Casing Depth (ft):	84	Total Well Depth (ft):	374
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	1200
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

G30
SSE
1/4 - 1/2 Mile
Lower

FL WELLS **FLSJ12000043733**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3741	Official Permit ID:	8300
Permit Seq #:	2	Station Name:	2
Station Type:	Production Well	Monitoring:	N
Site ID:	4038	Site Name:	L. D. PLANTE INC.
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	L. D. Plante Inc.	Date Received:	14-APR-93
Decision Made:	07-SEP-93	Permit Expiration:	07-SEP-00
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	82	Casing Diameter (in):	8
Casing Depth (ft):	84	Total Well Depth (ft):	374
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	1200
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

31
North
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000004734**

Database:	Super Act Program Well Data	Well Name:	JUANITA BLUMBERG
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	Black Steel
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	4	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE

Resident Type: Not Reported

H32
SSE **FL WELLS** **FLSJ12000037721**
1/4 - 1/2 Mile
Lower

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3741	Official Permit ID:	8300
Permit Seq #:	2	Station Name:	C
Station Type:	Production Well	Monitoring:	N
Site ID:	4038	Site Name:	L. D. PLANTE INC.
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	L. D. Plante Inc.	Date Received:	14-APR-93
Decision Made:	07-SEP-93	Permit Expiration:	07-SEP-00
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	82	Casing Diameter (in):	4
Casing Depth (ft):	0	Total Well Depth (ft):	0
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Inactive	Pump Capacity (gpm):	0
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

H33
SSE **FL WELLS** **FLSJ12000037783**
1/4 - 1/2 Mile
Lower

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	67835	Official Permit ID:	8300
Permit Seq #:	3	Station Name:	C
Station Type:	Production Well	Monitoring:	N
Site ID:	25099	Site Name:	L. D. PLANTE INC.
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	L. D. Plante Inc.	Date Received:	06-SEP-00
Decision Made:	06-OCT-00	Permit Expiration:	Not Reported
Recommendation:	No Permit Required	Permit Status:	Never Issued
Project Acres:	136	Casing Diameter (in):	4
Casing Depth (ft):	0	Total Well Depth (ft):	0
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Inactive	Pump Capacity (gpm):	0
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

H34
SSE **FL WELLS** **FLSJ12000008652**
1/4 - 1/2 Mile
Lower

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3741	Official Permit ID:	8300
Permit Seq #:	2	Station Name:	D
Station Type:	Production Well	Monitoring:	N
Site ID:	4038	Site Name:	L. D. PLANTE INC.

Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	L. D. Plante Inc.	Date Received:	14-APR-93
Decision Made:	07-SEP-93	Permit Expiration:	07-SEP-00
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	82	Casing Diameter (in):	4
Casing Depth (ft):	0	Total Well Depth (ft):	0
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	0
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Commercial/Industrial/Institutional		

35
South
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA12000064025**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ERROR
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	590032601
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

I36
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000056986**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8368	Official Permit ID:	8369
Permit Seq #:	2	Station Name:	A
Station Type:	Production Well	Monitoring:	N
Site ID:	8628	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	06-APR-92	Decision Made:	13-OCT-92
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	4	Casing Depth (ft):	88
Total Well Depth (ft):	150	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Inactive	Pump Capacity (gpm):	100
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

I37
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000064726**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8369	Official Permit ID:	8369
Permit Seq #:	1	Station Name:	A

Station Type:	Production Well	Monitoring:	N
Site ID:	8629	Site Name:	Incian Creek Inc
Permit Type:	Initial Sequence	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Indian Creek Inc	Date Received:	17-DEC-84
Decision Made:	08-APR-85	Permit Expiration:	08-APR-92
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	1280	Casing Diameter (in):	4
Casing Depth (ft):	88	Total Well Depth (ft):	150
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Inactive	Pump Capacity (gpm):	100
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

I38
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000010560**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	62700	Official Permit ID:	8369
Permit Seq #:	4	Station Name:	A
Station Type:	Production Well	Monitoring:	N
Site ID:	20957	Site Name:	Tuscawilla Trails
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	Tuscawilla Trails	Date Received:	13-OCT-99
Decision Made:	16-NOV-00	Permit Expiration:	16-NOV-20
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	50	Casing Diameter (in):	4
Casing Depth (ft):	88	Total Well Depth (ft):	150
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Inactive	Pump Capacity (gpm):	100
Compliance Status:	Out Of Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

I39
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000031469**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	12071	Official Permit ID:	8369
Permit Seq #:	3	Station Name:	A
Station Type:	Production Well	Monitoring:	N
Site ID:	11986	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Transfer of Ownership	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	10-OCT-96	Decision Made:	10-OCT-96
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	4	Casing Depth (ft):	88
Total Well Depth (ft):	150	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Inactive	Pump Capacity (gpm):	100
Compliance Status:	Out Of Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

I40
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSA12000004733**

Database:	Super Act Program Well Data	Well Name:	TUSKAWILLA TRAILS
Permit #:	3694026	Well Status:	RETAGGED
Well Type:	Irrigation	Casing Material:	Black Steel
Well Depth (ft):	460	Casing Length (ft):	322
Casing Diameter (in):	10	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

I41
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSA12000000495**

Database:	Super Act Program Well Data	Well Name:	TUSKAWILLA TRAILS
Permit #:	3594026	Well Status:	INACTIVE
Well Type:	Irrigation	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported		

I42
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000030056**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	12071	Official Permit ID:	8369
Permit Seq #:	3	Station Name:	B
Station Type:	Production Well	Monitoring:	N
Site ID:	11986	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Transfer of Ownership	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	10-OCT-96	Decision Made:	10-OCT-96
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	10	Casing Depth (ft):	322
Total Well Depth (ft):	460	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Abandoned	Pump Capacity (gpm):	750
Compliance Status:	Out Of Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

I43
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000067394**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8368	Official Permit ID:	8369
Permit Seq #:	2	Station Name:	B
Station Type:	Production Well	Monitoring:	N
Site ID:	8628	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	06-APR-92	Decision Made:	13-OCT-92
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	10	Casing Depth (ft):	322
Total Well Depth (ft):	460	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Abandoned	Pump Capacity (gpm):	750
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

J44
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000011406**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	70241	Official Permit ID:	8420
Permit Seq #:	3	Station Name:	1
Station Type:	Production Well	Monitoring:	N
Site ID:	27468	Site Name:	Keeth Elementary
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-20	Statue Description:	CUP General (40C-20)
Permit Project Name:	Keeth Elementary	Date Received:	02-MAR-01
Decision Made:	19-OCT-01	Permit Expiration:	19-OCT-21
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	5.79	Casing Diameter (in):	6
Casing Depth (ft):	132	Total Well Depth (ft):	204
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	100
Compliance Status:	Undetermined	Permit App Process Status:	CLOS
Project Use:	Landscape/Recreation/Aesthetic		

J45
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000022387**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3794	Official Permit ID:	8420
Permit Seq #:	2	Station Name:	1
Station Type:	Production Well	Monitoring:	N
Site ID:	4091	Site Name:	KEETH ELEMENTARY
Permit Type:	Renewal	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)

Permit Project Name:	Keeth Elementary	Date Received:	08-OCT-93
Decision Made:	08-FEB-94	Permit Expiration:	08-FEB-01
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	12.3	Casing Diameter (in):	6
Casing Depth (ft):	132	Total Well Depth (ft):	204
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Abandoned	Pump Capacity (gpm):	100
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Landscape/Recreation/Aesthetic		

46
NNE
1/2 - 1 Mile
Lower

FL WELLS **FLSA12000064030**

Database:	Super Act Program Well Data	Well Name:	Not Reported
Permit #:	0	Well Status:	ACTIVE
Well Type:	Private	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0
Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	590033101
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported		

47
NW
1/2 - 1 Mile
Lower

FL WELLS **FLSJ12000027123**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	12071	Official Permit ID:	8369
Permit Seq #:	3	Station Name:	C
Station Type:	Production Well	Monitoring:	N
Site ID:	11986	Site Name:	Seminole Pines Mobile Home Park
Permit Type:	Transfer of Ownership	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	Seminole Pines Mobile Home Park		
Date Received:	10-OCT-96	Decision Made:	10-OCT-96
Permit Expiration:	13-OCT-99	Recommendation:	Approval
Permit Status:	Closed	Project Acres:	50
Casing Diameter (in):	12	Casing Depth (ft):	88
Total Well Depth (ft):	500	Water Source:	FAS - Upper Floridan Aquifer
Station Status:	Proposed	Pump Capacity (gpm):	1200
Compliance Status:	Out Of Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

K48
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000013757**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	107737	Official Permit ID:	8238
Permit Seq #:	6	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	306959	Site Name:	WTP 1

Permit Type:	Renewal	Permit Stage:	Compliance
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	26-SEP-06
Decision Made:	25-JAN-10	Permit Expiration:	25-JAN-30
Recommendation:	Approval	Permit Status:	Issued
Project Acres:	0	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	Undetermined	Permit App Process Status:	COMP
Project Use:	Public Supply		

K49
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000004844**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8240	Official Permit ID:	8238
Permit Seq #:	3	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	8500	Site Name:	CITY OF WINTER SPRINGS
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	01-MAY-95
Decision Made:	07-NOV-95	Permit Expiration:	07-NOV-02
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	3400	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

K50
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000023531**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	3715	Official Permit ID:	8238
Permit Seq #:	4	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	4012	Site Name:	CITY OF WINTER SPRINGS
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	06-MAR-96
Decision Made:	08-OCT-96	Permit Expiration:	08-OCT-06
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	7000	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

K51
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000043780**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	8239	Official Permit ID:	8238
Permit Seq #:	2	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	8499	Site Name:	CITY OF WINTER SPRINGS
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	04-DEC-85
Decision Made:	09-MAY-88	Permit Expiration:	09-MAY-95
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	3400	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	In Compliance	Permit App Process Status:	CLOS
Project Use:	Public Supply		

K52
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000036643**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	87750	Official Permit ID:	8238
Permit Seq #:	5	Station Name:	2EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	93278	Site Name:	WTP No 1
Permit Type:	Modification	Permit Stage:	Closed
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	28-FEB-03
Decision Made:	13-MAY-03	Permit Expiration:	08-OCT-06
Recommendation:	Approval	Permit Status:	Closed
Project Acres:	9	Casing Diameter (in):	12
Casing Depth (ft):	119	Total Well Depth (ft):	290
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	2000
Compliance Status:	Undetermined	Permit App Process Status:	CLOS
Project Use:	Public Supply		

K53
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000039018**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	107737	Official Permit ID:	8238
Permit Seq #:	6	Station Name:	MW-V1
Station Type:	Monitoring Well	Monitoring:	Y
Site ID:	306410	Site Name:	City of Winter Springs
Permit Type:	Renewal	Permit Stage:	Compliance
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)

Permit Project Name:	City of Winter Springs	Date Received:	26-SEP-06
Decision Made:	25-JAN-10	Permit Expiration:	25-JAN-30
Recommendation:	Approval	Permit Status:	Issued
Project Acres:	0	Casing Diameter (in):	4
Casing Depth (ft):	471	Total Well Depth (ft):	501
Water Source:	Not Reported	Station Status:	Active
Pump Capacity (gpm):	0	Compliance Status:	Undetermined
Permit App Process Status:	COMP	Project Use:	Public Supply

54
South
1/2 - 1 Mile
Higher

FL WELLS **FLSJ12000055297**

Database:	Consumptive Use Permit Well Database (St. Johns River WMD)		
Permit ID:	107737	Official Permit ID:	8238
Permit Seq #:	6	Station Name:	4EAST
Station Type:	Production Well	Monitoring:	N
Site ID:	306959	Site Name:	WTP 1
Permit Type:	Renewal	Permit Stage:	Compliance
FL Statute:	40C-2	Statue Description:	CUP Individual (40C-2)
Permit Project Name:	City of Winter Springs	Date Received:	26-SEP-06
Decision Made:	25-JAN-10	Permit Expiration:	25-JAN-30
Recommendation:	Approval	Permit Status:	Issued
Project Acres:	0	Casing Diameter (in):	12
Casing Depth (ft):	130	Total Well Depth (ft):	350
Water Source:	FAS - Upper Floridan Aquifer		
Station Status:	Active	Pump Capacity (gpm):	1200
Compliance Status:	Undetermined	Permit App Process Status:	COMP
Project Use:	Public Supply		

K55
South
1/2 - 1 Mile
Higher

FL WELLS **FLPUB1000007995**

Database:	Public Water System (PWS) Wells (Non-Federal)		
PWS Status:	ACTIVE	PWS Name:	WINTER SPRINGS, CITY OF (3 WPS)
PWS Type:	COMMUNITY	PWS Operator:	KYLE LANHAM
PWS Population Served:	34657	PWS Last San Survey:	19-SEP-19
PWS Design Capacity:	13912000	PWS Primary Service Area:	MUNICIPAL/CITY
Well ID:	2	Well Name:	WELL #2 TUSKAWILLA
Well Status:	ACTIVE	FLUW ID:	AAC3126
Height Above Elipsoid (m):	0	Well Plant ID:	3
Year Drilled:	1978	Depth (ft):	290
Availability Usage:	PERMANENT	Aquifer:	Floridan Aquifer

K56
South
1/2 - 1 Mile
Higher

FL WELLS **FLSA12000000489**

Database:	Super Act Program Well Data	Well Name:	WINTER SPRINGS EAST(TUSKAWILLA)
Permit #:	3591394	Well Status:	INACTIVE
Well Type:	Large (>150,00 gpd) Community PWS	Casing Material:	Not Reported
Well Depth (ft):	0	Casing Length (ft):	0

Casing Diameter (in):	0	Sanitary Seal:	Not Reported
Large PWS Well:	1	WSRP ID:	0
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: FL Radon

Radon Test Results

Zip	Total Buildings	% of sites>4pCi/L	Data Source
32708	280	0.0	Certified Residential Database
32708	27	0.0	Mandatory Non-Residential Database
32708	1	0.0	Mandatory Residential Database

Federal EPA Radon Zone for SEMINOLE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SEMINOLE COUNTY, FL

Number of sites tested: 82

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.630 pCi/L	100%	0%	0%
Basement	1.450 pCi/L	75%	25%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Public Water System (PWS) Wells (Non-Federal)
Department of Environmental Protection
Telephone: 850-245-8629
Statewide coverage of PWS Wells, excluding Federally owned facilities.

Well Construction Permitting Database
Source: Northwest Florida Water Management District
Telephone: 850-539-5999

Consumptive Use Permit Well Database
Source: St. Johns River Water Management District
Telephone: 386-329-4841

DEP GWIS - Generalized Water Information System Well Data
Source: Department of Environmental Protection
Telephone: 850-245-8507
Data collected for the Watershed Monitoring Section of the Department of Environmental Protection.

DOH and DEP Historic Study of Private Wells
Source: Department of Environmental Protection
Telephone: 850-559-0901
Historic database for private supply wells.

Permitted Well Location Database
Source: South Florida Water Management District
Telephone: 561-682-6877

Super Act Program Well Data
Source: Department of Health
Telephone: 850-245-4250
This table consists of data relating to all privately and publicly owned potable wells investigated as part of the SUPER Act program. The Florida Department of Health's SUPER Act Program (per Chapter 376.3071(4)(g), Florida Statutes), was given authority to provide field and laboratory services, toxicological risk assessments, investigations of drinking water contamination complaints and education of the public.

Water Well Location Information
Source: Suwannee River Water Management District
Telephone: 386-796-7211

Water Well Permit Database
Source: Southwest Water Management District
Telephone: 352-796-7211

Oil and Gas Permit Database
Source: Department of Environmental Protection
Telephone: 850-245-3194
Locations of all permitted wells in the state of Florida.

Florida Sinkholes

PHYSICAL SETTING SOURCE RECORDS SEARCHED

RADON

State Database: FL Radon
Source: Department of Health
Telephone: 850-245-4288
Zip Code Based Radon Data

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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Appendix iv

NATIVE GEOSCIENCE

2014 Edgewater Drive, Suite 246
Orlando, Florida 32804
(321) 442-3056
cwilhelm@nativegeo.com

CLINTON H. WILHELM

EXPERIENCE

Mr. Wilhelm has worked in the environmental and geotechnical industry for over seven years. He is familiar with stormwater system design methodologies, field testing for soil and groundwater parameters for stormwater system design, groundwater modeling, environmental assessment of soil and groundwater contamination, as well as environmental remediation technologies. Mr. Wilhelm has performed and reviewed numerous geotechnical and environmental reports in the State of Florida. He is certified in Hazardous Waste Operations and Emergency Response (HAZWOPER) per 29 CFR 1910.120(e). He has conducted numerous site assessments including soil and groundwater screening, sampling and analysis and has overseen soil and groundwater remediation projects.

Mr. Wilhelm has participated in the performance of environmental site assessments that include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the process used to develop opinions regarding conditions indicative of releases of hazardous substances and or petroleum products.

EDUCATION

FLORIDA ATLANTIC UNIVERSITY, BOCA RATON, FLORIDA – BACHELORS OF SCIENCE IN GEOLOGY

NATIVE GEOSCIENCE

2014 Edgewater Drive, Suite 246
Orlando, Florida 32804
(407) 342-1443
cdiehl@nativegeo.com

JOHN (CAIN) DIEHL, JR, P.G.

EXPERIENCE

Mr. Diehl has worked in the environmental industry for over 15 years and is currently a Professional Geologist in the State of Florida (P.G. # 2460). He is familiar with environmental remediation technologies such as In-Situ Chemical Oxidation, Bioremediation, Air Sparging and Soil Vapor Recovery, Permeable Reactive Barriers, etc. Mr. Diehl has performed and reviewed numerous Phase I Environmental Site Assessments in the State of Florida as well as Georgia, Alabama, New Hampshire, Maine, Utah, and California. He is certified in Hazardous Waste Operations and Emergency Response (HAZWOPER) per 29 CFR 1910.120(e). He has conducted numerous site assessments including soil and groundwater screening, sampling and analysis and has overseen soil and groundwater remediation projects.

Mr. Diehl has participated in the performance of environmental site assessments that include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions and for which professional judgment was used to develop opinions regarding conditions indicative of releases of hazardous substances and or petroleum products.

EDUCATION

UNIVERSITY OF FLORIDA, GAINESVILLE, FLORIDA – BACHELORS OF SCIENCE IN GEOLOGY

With Honors

UNIVERSITY OF MONTANA, MISSOULA, MONTANA – MASTERS OF SCIENCE IN HYDROGEOLOGY

QUEUE ANALYSIS

Chick-Fil-A

4311 Manatee Avenue

Prepared for:

Bohler Engineering

Palm Traffic
Engineering + Planning

1640

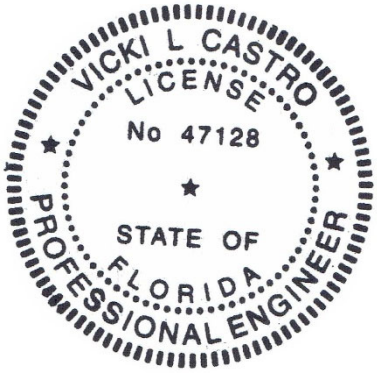
Queue Analysis
Chick-Fil-A – 4311 Manatee Avenue

July 2024

Prepared for:
Bohler Engineering

Prepared by:
Palm Traffic
400 North Tampa Street, 15th Floor
Tampa, FL 33602
Ph: (813) 296-2595

Project No. T23098



Vicki L Castro

Digitally signed by Vicki L Castro
Date: 2024.07.23 09:16:17 -04'00'

Vicki L. Castro, P.E.
P.E. No. 47128

This item has been digitally signed and sealed by Vicki L Castro on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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Observed Trip Generation

ITE Trip Generation

Observed Queue Data

PROJECT OVERVIEW

The purpose of this report is to provide the Queue Analysis for the existing Chick-Fil-A located at 4311 Manatee Avenue West which on the corner of Manatee Avenue West and 43rd Street West in the Manatee County, Florida, as shown in Figure 1. The store is 5,113 square feet with two drive through lanes extending from the drive through exit to the drive through entrance.

ACCESS SUMMARY

The accesses for the project is as follows:

- One (1) full access to 43rd Street West
- One (1) full access to 44th Street West.

Manatee Avenue West is a four-lane divided roadway with an existing posted speed limit of 45 mph. 43rd Street West and 44th Street West are two (2) lane undivided roadways. A site plan is included in the Appendix of this report.

ESTIMATED PROJECT TRIP GENERATION

A 12-hour observation study of the traffic entering and exiting the existing Chick-Fil-A was conducted on December 5, 2023 from 7:00 AM to 7:00 PM in 15-minute intervals. This data was utilized to develop the AM, mid-day, and PM peak hour trip generation for this store. Based on the observational study, during the AM peak hour, it is estimated that existing restaurant attracts 222 trip ends with 115 inbound and 107 outbound, as shown in Table 1. During the mid-day peak hour, it is estimated that existing restaurant attracts 550 trip ends with 278 inbound and 272 outbound, as shown in Table 1. During the PM peak hour, it is estimated that existing restaurant attracts 336 trip ends with 169 inbound and 167 outbound, as shown in Table 1. The trip rates obtained from the latest computerized version of "OTISS" which utilizes the Institute of Transportation Engineers' (ITE) Trip Generation, 11th Edition, 2021, as its database were included for comparison.

Figure 1. Project Location

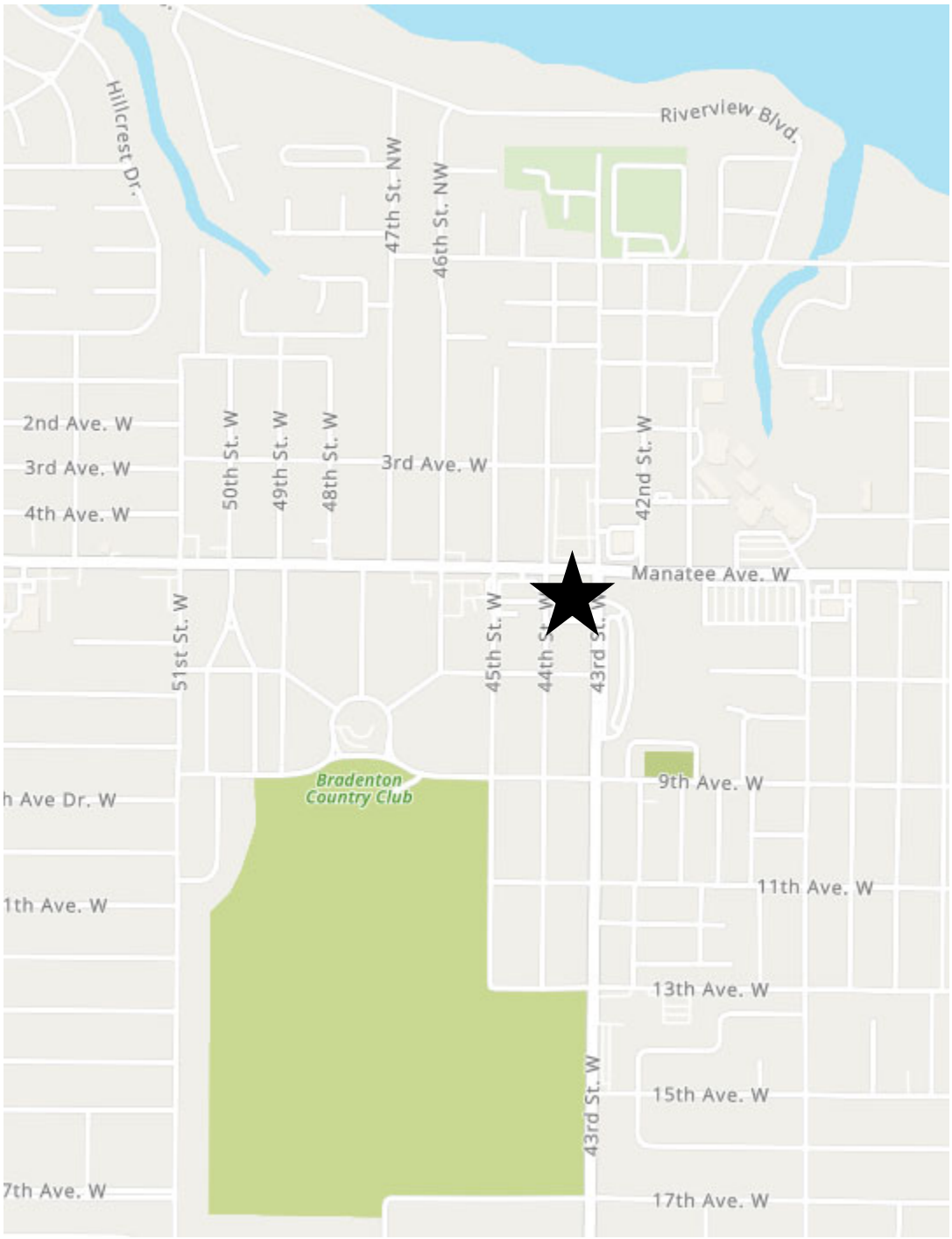


Table 1. Estimated Project Trip Generation

Land Use	ITE LUC	Size	AM Peak Hour Trip Ends (1) In	Out	Total	Rate	Mid-Day Trip Ends (1) In	Out	Total	Rate	PM Peak Hour Trip Ends (1) In	Out	Total	Rate
CFA w DT	934	5,113 SF	115	107	222	43.44	278	272	550	107.63	169	167	336	65.75
		ITE Trip Rate (2)	116	112	228	44.61					88	81	169	33.03

(1) Source: CFA observational study December 5, 2023.

(2) Source: ITE Trip Generation Hanbook, 11th Edition.

QUEUE LENGTH HOURLY ANALYSIS

A 12-hour observation study of the queue length in both lanes from the pick-up window to the order board and from the order board to the end of the lane was conducted on December 5, 2023, from 7:00 AM to 7:00 PM in one (1)-minute intervals. This data was utilized to develop the maximum one (1) minute queue in each lane per hour. Based on the observation study, the single longest queue occurred during the 12:00 – 1:00 PM hour with 10 vehicles queued at order board, as shown in Table 1. The longest queue from the pick-up window was 8 vehicles occurring during five (5) different hours. In addition, it was noted if the queue extended beyond the drive through lanes and into the parking area. The queue never extended beyond the queue area.

Table 2. Estimated Maximum Hourly Queue Length

Time	Maximum Queue (1) Pick Up Window to Order Borad (2)	Order Board to End of Lane (2)	Beyond Drive Thru Lanes
7:00-8:00 AM	8	2	0
8:00-9:00 AM	6	3	0
9:00-10:00 AM	3	3	0
10:00-11:00 AM	4	4	0
11:00 AM-12:00 PM	4	4	0
12:00-1:00 PM	8	10	0
1:00-2:00 PM	8	6	0
2:00-3:00 PM	4	5	0
3:00-4:00 PM	5	4	0
4:00-5:00 PM	6	6	0
5:00-6:00 PM	8	5	0
6:00-7:00 PM	8	5	0

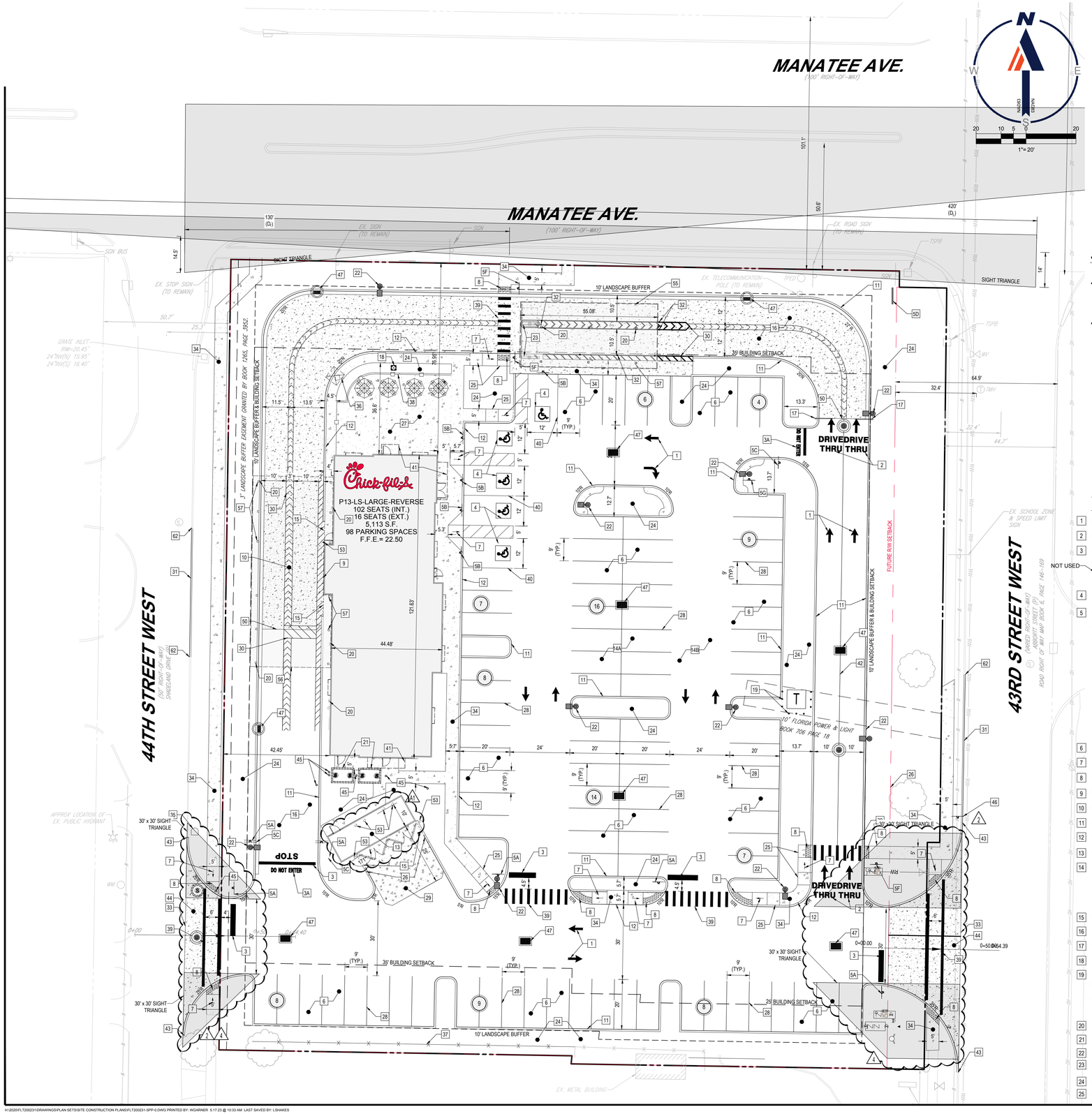
(1) Based on queue study conducted at existing CFA at 4311 Manatee Ave W on 12/5/2023.

(2) Two lanes each.

APPENDIX

APPENDIX

SITE PLAN



LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	#
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE DISTANCE NOTES:

43RD STREET WEST:
D = 590'
D_L = 420'

44TH STREET WEST:
D = 590'
D_R = 130'

SITE PLAN DESIGN NOTES & KEY PLAN

1 DIRECTIONAL ARROW (TYP)
2 DRIVE-THRU GRAPHICS (TYP)
3 STOP BAR GRAPHIC (TYP)
NOT USED 3A DO NOT ENTER GRAPHIC (TYP)
ONE WAY GRAPHIC (TYP)
4 PAINTED ACCESSIBLE PARKING SYMBOL (TYP)
5 SITE SIGNAGE
ALL SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE U.S. DEPARTMENT OF TRANSPORTATION AND NEW YORK STATE SUPPLEMENT; REFER TO SIGN PLAN BY OTHERS
5A STOP SIGN
5B ACCESSIBLE PARKING SIGN WITH BOLLARD BASE
5C "DO NOT ENTER" SIGN
5D DOUBLE FACED PYLON SIGN
5E CATERING AND CARRYOUT SIGN WITH BOLLARD BASE
5F YIELD FOR PEDESTRIAN SIGN
5G LEFT TURN ONLY SIGN
6 STANDARD PARKING STALL (TYP)
7 SIDEWALK ACCESSIBLE RAMP (TYP)
8 PROP. DETECTABLE WARNING STRIP (TYP)
9 DRIVE-THRU MANUAL SLIDER PANEL DOOR. REFER TO ARCH PLANS FOR DETAILS
10 DRIVE-THRU ISOMETRIC (REFER TO ARCH. PLANS AND CFA DETAILS)
11 CONCRETE CURB (TYP)
12 MONOLITHIC CURB AND SIDEWALK (TYP)
13 REFUSE ENCLOSURE FOUNDATION (REFER TO ARCH. PLANS AND CFA DETAILS)
14 TYPICAL PAVEMENT SECTION (REFER TO GEOTECHNICAL REPORT BY OTHERS)
14A LIGHT DUTY PAVEMENT SECTION (PARKING SPACES ONLY)
14B HEAVY DUTY PAVEMENT SECTION
15 FLUSH CURB
16 CONCRETE PAVING @ DRIVE THRU LANE
17 CLEARANCE BAR
18 FLAGPOLE (REFER TO SIGN PACKAGE BY OTHERS)
19 TRANSFORMER & PULL BOX WITH BOLLARDS (IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. GC TO COORDINATE TRANSFORMER LOCATION, BOLLARD PLACEMENT AND ALL OTHER REQUIREMENTS WITH THE UTILITY PROVIDER PRIOR TO CONSTRUCTION)
20 ROOF DOWNSPOUT (TO CONNECT TO SITE DRAINAGE SYSTEM)
21 1,250 GAL. GREASE INTERCEPTOR (PER UTILITY PROVIDER REQS.)
22 AREA LIGHT AND POLE (REFER TO LIGHTING PLAN BY OTHERS, TYP)
23 MENU BOARD & CANOPY ORDERING STATION (REFER TO ARCH PLANS BY OTHERS)
24 LANDSCAPED AREA
25 ACCESSIBLE LANDING AREA (TYP)
26 PROP. RELOCATED ROW LINE
27 SEASONAL OUTDOOR SEATING AREA (REFER TO ARCH. PLANS)
28 4" WIDE WHITE STRIPE (TYP.)
29 CONCRETE APRON @ TRASH ENCLOSURE
30 4" WIDE STRIPES @ 3' O.C., YELLOW REFLECTIVE PAINT WITH ANTI-SLIP ADHESIVE
31 GRANITE CURB
32 DRIVE-THRU ORDER POINT BOLLARD
33 PROP. EDGE OF ASPHALT PAVEMENT
34 CONCRETE SIDEWALK
35 PROP. LOCATION OF RELOCATED MAILBOX
36 PROP. CASH STATION (5' x 5' CONC. PAD FOR CASH STATION
37 PROP. 130 LF OF 6' PVC FENCE (PAINTED TO MATCH EXISTING)
38 PROP. ALUMINUM HANDRAIL
39 STRIPED CROSS-WALK (TYP)
40 4" WIDE BLUE STRIPE (TYP.)
41 BUILDING CANOPY
42 4" WIDE YELLOW STRIPE
43 LIMIT OF CONC. CURB REPLACEMENT
44 PROPOSED CONCRETE DRIVEWAY PER MANATEE COUNTY DETAIL 101.3 (SEE SHEET C-5.3)
45 SANITARY SEWER CLEANOUT
46 PROP. RELOCATED "SPEEDING FINES DOUBLED SIGN"
47 PROP. CATCH BASIN. GC TO PAINT INLETS BLACK
48 PROP. FIRE DEPARTMENT CONNECTION (REFER TO ARCH PLANS)
49 PROP. FIRE HYDRANT
50 EDGE OF CONCRETE PAVEMENT
NOT USED PROP. REDI ROCK RETAINING WALL (TO BE DESIGNED AND INSTALLED BY GC.
NOT USED PROP FIRST DEFENSE UNIT HYDRODYNAMIC SEPARATOR
NOT USED 53 PROP. BOLLARD
PROP. DELINEATOR POST
55 ORDER CANOPY (REFER TO PLANS BY OTHERS)
56 OUTSIDE MEAL DELIVERY CANOPY (REFER TO PLANS BY OTHERS)
NOT USED 57 CANOPY COLUMN (REFER TO PLANS BY OTHERS)
NOT USED PROP. SANITARY SEWER MANHOLE
NOT USED LIMIT OF WORK
NOT USED PROP. SAWCUT - REMOVE AND REPLACE PAVEMENT TO FULL DEPTH (TYP)
PROPOSED RELOCATED FLASHING SPEED LIMIT SIGN
62 LIMIT OF GRANITE CURB

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY REFER TO C-2.3 FOR ADDITIONAL NOTES

SITE DATA

PARCEL ID/FOLIO NUMBER	36487000056
SITE ADDRESS	4311 MANATEE AVE W
	BRADENTON, FL 34209
JURISDICTION	CITY OF BRADENTON
ZONING	SCC (SUBURBAN COMMERCIAL CORRIDOR)
FUTURE LAND USE	SCC (SUBURBAN COMMERCIAL CORRIDOR)
EXISTING LAND USE	FINANCIAL INSTITUTION
PROPOSED LAND USE	RESTAURANTS - OVER 20 SEATS
FEMA ZONE	Zone X
PROPOSED F.A.R.	0.05
PROPOSED BUILDING HEIGHT	± 22'
TOTAL PROJECT AREA	90,760 SF (2.08 AC)
EXISTING GREEN SPACE	22,301 SF (0.51 AC)
EXISTING POND AREA	0 AC
EXISTING TOTAL IMPERVIOUS AREA	68,389 SF (1.57 AC)
EXISTING BLDG. AREA	12,619 SF (0.29 AC)
EXISTING VUA AREA	53,579 SF (1.23 AC)
EXISTING OTHER IMPERVIOUS AREA	2,240 SF (0.05 AC)
PROPOSED GREEN SPACE	18,570 SF (0.42 AC)
PROPOSED POND AREA	0 AC
PROPOSED TOTAL IMPERVIOUS AREA	72,190 SF (1.66 AC)
PROPOSED BLDG. AREA	5,113 SF (0.12 AC)
PROPOSED DRIVE THRU BLDG AREA	1,550 SF (0.04 AC)
PROPOSED VUA AREA	61,678 SF (1.41 AC)
PROPOSED OTHER IMPERVIOUS AREA	3,849 SF (.09 AC)
PARKING CALCULATIONS	
(9'X20') PARKING SPACES PROVIDED	91 SPACES
TOTAL (12'X20') ADA SPACES PROVIDED	5 SPACES
TOTAL SPACES PROVIDED	96 SPACES
REQUIRED PARKING CALCULATION	1/3 SEATS + 1/ 50SF OF DRIVE THRU FLOOR AREA
REQUIRED PARKING	42 SPACES + 31 SPACES
TOTAL REQUIRED PARKING	73 SPACES
BUILDING SETBACKS	
NORTH	35'
SOUTH	35' (RESIDENTIAL ADJACENT) 25' (NON- RESIDENTIAL ADJACENT)
EAST	10'
WEST	10'
LANDSCAPE BUFFER REQUIREMENTS	
NORTH	10'
SOUTH	10'
EAST	10'
WEST	10'

5200 Buffington Rd
Atlanta Georgia, 30349-2998

Sunshine811
ALWAYS CALL 811
It's fast. It's free. It's the law.

REVISIONS

REV.	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/10/2022	PER CITY & FDOT COMMENTS	WG / KM
2	04/01/2022	PER CITY & COUNTY COMMENTS	LS / KM
3	05/23/2022	PER CITY & COUNTY COMMENTS	LS / KM
4	06/03/2022	PER COUNTY COMMENTS	LS / KM
A1	08/22/2022	PER CONTRACTOR RFI	WG / KM
A2	09/21/2022	PER STORM SHOP DRAWINGS	WG / KM
A3	11/04/2022	PER COUNTY MOD COMMENTS	LS / WG
A4	11/16/2022	PER COUNTY MOD COMMENTS	LS / KM

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BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROJECT MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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BOHLER
3820 NORTHDALE BLVD., SUITE 300B
TAMPA, FLORIDA 33624
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

STORE
SERIES 08 - #04871
BRADENTON
4311 MANATEE AVE W
BRADENTON, FL 34209

SHEET TITLE
SITE LAYOUT PLAN
DWG EDITION 02.4

☐ PRELIMINARY
☐ FOR CONSTRUCTION
☒ RECORD DRAWINGS

JOB NO.	FLT200231
STORE	#04871
DATE	04/27/2023
DRAWN BY	JRT
CHECKED BY	EWS
CAD ID	SPP-0

SHEET
C-2.0

APPENDIX

OBSERVED TRIP GENERATION

Prepared by National Data & Surveying Services

Trip Gen Study

Location: Chick-fil-A,4311 Manatee Ave W
City: Bradenton, FL

Date: 12/5/2023
Day: Tuesday

TIME	[001] West Dwy						[002] East Dwy				Trip		
	IN			OUT			IN		OUT				
	NR	ET	SL	WL	WT	WR	NL	SR	EL	ER	IN	OUT	OUTCOME
7:00 AM	2	0	3	3	0	3	7	11	7	7	*23*	*20*	*3*
7:15 AM	0	0	3	2	0	3	5	18	10	10	*26*	*25*	*1*
7:30 AM	2	0	6	5	1	3	5	13	8	10	*26*	*27*	*-1*
7:45 AM	1	0	9	6	0	8	9	10	5	4	*29*	*23*	*6*
8:00 AM	5	1	8	5	0	9	5	11	6	9	*30*	*29*	*1*
8:15 AM	5	0	3	5	0	8	8	13	6	10	*29*	*29*	*0*
8:30 AM	2	0	4	5	0	2	9	13	11	6	*28*	*24*	*4*
8:45 AM	1	0	4	4	0	1	5	18	15	5	*28*	*25*	*3*
9:00 AM	3	0	1	8	0	4	3	16	13	3	*23*	*28*	*-5*
9:15 AM	4	0	5	4	0	2	3	12	8	7	*24*	*21*	*3*
9:30 AM	2	0	10	3	0	3	6	9	16	6	*27*	*28*	*-1*
9:45 AM	1	0	6	6	0	4	4	17	9	7	*28*	*26*	*2*
10:00 AM	5	0	5	3	0	2	3	10	11	6	*23*	*22*	*1*
10:15 AM	2	0	5	0	0	5	9	8	7	10	*24*	*22*	*2*
10:30 AM	0	0	11	3	0	4	7	7	15	5	*25*	*27*	*-2*
10:45 AM	4	0	10	2	0	4	5	10	7	4	*29*	*17*	*12*
11:00 AM	1	0	9	3	0	7	12	12	13	13	*34*	*36*	*-2*
11:15 AM	1	0	12	3	0	4	7	23	16	3	*43*	*26*	*17*
11:30 AM	4	0	11	8	0	5	19	17	25	13	*51*	*51*	*0*
11:45 AM	2	0	12	11	0	11	13	33	18	12	*60*	*52*	*8*
12:00 PM	6	1	23	9	0	11	13	27	27	12	*70*	*59*	*11*
12:15 PM	8	0	15	16	0	7	18	37	37	17	*78*	*77*	*1*
12:30 PM	1	0	19	14	0	14	15	31	30	18	*66*	*76*	*-10*
12:45 PM	4	0	14	10	1	9	13	33	22	18	*64*	*60*	*4*
1:00 PM	5	0	12	12	0	4	9	14	24	15	*40*	*55*	*-15*
1:15 PM	3	1	12	6	0	6	17	21	22	11	*54*	*45*	*9*
1:30 PM	3	0	12	6	0	9	12	25	19	18	*52*	*52*	*0*
1:45 PM	2	0	8	1	0	7	8	14	24	12	*32*	*44*	*-12*
2:00 PM	1	0	11	5	0	2	9	16	15	11	*37*	*33*	*4*
2:15 PM	3	0	8	6	0	0	10	11	21	17	*32*	*44*	*-12*
2:30 PM	1	0	10	8	0	8	23	19	10	15	*53*	*41*	*12*
2:45 PM	2	0	5	7	0	6	13	13	14	13	*33*	*40*	*-7*
3:00 PM	3	1	12	13	0	5	11	20	14	10	*47*	*42*	*5*
3:15 PM	2	0	8	9	0	8	7	14	6	11	*31*	*34*	*-3*
3:30 PM	2	0	12	7	0	11	8	18	12	10	*40*	*40*	*0*
3:45 PM	1	0	8	9	0	10	11	8	11	14	*28*	*44*	*-16*
4:00 PM	3	0	10	1	0	3	11	19	11	12	*43*	*27*	*16*
4:15 PM	1	0	9	8	0	4	13	15	19	10	*38*	*41*	*-3*
4:30 PM	4	0	3	4	0	5	11	14	13	14	*32*	*36*	*-4*
4:45 PM	3	0	8	7	0	7	23	12	11	14	*46*	*39*	*7*
5:00 PM	2	0	5	9	1	7	30	12	15	15	*49*	*47*	*2*
5:15 PM	5	0	6	6	0	4	12	20	14	15	*43*	*39*	*4*
5:30 PM	1	0	8	12	0	2	9	13	16	12	*31*	*42*	*-11*
5:45 PM	7	0	7	5	0	5	10	18	13	15	*42*	*38*	*4*
6:00 PM	0	0	10	6	0	4	11	18	16	13	*39*	*39*	*0*
6:15 PM	0	0	7	6	0	5	11	29	21	11	*47*	*43*	*4*
6:30 PM	5	0	8	6	0	4	16	14	18	17	*43*	*45*	*-2*
6:45 PM	2	0	8	6	0	7	10	28	23	11	*48*	*47*	*1*
Totals	**127**	**4**	**415**	**303**	**3**	**266**	***508***	***814***	***724***	***531***	***1868***	***1827***	***41***


Blue arrows are movements going IN.
Red arrows are movements going OUT.
SL
WR
001
WT
ET
WL
NR
SR
002
NL
EL
ER

APPENDIX

ITE TRIP GENERATION

PERIOD SETTING

Analysis Name : AM Peak Hour
Project Name : CFA -Queue Study
No :
Date: 1/11/2024
City:
State/Province:
Zip/Postal Code:
Country:
Client Name:
Analyst's Name:
Edition: Trip Generation Manual, 11th Ed

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)	1000 Sq. Ft. GFA	5.11	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Average 44.61	116 51%	112 49%	228

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
934 - Fast-Food Restaurant with Drive-Through Window	0 %	116	0 %	112

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
934 - Fast-Food Restaurant with Drive-Through Window	228	0	0	228

ITE DEVIATION DETAILS

Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips — 934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	116
Total Exiting	112
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	0
Total Exiting Internal Capture Reduction	0
Total Entering Pass-by Reduction	0
Total Exiting Pass-by Reduction	0
Total Entering Non-Pass-by Trips	116
Total Exiting Non-Pass-by Trips	112

PERIOD SETTING

Analysis Name :	PM Peak Hour		
Project Name :	CFA -Queue Study	**No :**	
Date:	1/11/2024	**City:**	
State/Province:		**Zip/Postal Code:**	
Country:		**Client Name:**	
Analyst's Name:		**Edition:**	Trip Generation Manual, 11th Ed

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)	1000 Sq. Ft. GFA	5.11	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 33.03	88 52%	81 48%	169

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
934 - Fast-Food Restaurant with Drive-Through Window	0 %	88	0 %	81

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
934 - Fast-Food Restaurant with Drive-Through Window	169	0	0	169

ITE DEVIATION DETAILS

Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Landuse	No deviations from ITE.
Methods	No deviations from ITE.
External Trips	934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban) ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	88
Total Exiting	81
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	0
Total Exiting Internal Capture Reduction	0
Total Entering Pass-by Reduction	0
Total Exiting Pass-by Reduction	0
Total Entering Non-Pass-by Trips	88
Total Exiting Non-Pass-by Trips	81

APPENDIX

OBSERVED QUEUE DATA

Prepared by National Data & Surveying Services

Snapshot Queue

Location: Chick-fil-A, 4311 Manatee Ave W
City: Bradenton, FL

Date: 12/5/2023 (Tue)

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
7:00 AM	1	0	1	0	0
7:01 AM	0	0	0	0	0
7:02 AM	0	0	0	0	0
7:03 AM	1	0	0	0	0
7:04 AM	0	0	1	1	0
7:05 AM	2	0	2	2	0
7:06 AM	6	0	1	0	0
7:07 AM	7	0	0	0	0
7:08 AM	4	0	1	0	0
7:09 AM	2	0	1	1	0
7:10 AM	4	0	0	0	0
7:11 AM	3	0	1	1	0
7:12 AM	5	0	1	0	0
7:13 AM	3	0	1	1	0
7:14 AM	3	0	1	0	0
7:15 AM	3	0	1	1	0
7:16 AM	2	0	1	0	0
7:17 AM	2	0	1	0	0
7:18 AM	3	0	0	0	0
7:19 AM	2	0	1	0	0
7:20 AM	2	1	0	0	0
7:21 AM	0	0	0	0	0
7:22 AM	0	0	1	1	0
7:23 AM	2	0	1	1	0
7:24 AM	4	0	1	2	0
7:25 AM	4	0	0	1	0
7:26 AM	4	0	1	0	0
7:27 AM	5	0	1	1	0
7:28 AM	7	0	1	0	0
7:29 AM	4	0	1	1	0
7:30 AM	5	0	1	2	0
7:31 AM	8	0	2	1	0
7:32 AM	6	0	2	2	0
7:33 AM	7	0	1	1	0
7:34 AM	5	0	0	0	0
7:35 AM	3	0	1	1	0
7:36 AM	2	0	2	2	0
7:37 AM	4	0	2	1	0
7:38 AM	5	0	0	1	0
7:39 AM	5	0	0	0	0
7:40 AM	5	0	1	0	0
7:41 AM	4	0	0	0	0
7:42 AM	2	0	0	0	0
7:43 AM	2	0	1	1	0
7:44 AM	4	0	1	0	0
7:45 AM	4	0	1	0	0
7:46 AM	3	0	0	1	0
7:47 AM	3	0	1	1	0
7:48 AM	4	0	0	0	0
7:49 AM	3	0	1	1	0
7:50 AM	4	0	0	0	0
7:51 AM	3	0	0	0	0
7:52 AM	2	0	2	1	0
7:53 AM	2	0	1	0	0
7:54 AM	1	0	1	1	0
7:55 AM	2	0	0	1	0
7:56 AM	0	0	0	0	0
7:57 AM	0	0	1	0	0
7:58 AM	0	0	2	0	0
7:59 AM	1	0	2	1	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
8:00 AM	2	0	1	1	0
8:01 AM	4	0	1	1	0
8:02 AM	6	0	2	2	0
8:03 AM	5	0	2	1	0
8:04 AM	3	0	1	2	0
8:05 AM	4	0	0	0	0
8:06 AM	4	0	0	0	0
8:07 AM	0	0	1	0	0
8:08 AM	2	0	0	0	0
8:09 AM	3	0	1	1	0
8:10 AM	5	0	1	1	0
8:11 AM	4	0	1	1	0
8:12 AM	2	0	3	1	0
8:13 AM	2	0	0	2	0
8:14 AM	2	0	2	1	0
8:15 AM	3	0	1	0	0
8:16 AM	1	0	1	1	0
8:17 AM	1	1	1	1	0
8:18 AM	2	2	1	1	0
8:19 AM	1	3	1	0	0
8:20 AM	2	0	1	1	0
8:21 AM	3	1	1	0	0
8:22 AM	2	1	0	0	0
8:23 AM	2	0	0	0	0
8:24 AM	0	0	1	1	0
8:25 AM	2	0	1	0	0
8:26 AM	2	1	0	0	0
8:27 AM	1	1	1	1	0
8:28 AM	0	0	1	1	0
8:29 AM	1	0	0	0	0
8:30 AM	2	0	0	0	0
8:31 AM	1	0	0	0	0
8:32 AM	1	0	1	1	0
8:33 AM	2	0	2	1	0
8:34 AM	3	0	2	1	0
8:35 AM	4	0	1	1	0
8:36 AM	5	0	1	2	0
8:37 AM	4	0	1	0	0
8:38 AM	3	0	1	1	0
8:39 AM	1	1	0	0	0
8:40 AM	1	0	1	0	0
8:41 AM	1	0	0	1	0
8:42 AM	3	0	0	0	0
8:43 AM	3	0	0	0	0
8:44 AM	1	0	0	0	0
8:45 AM	0	0	0	2	0
8:46 AM	1	0	0	1	0
8:47 AM	1	0	0	0	0
8:48 AM	1	0	1	0	0
8:49 AM	0	0	1	1	0
8:50 AM	1	0	1	1	0
8:51 AM	1	0	1	1	0
8:52 AM	2	1	0	1	0
8:53 AM	1	3	1	0	0
8:54 AM	1	3	0	1	0
8:55 AM	2	1	1	2	0
8:56 AM	2	0	1	1	0
8:57 AM	0	1	2	0	0
8:58 AM	1	1	1	1	0
8:59 AM	1	2	1	2	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
9:00 AM	1	2	1	1	0
9:01 AM	2	3	1	0	0
9:02 AM	3	3	0	1	0
9:03 AM	0	2	0	0	0
9:04 AM	0	2	0	1	0
9:05 AM	0	1	1	1	0
9:06 AM	1	1	1	0	0
9:07 AM	1	1	1	0	0
9:08 AM	2	1	0	0	0
9:09 AM	2	0	0	1	0
9:10 AM	0	0	1	1	0
9:11 AM	1	1	1	1	0
9:12 AM	1	1	1	1	0
9:13 AM	1	2	1	1	0
9:14 AM	1	1	1	1	0
9:15 AM	0	0	1	1	0
9:16 AM	0	1	1	1	0
9:17 AM	1	0	1	1	0
9:18 AM	1	1	0	0	0
9:19 AM	1	1	0	1	0
9:20 AM	1	2	1	0	0
9:21 AM	2	3	1	0	0
9:22 AM	1	1	1	0	0
9:23 AM	1	0	1	1	0
9:24 AM	2	1	0	0	0
9:25 AM	2	1	0	0	0
9:26 AM	0	1	1	0	0
9:27 AM	0	2	1	1	0
9:28 AM	1	0	2	2	0
9:29 AM	2	1	1	1	0
9:30 AM	3	2	0	1	0
9:31 AM	2	2	2	2	0
9:32 AM	0	2	2	0	0
9:33 AM	1	1	0	0	0
9:34 AM	1	1	0	0	0
9:35 AM	0	0	1	0	0
9:36 AM	0	0	1	0	0
9:37 AM	1	0	0	0	0
9:38 AM	1	0	1	1	0
9:39 AM	1	1	0	1	0
9:40 AM	0	1	1	1	0
9:41 AM	0	0	2	2	0
9:42 AM	1	2	3	2	0
9:43 AM	2	2	1	1	0
9:44 AM	2	2	2	2	0
9:45 AM	2	2	2	1	0
9:46 AM	2	2	2	2	0
9:47 AM	3	1	2	2	0
9:48 AM	3	3	1	1	0
9:49 AM	3	3	1	2	0
9:50 AM	2	1	2	2	0
9:51 AM	2	2	3	2	0
9:52 AM	2	1	3	2	0
9:53 AM	2	0	2	2	0
9:54 AM	2	1	1	2	0
9:55 AM	2	1	1	2	0
9:56 AM	1	0	3	3	0
9:57 AM	1	1	2	2	0
9:58 AM	1	2	2	1	0
9:59 AM	1	3	2	1	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
10:00 AM	2	3	1	1	0
10:01 AM	2	2	1	0	0
10:02 AM	2	1	0	0	0
10:03 AM	1	0	0	1	0
10:04 AM	0	0	0	1	0
10:05 AM	0	1	2	1	0
10:06 AM	1	0	1	1	0
10:07 AM	0	1	2	2	0
10:08 AM	1	1	2	2	0
10:09 AM	2	2	2	2	0
10:10 AM	2	3	1	1	0
10:11 AM	1	2	2	1	0
10:12 AM	2	0	1	2	0
10:13 AM	3	1	0	1	0
10:14 AM	2	1	1	2	0
10:15 AM	3	2	0	1	0
10:16 AM	1	3	0	0	0
10:17 AM	2	2	1	0	0
10:18 AM	2	1	0	1	0
10:19 AM	2	0	0	1	0
10:20 AM	0	0	1	2	0
10:21 AM	0	1	2	3	0
10:22 AM	1	2	4	0	0
10:23 AM	3	2	2	2	0
10:24 AM	2	2	3	1	0
10:25 AM	3	2	2	2	0
10:26 AM	4	3	1	1	0
10:27 AM	3	1	2	1	0
10:28 AM	4	1	1	0	0
10:29 AM	1	1	1	0	0
10:30 AM	1	2	2	1	0
10:31 AM	2	2	0	2	0
10:32 AM	2	2	2	1	0
10:33 AM	2	1	1	1	0
10:34 AM	2	0	1	2	0
10:35 AM	1	2	1	0	0
10:36 AM	2	1	2	0	0
10:37 AM	2	1	1	0	0
10:38 AM	1	0	1	0	0
10:39 AM	1	0	0	1	0
10:40 AM	0	1	0	0	0
10:41 AM	0	1	0	0	0
10:42 AM	0	0	1	0	0
10:43 AM	0	0	0	0	0
10:44 AM	0	0	0	0	0
10:45 AM	0	0	0	0	0
10:46 AM	0	0	0	0	0
10:47 AM	0	0	1	0	0
10:48 AM	1	0	1	0	0
10:49 AM	1	0	1	0	0
10:50 AM	1	0	2	1	0
10:51 AM	2	1	0	1	0
10:52 AM	1	2	0	0	0
10:53 AM	1	2	0	0	0
10:54 AM	0	1	0	0	0
10:55 AM	0	0	0	0	0
10:56 AM	0	0	1	1	0
10:57 AM	1	0	1	1	0
10:58 AM	2	0	1	0	0
10:59 AM	2	0	2	2	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
11:00 AM	2	0	3	2	0
11:01 AM	2	1	4	2	0
11:02 AM	2	1	3	4	0
11:03 AM	4	2	3	3	0
11:04 AM	3	1	4	3	0
11:05 AM	3	1	4	3	0
11:06 AM	4	1	3	3	0
11:07 AM	2	1	3	3	0
11:08 AM	1	3	2	0	0
11:09 AM	1	3	2	2	0
11:10 AM	2	2	1	1	0
11:11 AM	3	2	0	1	0
11:12 AM	3	1	1	1	0
11:13 AM	0	0	1	0	0
11:14 AM	0	0	1	0	0
11:15 AM	0	0	2	0	0
11:16 AM	1	0	1	1	0
11:17 AM	1	1	2	2	0
11:18 AM	1	1	2	2	0
11:19 AM	2	0	2	2	0
11:20 AM	0	1	2	2	0
11:21 AM	0	2	2	2	0
11:22 AM	2	2	3	3	0
11:23 AM	2	0	1	3	0
11:24 AM	0	0	2	2	0
11:25 AM	3	2	1	2	0
11:26 AM	1	2	2	2	0
11:27 AM	0	0	3	3	0
11:28 AM	2	0	2	2	0
11:29 AM	4	2	1	0	0
11:30 AM	3	0	1	1	0
11:31 AM	2	1	1	1	0
11:32 AM	1	1	1	1	0
11:33 AM	0	0	4	4	0
11:34 AM	2	2	3	3	0
11:35 AM	3	1	1	3	0
11:36 AM	2	2	1	1	0
11:37 AM	1	1	4	1	0
11:38 AM	2	1	2	2	0
11:39 AM	3	1	2	4	0
11:40 AM	2	1	3	3	0
11:41 AM	1	1	3	1	0
11:42 AM	0	0	3	2	0
11:43 AM	0	2	3	2	0
11:44 AM	3	3	3	3	0
11:45 AM	1	1	4	3	0
11:46 AM	2	1	2	4	0
11:47 AM	2	4	3	2	0
11:48 AM	3	3	2	2	0
11:49 AM	3	2	1	2	0
11:50 AM	2	2	2	0	0
11:51 AM	1	0	3	1	0
11:52 AM	2	2	1	1	0
11:53 AM	1	2	2	2	0
11:54 AM	1	2	2	3	0
11:55 AM	1	3	2	1	0
11:56 AM	3	3	1	0	0
11:57 AM	2	2	3	2	0
11:58 AM	0	1	2	2	0
11:59 AM	2	2	1	2	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
12:00 PM	1	3	2	1	0
12:01 PM	1	1	1	1	0
12:02 PM	0	0	2	2	0
12:03 PM	1	2	4	3	0
12:04 PM	1	2	4	4	0
12:05 PM	0	2	4	4	0
12:06 PM	2	0	4	4	0
12:07 PM	2	3	4	5	0
12:08 PM	0	1	4	5	0
12:09 PM	5	6	5	5	0
12:10 PM	2	7	4	3	0
12:11 PM	2	7	5	5	0
12:12 PM	2	8	4	3	0
12:13 PM	4	3	2	2	0
12:14 PM	5	5	2	0	0
12:15 PM	2	4	1	1	0
12:16 PM	3	5	2	2	0
12:17 PM	3	7	4	4	0
12:18 PM	5	6	3	4	0
12:19 PM	2	4	5	7	0
12:20 PM	2	4	6	6	0
12:21 PM	0	3	8	10	0
12:22 PM	6	5	6	6	0
12:23 PM	2	4	7	6	0
12:24 PM	3	4	7	7	0
12:25 PM	3	3	8	8	0
12:26 PM	1	3	9	8	0
12:27 PM	4	3	8	8	0
12:28 PM	6	0	7	6	0
12:29 PM	2	2	4	5	0
12:30 PM	3	2	6	6	0
12:31 PM	4	4	5	5	0
12:32 PM	4	3	4	5	0
12:33 PM	3	3	4	5	0
12:34 PM	5	6	4	4	0
12:35 PM	4	3	5	5	0
12:36 PM	2	7	6	6	0
12:37 PM	6	3	3	5	0
12:38 PM	6	2	4	4	0
12:39 PM	7	5	4	3	0
12:40 PM	3	7	3	1	0
12:41 PM	3	8	1	2	0
12:42 PM	3	6	3	2	0
12:43 PM	2	3	1	1	0
12:44 PM	1	1	1	3	0
12:45 PM	1	1	2	2	0
12:46 PM	1	0	3	2	0
12:47 PM	1	0	4	3	0
12:48 PM	2	2	3	3	0
12:49 PM	2	1	4	3	0
12:50 PM	2	0	2	2	0
12:51 PM	2	2	4	4	0
12:52 PM	1	1	4	3	0
12:53 PM	4	3	3	3	0
12:54 PM	2	3	3	3	0
12:55 PM	0	1	4	4	0
12:56 PM	0	1	5	5	0
12:57 PM	0	1	4	5	0
12:58 PM	1	1	4	4	0
12:59 PM	2	1	5	4	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
1:00 PM	3	2	4	4	0
1:01 PM	4	3	4	3	0
1:02 PM	5	3	3	2	0
1:03 PM	5	2	5	3	0
1:04 PM	3	3	4	3	0
1:05 PM	3	2	4	2	0
1:06 PM	2	1	3	3	0
1:07 PM	2	2	2	2	0
1:08 PM	1	2	3	2	0
1:09 PM	0	1	1	1	0
1:10 PM	1	1	1	1	0
1:11 PM	1	1	1	2	0
1:12 PM	2	2	0	0	0
1:13 PM	0	3	1	2	0
1:14 PM	0	3	2	0	0
1:15 PM	2	2	2	0	0
1:16 PM	1	2	1	0	0
1:17 PM	0	0	3	2	0
1:18 PM	1	1	4	3	0
1:19 PM	2	3	2	3	0
1:20 PM	3	2	2	0	0
1:21 PM	1	0	2	3	0
1:22 PM	1	1	2	3	0
1:23 PM	2	2	1	0	0
1:24 PM	2	1	3	3	0
1:25 PM	1	1	3	4	0
1:26 PM	1	1	3	4	0
1:27 PM	1	3	1	2	0
1:28 PM	2	2	1	1	0
1:29 PM	3	2	1	2	0
1:30 PM	4	2	0	2	0
1:31 PM	1	1	2	1	0
1:32 PM	0	0	1	1	0
1:33 PM	0	0	2	2	0
1:34 PM	1	0	2	1	0
1:35 PM	1	0	1	1	0
1:36 PM	1	0	2	1	0
1:37 PM	1	1	2	2	0
1:38 PM	0	3	3	4	0
1:39 PM	2	1	4	3	0
1:40 PM	2	1	4	3	0
1:41 PM	2	2	4	4	0
1:42 PM	1	1	4	4	0
1:43 PM	0	1	5	5	0
1:44 PM	1	2	5	5	0
1:45 PM	1	3	5	6	0
1:46 PM	2	5	4	4	0
1:47 PM	2	8	3	3	0
1:48 PM	5	4	1	2	0
1:49 PM	4	5	2	2	0
1:50 PM	3	4	3	0	0
1:51 PM	2	2	2	3	0
1:52 PM	3	2	2	1	0
1:53 PM	3	3	1	1	0
1:54 PM	3	3	0	1	0
1:55 PM	3	1	0	0	0
1:56 PM	1	0	1	0	0
1:57 PM	1	0	1	1	0
1:58 PM	0	1	1	1	0
1:59 PM	0	2	0	0	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
2:00 PM	0	3	0	0	0
2:01 PM	0	1	0	0	0
2:02 PM	0	0	2	2	0
2:03 PM	2	0	2	2	0
2:04 PM	0	2	1	2	0
2:05 PM	0	0	2	1	0
2:06 PM	2	1	0	0	0
2:07 PM	2	1	2	1	0
2:08 PM	1	1	2	0	0
2:09 PM	2	1	2	2	0
2:10 PM	1	1	4	5	0
2:11 PM	2	1	3	3	0
2:12 PM	2	3	4	3	0
2:13 PM	1	4	3	4	0
2:14 PM	1	3	4	4	0
2:15 PM	1	4	3	3	0
2:16 PM	4	3	2	2	0
2:17 PM	2	3	2	2	0
2:18 PM	4	3	2	2	0
2:19 PM	4	4	2	0	0
2:20 PM	3	4	1	1	0
2:21 PM	4	4	2	1	0
2:22 PM	2	3	2	1	0
2:23 PM	2	2	0	1	0
2:24 PM	2	0	3	0	0
2:25 PM	2	1	1	0	0
2:26 PM	1	1	0	1	0
2:27 PM	1	1	0	0	0
2:28 PM	1	0	1	1	0
2:29 PM	2	0	1	0	0
2:30 PM	1	1	2	1	0
2:31 PM	2	0	2	2	0
2:32 PM	1	2	1	2	0
2:33 PM	0	2	3	1	0
2:34 PM	1	1	3	4	0
2:35 PM	2	2	5	3	0
2:36 PM	2	3	4	1	0
2:37 PM	1	0	4	3	0
2:38 PM	1	1	2	1	0
2:39 PM	0	1	2	0	0
2:40 PM	2	0	0	1	0
2:41 PM	1	0	1	0	0
2:42 PM	0	0	3	1	0
2:43 PM	1	2	3	2	0
2:44 PM	1	3	3	3	0
2:45 PM	1	2	2	2	0
2:46 PM	1	2	3	2	0
2:47 PM	3	2	2	2	0
2:48 PM	2	1	1	2	0
2:49 PM	0	2	3	3	0
2:50 PM	1	2	2	1	0
2:51 PM	2	3	0	0	0
2:52 PM	2	2	0	0	0
2:53 PM	1	2	0	0	0
2:54 PM	0	0	0	1	0
2:55 PM	0	1	0	0	0
2:56 PM	0	2	3	0	0
2:57 PM	1	1	3	3	0
2:58 PM	2	2	3	3	0
2:59 PM	3	3	1	2	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
3:00 PM	4	3	2	1	0
3:01 PM	5	5	0	0	0
3:02 PM	3	5	0	1	0
3:03 PM	2	5	1	1	0
3:04 PM	0	2	2	1	0
3:05 PM	0	0	2	3	0
3:06 PM	1	1	1	2	0
3:07 PM	2	3	2	1	0
3:08 PM	3	3	0	0	0
3:09 PM	1	2	2	1	0
3:10 PM	2	2	2	1	0
3:11 PM	1	0	2	2	0
3:12 PM	2	0	2	3	0
3:13 PM	0	3	3	1	0
3:14 PM	1	3	3	2	0
3:15 PM	2	3	1	3	0
3:16 PM	3	2	2	4	0
3:17 PM	2	0	2	3	0
3:18 PM	1	2	2	1	0
3:19 PM	1	1	1	1	0
3:20 PM	2	1	1	0	0
3:21 PM	3	2	0	1	0
3:22 PM	1	2	1	1	0
3:23 PM	1	1	1	2	0
3:24 PM	1	1	0	2	0
3:25 PM	1	3	0	0	0
3:26 PM	0	1	1	0	0
3:27 PM	1	1	1	0	0
3:28 PM	1	1	0	0	0
3:29 PM	0	1	0	0	0
3:30 PM	0	0	1	1	0
3:31 PM	0	1	1	1	0
3:32 PM	2	2	2	1	0
3:33 PM	2	2	1	0	0
3:34 PM	3	2	0	0	0
3:35 PM	1	1	1	1	0
3:36 PM	1	0	3	2	0
3:37 PM	1	0	4	3	0
3:38 PM	0	1	4	3	0
3:39 PM	0	2	4	3	0
3:40 PM	3	1	2	4	0
3:41 PM	2	1	4	4	0
3:42 PM	2	0	4	4	0
3:43 PM	1	0	4	4	0
3:44 PM	1	2	4	4	0
3:45 PM	2	1	2	3	0
3:46 PM	1	3	1	4	0
3:47 PM	4	1	1	3	0
3:48 PM	4	2	2	1	0
3:49 PM	3	4	2	0	0
3:50 PM	5	4	2	1	0
3:51 PM	3	2	1	1	0
3:52 PM	4	2	0	2	0
3:53 PM	1	2	1	0	0
3:54 PM	2	2	1	0	0
3:55 PM	1	0	1	1	0
3:56 PM	1	1	0	0	0
3:57 PM	1	1	1	0	0
3:58 PM	0	0	2	2	0
3:59 PM	1	0	0	0	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
4:00 PM	1	0	1	0	0
4:01 PM	0	0	2	2	0
4:02 PM	2	1	1	0	0
4:03 PM	2	2	1	2	0
4:04 PM	2	1	1	1	0
4:05 PM	2	2	1	0	0
4:06 PM	0	1	3	3	0
4:07 PM	1	2	4	3	0
4:08 PM	1	1	4	3	0
4:09 PM	2	1	4	4	0
4:10 PM	1	1	3	3	0
4:11 PM	1	0	4	5	0
4:12 PM	1	0	4	6	0
4:13 PM	3	1	5	4	0
4:14 PM	4	1	3	4	0
4:15 PM	3	3	4	4	0
4:16 PM	2	3	4	3	0
4:17 PM	4	3	2	2	0
4:18 PM	3	2	1	2	0
4:19 PM	2	3	1	3	0
4:20 PM	3	4	1	1	0
4:21 PM	3	3	0	1	0
4:22 PM	0	1	1	0	0
4:23 PM	1	2	1	1	0
4:24 PM	0	1	2	2	0
4:25 PM	1	2	5	2	0
4:26 PM	0	0	5	2	0
4:27 PM	1	1	3	4	0
4:28 PM	2	1	3	3	0
4:29 PM	3	0	4	4	0
4:30 PM	4	2	1	3	0
4:31 PM	6	5	2	2	0
4:32 PM	5	2	2	1	0
4:33 PM	3	2	3	1	0
4:34 PM	3	1	1	2	0
4:35 PM	1	2	1	1	0
4:36 PM	2	1	0	0	0
4:37 PM	0	0	1	0	0
4:38 PM	1	0	2	1	0
4:39 PM	0	0	2	3	0
4:40 PM	2	2	3	3	0
4:41 PM	0	1	3	3	0
4:42 PM	3	0	2	1	0
4:43 PM	2	1	2	0	0
4:44 PM	3	0	0	0	0
4:45 PM	2	0	2	0	0
4:46 PM	1	0	4	3	0
4:47 PM	0	1	4	4	0
4:48 PM	2	1	3	4	0
4:49 PM	1	1	4	6	0
4:50 PM	2	1	4	5	0
4:51 PM	3	3	5	4	0
4:52 PM	3	2	5	6	0
4:53 PM	2	5	4	4	0
4:54 PM	1	2	3	3	0
4:55 PM	2	4	1	3	0
4:56 PM	4	2	2	1	0
4:57 PM	3	2	3	2	0
4:58 PM	2	3	3	1	0
4:59 PM	5	3	2	1	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
5:00 PM	3	3	4	5	0
5:01 PM	3	2	3	4	0
5:02 PM	3	4	4	3	0
5:03 PM	1	3	3	2	0
5:04 PM	1	2	5	5	0
5:05 PM	1	3	5	4	0
5:06 PM	1	2	3	3	0
5:07 PM	0	2	3	1	0
5:08 PM	3	1	0	0	0
5:09 PM	1	1	2	2	0
5:10 PM	1	2	1	1	0
5:11 PM	0	1	1	2	0
5:12 PM	0	0	4	3	0
5:13 PM	0	2	4	3	0
5:14 PM	1	2	3	2	0
5:15 PM	3	1	1	0	0
5:16 PM	3	1	2	0	0
5:17 PM	2	1	3	1	0
5:18 PM	3	1	3	2	0
5:19 PM	3	1	2	2	0
5:20 PM	2	3	2	1	0
5:21 PM	1	2	1	2	0
5:22 PM	2	2	1	1	0
5:23 PM	2	1	3	3	0
5:24 PM	1	1	2	1	0
5:25 PM	2	2	1	2	0
5:26 PM	1	3	2	2	0
5:27 PM	2	2	1	0	0
5:28 PM	1	1	1	2	0
5:29 PM	1	1	2	2	0
5:30 PM	3	3	1	2	0
5:31 PM	3	3	3	2	0
5:32 PM	3	5	2	2	0
5:33 PM	4	4	3	3	0
5:34 PM	7	8	1	1	0
5:35 PM	7	7	0	0	0
5:36 PM	7	4	2	1	0
5:37 PM	3	6	0	1	0
5:38 PM	3	4	0	0	0
5:39 PM	2	3	1	0	0
5:40 PM	0	0	2	1	0
5:41 PM	2	1	0	0	0
5:42 PM	2	1	1	0	0
5:43 PM	1	0	0	1	0
5:44 PM	2	0	2	2	0
5:45 PM	3	0	1	1	0
5:46 PM	3	1	1	1	0
5:47 PM	2	2	2	1	0
5:48 PM	3	3	1	1	0
5:49 PM	4	1	1	1	0
5:50 PM	2	2	2	0	0
5:51 PM	2	2	0	1	0
5:52 PM	2	3	2	2	0
5:53 PM	2	2	1	1	0
5:54 PM	2	1	1	1	0
5:55 PM	3	2	0	1	0
5:56 PM	2	3	2	1	0
5:57 PM	1	3	3	2	0
5:58 PM	3	5	1	1	0
5:59 PM	3	4	1	2	0

Time	Snapshot Queue Length (# of Vehicles)				
	QUEUE 1 From Pick Up Window to Order Board		QUEUE 2 From Order Board to the End of the Lane		QUEUE 3 Combined
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1
6:00 PM	2	5	1	0	0
6:01 PM	2	3	1	0	0
6:02 PM	1	3	1	0	0
6:03 PM	1	0	1	0	0
6:04 PM	2	1	2	1	0
6:05 PM	2	0	1	1	0
6:06 PM	2	0	2	2	0
6:07 PM	3	3	3	0	0
6:08 PM	4	3	1	0	0
6:09 PM	3	1	1	1	0
6:10 PM	2	1	0	0	0
6:11 PM	2	1	2	1	0
6:12 PM	1	2	2	2	0
6:13 PM	2	1	3	2	0
6:14 PM	2	0	4	3	0
6:15 PM	1	1	3	3	0
6:16 PM	3	1	4	4	0
6:17 PM	7	4	3	4	0
6:18 PM	8	4	4	3	0
6:19 PM	2	3	3	1	0
6:20 PM	2	2	1	1	0
6:21 PM	2	1	1	1	0
6:22 PM	1	2	1	1	0
6:23 PM	1	1	1	1	0
6:24 PM	2	2	3	3	0
6:25 PM	2	3	3	4	0
6:26 PM	3	4	3	3	0
6:27 PM	3	3	3	4	0
6:28 PM	4	1	3	5	0
6:29 PM	4	3	4	4	0
6:30 PM	4	3	2	1	0
6:31 PM	3	3	4	3	0
6:32 PM	2	4	3	3	0
6:33 PM	3	2	2	3	0
6:34 PM	4	3	1	1	0
6:35 PM	5	2	1	2	0
6:36 PM	4	3	3	2	0
6:37 PM	6	5	3	4	0
6:38 PM	7	6	1	2	0
6:39 PM	6	6	3	3	0
6:40 PM	6	6	2	2	0
6:41 PM	6	5	2	2	0
6:42 PM	2	2	2	3	0
6:43 PM	2	3	3	1	0
6:44 PM	4	2	1	1	0
6:45 PM	3	3	0	1	0
6:46 PM	4	2	0	1	0
6:47 PM	3	1	1	1	0
6:48 PM	1	1	2	2	0
6:49 PM	1	1	3	3	0
6:50 PM	3	1	2	2	0
6:51 PM	3	1	4	4	0
6:52 PM	2	4	4	3	0
6:53 PM	2	6	3	3	0
6:54 PM	6	6	1	1	0
6:55 PM	6	5	2	2	0
6:56 PM	4	4	2	1	0
6:57 PM	3	2	2	3	0
6:58 PM	2	1	4	4	0
6:59 PM	2	1	4	3	0
Totals	1439	1118	1330	1202	0

PROPOSED SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED

ACE HARDWARE

LOCATION OF SITE

E. SR. 434 & MICHAEL BLAKE BLVD.

WINTER SPRINGS, FL 32708

SECTION 38, TOWNSHIP 21 SOUTH, RANGE 31 EAST

REFERENCES AND CONTACTS

REFERENCES

- BOUNDARY & TOPOGRAPHIC SURVEY:
  REPUBLIC NATIONAL
  480 NEEDLES TRAIL
  LONGWOOD, FL 32779
  DATED: 10/08/24 (REV. 4)
  JOB # /SURVEY JOB #: 220336
  ELEVATIONS: NAVD 1988
- GEOTECHNICAL INVESTIGATION REPORT:
  YOVAISH ENGINEERING SERVICES
  953 SUNSHINE LANE
  ALTAMONTE SPRINGS, FL 32714
  DATED: 10/12/23
- ARCHITECTURAL PLAN:
  STUDIO1+
  9100 CONROY WINDERMERE ROAD,
  SUITE 200 PMB 374
  WINDERMERE, FL 34786
  DATED: 08/20/24

GOVERNING AGENCIES

- PLANNING, ZONING COMMITTEE
  CITY OF WINTER SPRINGS
  1126 E STATE RD. 434
  WINTER SPRINGS, FL 32708
  PHONE: (407) 327-5963
- BUILDING DEPARTMENT
  CITY OF WINTER SPRINGS BUILDING DEPT.
  1126 E STATE RD. 434
  WINTER SPRINGS, FL 32708
  PHONE: (407) 327-5963
- FIRE DEPARTMENT
  SEMINOLE COUNTY FIRE DEPT.
  150 ESLINGER WAY
  SANFORD, FL 32773
  PHONE: (407) 665-5042
- FDOT DISTRICT 5
  719 SOUTH WOODLAND BLVD.
  DELAND, FL 32720
  PHONE: (800) 780-7120
- SJRWMD
  19561 SE HWY. 42
  UMATILLA, FL 32784
  PHONE: (832) 821-1043

ROW JURISDICTION

- TRAFFIC, STORMWATER, WATER & SEWER
  CITY OF WINTER SPRINGS PUBLIC WORKS
  1126 E. SR. 434
  WINTER SPRINGS, FL 32708
  PHONE: (407) 327-5989

UTILITIES

- TELEPHONE
  AT&T
  PHONE: (407) 778-9140
- CABLE/INTERNET/FIBER
  SPECTRUM
  CONTACT: HELENE HERNANDEZ
  PHONE: (407) 332-8092
- ELECTRIC
  DUKE ENERGY
  2801 WEST STATE ROAD 426
  OVIEDO, FL 32765
  PHONE: (407) 359-4447
- GAS
  FLORIDA PUBLIC UTILITIES
  405 S. HWY 17-92
  DEBARY, FL 33713
  CONTACT: DAVID JOHNSON
  PHONE: (352) 636-7057
- WATER AND SEWER
  CITY OF WINTER SPRINGS
  1126 E. S.R. 434
  WINTER SPRINGS, FL 32708
  CONTACT: DILLON THOMAS
  PHONE: (407) 327-1800 EXT. 588

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.

LEGAL DESCRIPTION

THE LAND IS DESCRIBED AS FOLLOWS:
THAT PART OF LOT 8 BLOCK "A", OF TUSKAWILLA, ACCORDING TO THE PLAT OF MITCHELL'S SURVEY OF THE LEVY GRANT AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWESTERN MOST CORNER OF LOT 31 ST. JOHNS LANDING AS RECORDED IN PLAT BOOK 53, PAGES 45 THRU 49 OF SAID PUBLIC RECORDS, SAID POINT BEING A RECOVERED CONCRETE MONUMENT ON THE EASTERLY RIGHT OF WAY LINE OF TUSKAWILLA ROAD (FORMERLY BRANTLEY AS RECORDED IN OFFICIAL RECORDS BOOK 3225, PAGE 1829 OF SAID PUBLIC RECORDS; THENCE RUN NORTH 59°31'38" WEST ALONG THE WESTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 31 FOR A DISTANCE OF 15.00 FEET; THENCE RUN SOUTH 30°04'55" WEST ALONG SAID EASTERLY RIGHT OF WAY LINE FOR A DISTANCE OF 5.00 FEET; THENCE CONTINUE SOUTH 30°04'55" WEST A DISTANCE OF 35.00 FEET; THENCE SOUTH 59°31'38" EAST, A DISTANCE OF 1132.34 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT HAVING A RADIUS OF 150.00 FEET; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE AT 60°36'00" FOR AN ARC DISTANCE OF 158.65 FEET TO THE POINT OF TANGENCY; THENCE SOUTH 01°04'22" WEST A DISTANCE OF 146.91 FEET; THENCE SOUTH 24°59'41" WEST, A DISTANCE OF 318.72 FEET; THENCE SOUTH 00°00'00" EAST A DISTANCE OF 115.48 FEET; THENCE SOUTH 36°55'21" EAST A DISTANCE OF 217.54 FEET; THENCE SOUTH 15°19'53" EAST A DISTANCE OF 140.49 FEET; THENCE SOUTH 02°23'00" WEST A DISTANCE OF 556.34 FEET; THENCE SOUTH 07°25'15" WEST A DISTANCE OF 272.61 FEET; THENCE SOUTH 29°30'05" WEST A DISTANCE OF 231.32; THENCE SOUTH 50°31'58" WEST A DISTANCE OF 1475.69 FEET TO THE NORTHEASTERLY RIGHT OF WAY LINE OF STATE ROAD 434 ACCORDING TO FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 77070-2516; THENCE CONTINUE SOUTH 50°31'58" WEST FOR A DISTANCE OF 143.34 FEET TO A FOUND 1/2" IRON ROD & CAP (LB ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF SAID STATE ROAD 434; THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY NORTH 39°47'08" WEST, 741.99 FEET TO THE POINT OF BEGINNING; THENCE DEPARTING SAID SOUTHWESTERLY RIGHT OF WAY SOUTH 50°22'25" WEST, 153.21 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071); THENCE SOUTH 49°13'20" WEST, 22.84 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 21°33'57", AND A CHORD BEARING AND DISTANCE OF SOUTH 68°52'35" WEST, 63.61 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 63.99 FEET TO A SET 5/8" IRON ROD & CAP (LB 8071) ON THE WESTERLY RIGHT OF WAY OF C.S.X TRANSPORTATION., INC "LAKE CHARM BRANCH" RAIL CORRIDOR; SAID POINT BEING ON A NON-TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°28'47", AND A CHORD BEARING AND DISTANCE OF SOUTH 01°55'26" EAST, 31.04 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AND SAID WESTERLY RIGHT OF WAY, A DISTANCE OF 31.04 FEET TO A FOUND 4"X4" CONCRETE MONUMENT (LB 220) ON THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 17 OF SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID WESTERLY RIGHT OF WAY, ALONG SAID EASTERLY EXTENSION OF NORTH LINE, NORTH 87°52'13" WEST, 143.10 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R. MITCHELL'S SURVEY OF LEVY GRANT; THENCE DEPARTING SAID EASTERLY EXTENSION OF THE NORTH LINE, ALONG SAID EASTERLY RIGHT OF WAY, NORTH 02°44'06" EAST, 510.43 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY OF A 30 FOOT ROAD AS SHOWN ON SAID PLAT OF D.R MITCHELL'S SURVEY OF LEVY GRANT, THENCE DEPARTING SAID EASTERLY RIGHT OF WAY, ALONG SAID NORTHERLY RIGHT OF WAY, NORTH 87°56'41" WEST, 21.83 FEET TO THE EASTERLY BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 2152, PAGE 533 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE DEPARTING SAID NORTHERLY RIGHT OF WAY, ALONG SAID EASTERLY BOUNDARY, NORTH 02°03'02" EAST, 65.81 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT OF WAY OF AFORESAID STATE ROAD 434; THENCE DEPARTING SAID EASTERLY BOUNDARY, ALONG THE SAID SOUTHWESTERLY RIGHT OF WAY THE FOLLOWS THREE (3) COURSES: 1) THENCE SOUTH40°37'45" EAST, 224.63 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EASTERLY, ; HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°18'00", AND A CHORD BEARING AND DISTANCE OF SOUTH 06°37'29" WEST, 19.42 FEET; 2) THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 19.42 FEET TO THE END OF SAID CURVE; 3) THENCE S.39°47'08"E., 293.27 FEET TO THE POINT OF BEGINNING.

LESS (OFFICIAL RECORDS BOOK 8943, PAGE 877)

A PORTION LOT 8, BLOOK A, DR MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, LYING IN SECTION 6, TOWNSHIP 21 SOUTH, RANGE 31 EAST BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE RESERVE AT TUSCAWILLA PHASE II, AS RECORDED IN PLAT BOOK 50, PAGES 3 THROUGH 9 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE RUN SOUTH 00°46'33" EAST ALONG THE WESTERLY LINE OF SAID RESERVE AT TUSCAWILLA, PHASE II, ALSO BEING THE EAST LINE OF BLOCK A, GARDENIA FARMS TOWN SITES, AS RECORDED IN PLAT BOOK 6, PAGE 39, OF THE SAID PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, FOR A DISTANCE OF 810.29 FEET TO A POINT ON THE NORTHEASTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS AS RECORDED IN OFFICIAL RECORDS BOOK 3177, PAGE 632 OF SAID PUBLIC RECORDS; THENCE DEPARTING SAID WEST LINE AND SAID EAST LINE, RUN NORTH 55°28'13" WEST ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 593.50 FEET TO THE SOUTHEAST CORNER OF BLOCK C, OF SAID GARDENIA FARMS TOWN SITES; THENCE CONTINUE NORTH 55°28'13" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 800.00 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1815.35 FEET, A CHORD BEARING OF NORTH 39°53'20" WEST AND A CHORD DISTANCE OF 974.43 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 31°08'12" FOR AN ARC DISTANCE OF 986.53 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 2148.74 FEET, A CHORD BEARING OF NORTH 22°10'08" WEST AND A CHORD DISTANCE OF 162.34 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 04°19'47" FOR AN ARC DISTANCE OF 162.58 FEET TO A POINT ON THE NORTHWESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, AS RECORDED IN OFFICIAL RECORDS BOOK 3988, PAGE 1075 OF THE AFORESAID PUBLIC RECORDS OF SEMINOLE COUNTY; THENCE RUN NORTH 49°31'30" EAST, ALONG SAID NORTHWESTERLY RIGHT OF WAY LINE, NON-TANGENT TO SAID CURVE, FOR A DISTANCE OF 250.50 FEET; THENCE RUN NORTH 39°49'55" WEST, DEPARTING SAID NORTHWESTERLY RIGHT OF WAY LINE FOR A DISTANCE OF 659.48 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF RAILS TO TRAILS, ACCORDING TO THE AFORESAID OFFICIAL RECORDS BOOK 3177, PAGE 632, LYING ON A NON-TANGENT CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 4008.02 FEET, A CHORD BEARING OF NORTH 01°01'14" WEST AND A CHORD DISTANCE OF 96.30 FEET; THENCE RON NORTHERLY ALONG SAID WESTERLY RIGHT OF WAY LINE AND ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 01°22'36" FOR AN ARC DISTANCE OF 96.30 FEET TO A NON-TANGENT POINT AND THE POINT OF BEGINNING; THENCE RUN NORTH 87°58'38" WEST, ALONG THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 17 OF TUSKAWILLA, ACCORDING TO THE PLAT OF D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, AS RECORDED IN PLAT BOOK 1, PAGE 5 OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, NON-RADIAL WITH SAID CURVE AND DEPARTING SAID WESTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 142.83 FEET TO THE EASTERLY LINE OF THAT CERTAIN THIRTY FOOT (30) WIDE UNNAMED RIGHT OF WAY ACCORDING TO THE AFORESAID PLAT OF D.R. MITCHELL'S SURVEY OF THE LEVY GRANT; THENCE RUN NORTH 02°41'39" EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 27.00 FEET; THENCE RUN SOUTH 87°58'38" EAST, DEPARTING SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 99.57 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 151.67 FEET, A CHORD BEARING OF NORTH 83°10'19" EAST AND A CHORD DISTANCE OF 41.09 FEET; THENCE RUN NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 15°34'11" FOR AN ARC DISTANCE OF 41.22 FEET TO A POINT ON THE AFORESAID WESTERLY. RIGHT OF WAY LINE OF RAILS TO TRAILS, LYING ON A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 4008.02 FEET, A CHORD BEARING OF SOUTH 02°05'36" EAST AND A CHORD DISTANCE OF 33.41 FEET; THENCE RUN SOUTHERLY ALONG SAID WESTERLY RIGHT OF WAY LINE AND ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 00°28'39" FOR AN ARC DISTANCE OF 33.41 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH:

LOTS 1 AND 2 AND THAT PART OF LOTS 3 AND 4 EAST OF GOLDENROD ROAD, TUSKAWILLA, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGE 5, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

TOGETHER WITH: THE NORTH HALF (1/2) OF THE VACATED RIGHT-OF-WAY ADJACENT ON THE SOUTH, AS DESCRIBED IN RESOLUTION RECORDED IN O.R. BOOK 1050, PAGE 401, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

LESS AND EXCEPT: THOSE PORTIONS TAKEN IN WARRANTY DEED RECORDED IN O.R. BOOK 2440, PAGE 489, AND ORDER OF TAKING RECORDED IN O.R. BOOK 3326, PAGE 1162, PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.



LOCATION MAP
SCALE: 1" = 1,000'
SOURCE: MICROSOFT

APPLICANT/CONTACT
BLUE ORANGE HOLDINGS, LLC
WESS MCMILLAN
PHONE: (407) 509-7098
EMAIL: WESSMCMILLAN@GMAIL.COM

PREPARED BY

BOHLER

CONTACT: FL-PERMITS@BOHLERENG.COM

SHEET INDEX

SHEET TITLE	SHEET NUMBER
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SURVEY NOTE

A BOUNDARY AND TOPOGRAPHY SURVEY HAS BEEN PREPARED BY REPUBLIC NATIONAL. ALL EXISTING INFORMATION SHOWN IS BASED ON SAID SURVEY UNLESS OTHERWISE NOTED. PARCEL BOUNDARY LINES SHOWN THESE PLANS ARE BASED ON THE SURVEY PREPARED BY REPUBLIC NATIONAL DATED 5-4-2022. FUTURE/PROPOSED INTERNAL LOT LINES ARE APPROXIMATE AND WILL BE PROPOSED UNDER A FUTURE REPLAT OF THE PROJECT SITE, PREPARED BY THE PROJECT SURVEYOR.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES
THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE COPYRIGHTED AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT THE EXPRESS AUTHORIZATION FROM BOHLER. ONLY APPROVED, SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

811 Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, C=US, 0.9.2342.19200300.100.1.1=2629673826
Date: 2025.02.11 15:55:35-05'00'
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MOREL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-CNDS-FLA240162.00-0A-----1A\LYOUT: C-101 - COVER SHEET
KK

GENERAL NOTES

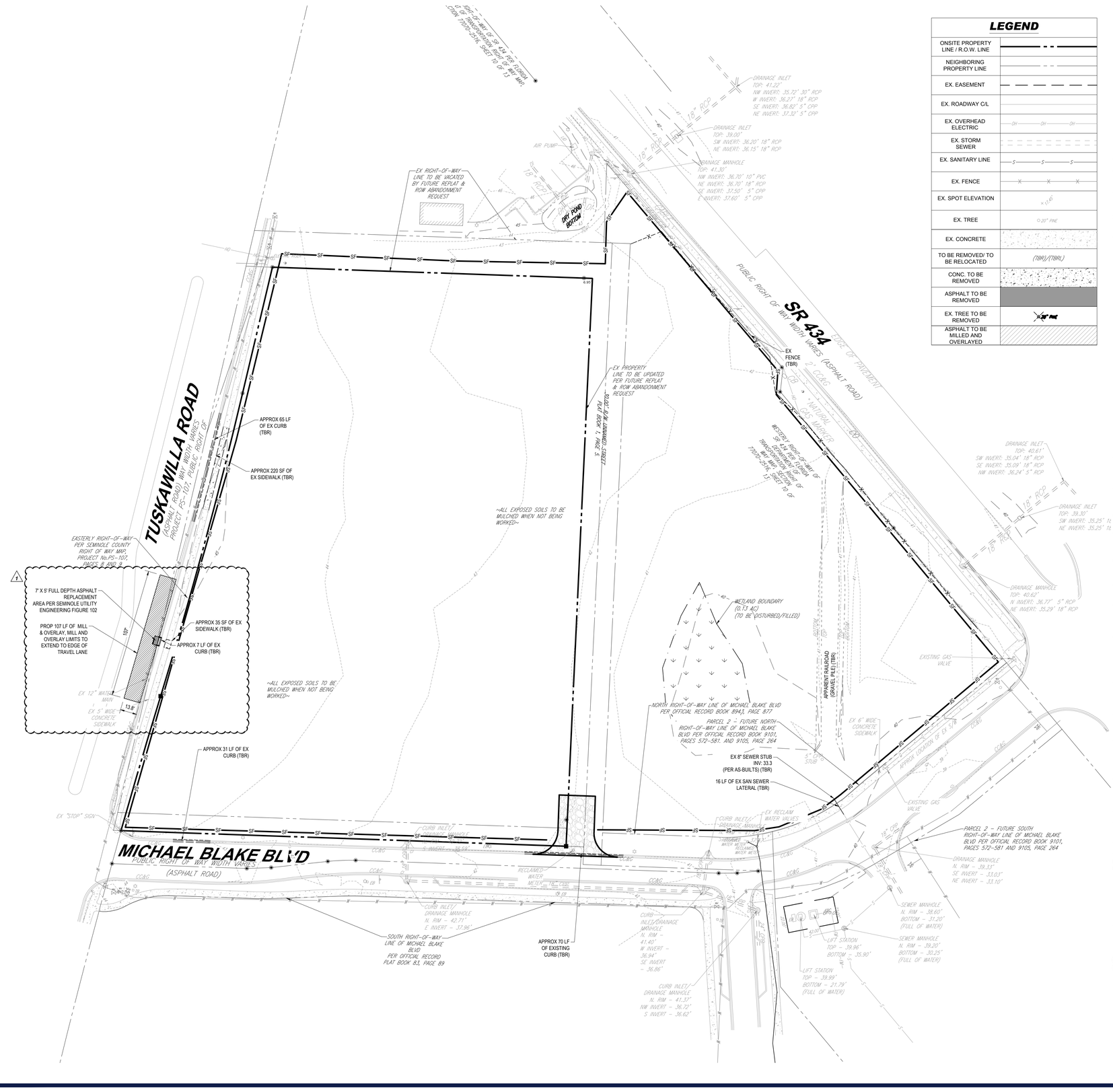
(Rev. 1/2023)

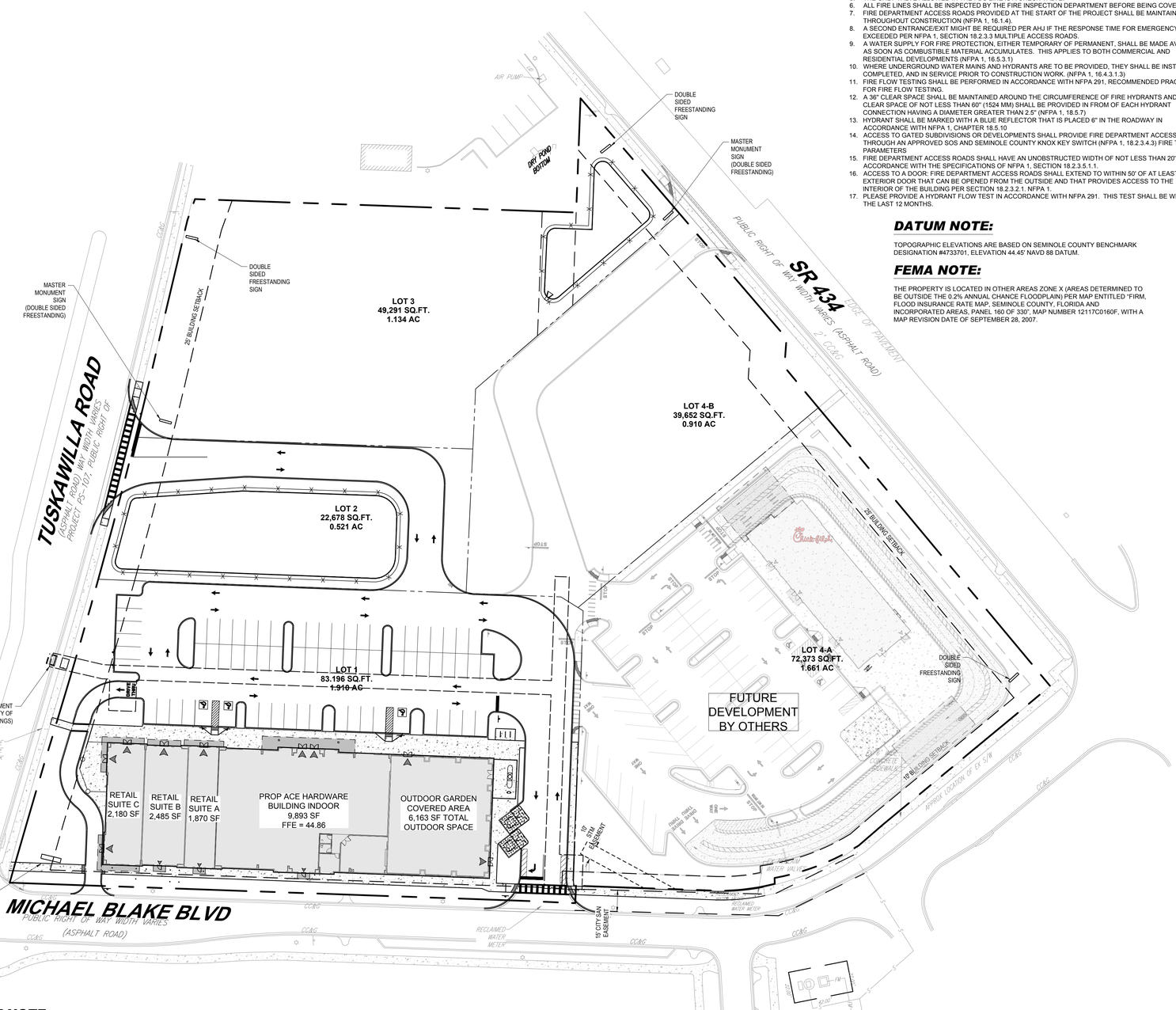
1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING FL, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE PROFESSIONAL OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER, IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS. THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BE UNDERTAKEN UNTIL THOROUGHLY REVIEWING AND UNDERSTANDING THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK PERFORMED DUE TO DIMENSIONAL MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING PROFESSIONAL OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) PROFESSIONAL OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. PROFESSIONAL OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIAL, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. AT NO TIME IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.
14. THE CONTRACTOR IS TO EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND FOR THIRD PARTIES, PEDESTRIANS AND ANYONE ELSE WHO MAY BE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
17. THE CONTRACTOR SHALL REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY CORRESPONDING ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
18. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING THE PROFESSIONAL OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
20. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER SHALL INDEMNIFY, DEFEND, JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT PROFESSIONAL OF RECORD AND BOHLER SUFFER AND ANY AND ALL COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME.
21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE SUCH INSURANCE ENDORSED TO NAME BOHLER, AND ITS PRESENT AND FUTURE EMPLOYEES, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL INSUREDS. NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREINAFTER COLLECTIVELY, THE PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ANY AND ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY BODY HAVING JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE MEANS, METHODS OR TECHNIQUES OF ANY CONTRACTOR OR ITS EMPLOYEES AND/OR THEIR SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE. THESE NOTES OR ANY PART THEREOF SHALL NOT BE CONSTRUED AS THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
22. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLYING WITH WORK DIRECTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREINAFTER COLLECTIVELY, THE PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ANY AND ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY BODY HAVING JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE MEANS, METHODS OR TECHNIQUES OF ANY CONTRACTOR OR ITS EMPLOYEES AND/OR THEIR SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FROM AND AGAINST ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE. THESE NOTES OR ANY PART THEREOF SHALL NOT BE CONSTRUED AS THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN PROFESSIONAL OF RECORD'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR MUST, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY.
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE PROFESSIONAL OF RECORD AND BOHLER'S (OR THEIR APPROVED PLAN(S) AND DESIGN AND, FURTHER, THE OWNER IS RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. PROFESSIONAL OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS, SPECIFICATIONS, INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND COSTS THAT PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE.
31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

DEMOLITION NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES WITHIN OR ADJACENT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK REQUIRED AND NECESSARY FOR THE SUCCESSFUL COMPLETION OF THE NEW SITE IMPROVEMENTS.
   B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE UTILIZED BY THE CONTRACTOR MUST BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTORS SOLE COST, MUST REPAIR ALL DAMAGE TO ALL STRUCTURES AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS, CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES DISTURBED DURING THE PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER IN ACCORDANCE WITH ALL OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEIGHBORING THE SITE.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATUR


TUSKAWILLA ROAD
(ASPHALT ROAD) WAY WIDTH VARIES
PROJECT FS-101, PUBLIC RIGHT OF
EASTERLY RIGHT-OF-WAY PER SEMINOLE COUNTY RIGHT OF WAY MAP, PROJECT No.FS-107, PAGES 8 AND 9
SR 434
PUBLIC RIGHT OF WAY WIDTH VARIES (ASPHALT ROAD)
EDGE OF PAVEMENT
MICHAEL BLAKE BLVD
PUBLIC RIGHT OF WAY WIDTH VARIES
(ASPHALT ROAD)
RIGHT-OF-WAY OF SR 434 PER FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, CPAM 77001-2516, SHEET 10 OF 11
DRAINAGE INLET TOP: 41.22' NW INVERT: 35.72' 30" RCP W INVERT: 36.27' 18" RCP SE INVERT: 36.82' 5" CPP NE INVERT: 37.32' 5" CPP
DRAINAGE INLET TOP: 39.00' SW INVERT: 36.20' 18" RCP NE INVERT: 36.15' 18" RCP
DRAINAGE MANHOLE TOP: 41.30' NW INVERT: 36.70' 10" PVC NE INVERT: 36.70' 18" RCP SE INVERT: 37.50' 5" CPP E INVERT: 37.60' 5" CPP
AIR PUMP
DRY POND BOTTOM
EX. RIGHT-OF-WAY LINE TO BE VACATED BY FUTURE REPLAT & ROW ABANDONMENT REQUEST
EX. PROPERTY LINE TO BE UPDATED PER FUTURE REPLAT & ROW ABANDONMENT REQUEST
APPROX 65 LF OF EX CURB (TBR)
APPROX 220 SF OF EX SIDEWALK (TBR)
7' X 5' FULL DEPTH ASPHALT REPLACEMENT AREA PER SEMINOLE UTILITY ENGINEERING FIGURE 102
PROP 107 LF OF MILL & OVERLAY, MILL AND OVERLAY LIMITS TO EXTEND TO EDGE OF TRAVEL LANE
APPROX 35 SF OF EX SIDEWALK (TBR)
APPROX 7 LF OF EX CURB (TBR)
EX 12" WATER MAIN
EX 5' WIDE CONCRETE SIDEWALK
APPROX 31 LF OF EX CURB (TBR)
EX "STOP" SIGN
~ALL EXPOSED SOILS TO BE MULCHED WHEN NOT BEING WORKED~
EX FENCE (TBR)
WESTERLY RIGHT-OF-WAY OF SR 434 PER FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, CPAM 77001-2516, SHEET 10 OF 11
WETLAND BOUNDARY (0.13 AC) (TO BE DISTURBED/FILLED)
NORTH RIGHT-OF-WAY LINE OF MICHAEL BLAKE BLVD PER OFFICIAL RECORD BOOK 8343, PAGE 877
PARCEL 2 - FUTURE NORTH RIGHT-OF-WAY LINE OF MICHAEL BLAKE BLVD PER OFFICIAL RECORD BOOK 9101, PAGES 572-581 AND 9105, PAGE 264
EX 8" SEWER STUB INV: 33.3 (PER AS-BUILTS) (TBR)
16 LF OF EX SAN SEWER LATERAL (TBR)
CURB INLET/ DRAINAGE MANHOLE N. RIM = 42.71' E. INVERT = 37.96'
SOUTH RIGHT-OF-WAY LINE OF MICHAEL BLAKE BLVD PER OFFICIAL RECORD PLAT BOOK 83, PAGE 89
APPROX 70 LF OF EXISTING CURB (TBR)
CURB INLET/ DRAINAGE MANHOLE N. RIM = 41.40' W INVERT = 36.94' SE INVERT = 36.86'
CURB INLET/ DRAINAGE MANHOLE N. RIM = 41.37' NW INVERT = 36.72' S INVERT = 36.62'
APPARENT RAILROAD (GRAVEL PILE) (TBR)
EX 6' WIDE CONCRETE SIDEWALK
APPROX LOCATION OF EX S/B MAST ARM
EXISTING GAS VALVE
EX RECLAIM WATER VALVES
EXISTING GAS VALVE
PARCEL 2 - FUTURE SOUTH RIGHT-OF-WAY LINE OF MICHAEL BLAKE BLVD PER OFFICIAL RECORD BOOK 9101, PAGES 572-581 AND 9105, PAGE 264
DRAINAGE MANHOLE N. RIM = 39.33' SE INVERT = 33.03' NE INVERT = 33.10'
SEWER MANHOLE N. RIM = 38.60' BOTTOM = 31.20' (FULL OF WATER)
SEWER MANHOLE N. RIM = 39.20' BOTTOM = 30.25' (FULL OF WATER)
LIFT STATION TOP = 39.96' BOTTOM = 35.90'
LIFT STATION TOP = 39.99' BOTTOM = 21.79' (FULL OF WATER)
DRAINAGE INLET TOP: 40.61' SW INVERT: 35.04' 18" RCP SE INVERT: 35.09' 18" RCP NW INVERT: 36.24' 5" RCP
DRAINAGE INLET TOP: 39.30' SW INVERT: 35.25' 18" RCP NE INVERT: 35.25' 18" RCP
DRAINAGE MANHOLE TOP: 40.62' N INVERT: 36.77' 5" RCP NE INVERT: 35.29' 18" RCP
CURB INLET/ DRAINAGE MANHOLE N. RIM = 39.33' E INVERT = 33.03'
CURB INLET/ DRAINAGE MANHOLE N. RIM = 39.33' W INVERT = 33.03'
RECLAIMED WATER METER
RECLAIMED WATER METER
FLORIDA WATER METER
FLORIDA WATER METER
CURB INLET/ DRAINAGE MANHOLE N. RIM = 39.33' W INVERT = 33.03'
CURB INLET/ DRAINAGE MANHOLE N. RIM = 39.33' E INVERT = 33.03'



WINTER SPRINGS FIRE NOTES:

1. AT MINIMUM, A CLASS 5 CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1' ABOVE THE FINISHED FLOOR.
2. THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
3. NO OTHER WATER CONNECTION SHALL BE OFF OD THE FIRE LINE.
4. THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 100' OF THE FIRE HYDRANT IS STANDPIPE SYSTEM IS PROVIDED.
5. THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
6. ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPARTMENT BEFORE BEING COVERED.
7. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF THE PROJECT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION (NFPA 1, 16.1.4).
8. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
9. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OF PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.(NFPA 1, 16.5.3.1)
10. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3)
11. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
12. A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524 MM) SHALL BE PROVIDED IN FROM OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" (NFPA 1, 18.5.7)
13. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10
14. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH (NFPA 1, 18.2.3.4.3) FIRE TRUCK PARAMETERS
15. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' IN ACCORDANCE WITH THE SPECIFICATIONS OF NFPA 1, SECTION 18.2.3.5.1.1.
16. ACCESS TO A DOOR: FIRE DEPARTMENT ACCESS ROADS SHALL EXTEND TO WITHIN 50' OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING PER SECTION 18.2.3.2.1. NFPA 1.
17. PLEASE PROVIDE A HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291. THIS TEST SHALL BE WITHIN THE LAST 12 MONTHS.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

N
W E
S

40 20 10 0 40
1"= 40'

LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE NOTES:

1. THE PROPOSED ACTIVITIES SHALL COMPLY WITH CITY OF WINTER SPRINGS DEVELOPMENT REGULATIONS (LATEST EDITION) INCLUDING THE TREE AND LANDSCAPE CODE, STORM WATER MANAGEMENT REGULATIONS, AND FIRE CODES AT THE TIME OF PERMITTING.
2. SIDEWALKS TO BE PROVIDED AND BUILT IN ACCORDANCE WITH F.D.O.T. AND CITY OF WINTER SPRINGS LAND DEVELOPMENT REGULATIONS (LATEST EDITION). ALL PROPOSED SIDEWALKS SHALL MEET ADA REQUIREMENTS.
3. ALL DIMENSIONS ARE SHOWN AT FACE OF CURB, UNLESS OTHERWISE NOTED. B/C INDICATES DIMENSION IS TO BACK OF CURB.
4. ALL RADII DIMENSIONS ARE 3' AT THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
6. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
7. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING, AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE, SIGN, WALL, ENCLOSURE, OR SCREENING, ETC.
8. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED, AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE OF FLORIDA APPROVED FACILITY.
9. ANY DAMAGED SIDEWALK OR CURB WITHIN THE F.D.O.T. RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
10. ALL DISTURBED AREAS WITHIN THE F.D.O.T. RIGHT-OF-WAY WILL BE SODDED.
11. STANDARD INDICES REFER TO THE LATEST VERSION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
12. NO LANE CLOSURES ARE ALLOWED BETWEEN 5:00 A.M. AND 7:30 P.M. THE F.D.O.T. RESERVES THE RIGHT TO REQUIRE DIFFERENT HOURS OF LANE CLOSURE. ALL LANE CLOSURES MUST BE APPROVED BY THE DEPARTMENT AT LEAST TWO WEEKS PRIOR TO THE LANE CLOSURE IN ACCORDANCE WITH THE DISTRICT LANE CLOSURE POLICY.
13. ALL POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN.
14. FDEP WATER AND WASTEWATER PERMITS MUST BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
15. PROPER DOCUMENTATION FOR ALL PUBLIC UTILITY EASEMENTS SHALL BE PROVIDED TO THE PROPERTY MANAGEMENT DEPARTMENT PRIOR TO CERTIFICATE OF COMPLETION.
16. UTILITY RECORD DRAWINGS ARE REQUIRED PRIOR TO PLACING THIS WATER AND WASTEWATER FACILITIES INTO SERVICE. PLEASE SEE THE ADDITIONAL INFORMATION SECTION FOR INSTRUCTIONS.

RIGHT-OF-WAY NOTES:

1. A RIGHT-OF-WAY USE PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
2. ALL AREAS WITHIN THE COUNTY OR F.D.O.T. RIGHT-OF-WAY DISTURBED THROUGH THE COURSE OF CONSTRUCTION WILL BE RE-GRADED AND SODDED.
3. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO PROTECT ALL COUNTY OR F.D.O.T. OWNED AND/OR MAINTAINED INFRASTRUCTURE. ANY/ALL COSTS ASSOCIATED WITH ALTERATIONS, RELOCATIONS, OR REPAIRS MADE NECESSARY BY THIS DEVELOPMENT SHALL BE BORNE BY EITHER THE OWNER, DEVELOPER, AND/OR CONTRACTOR. SPLICES IN THE FIBER OPTIC CABLE, SIGNALIZATION OR ROADWAY LIGHTING CONDUCTORS, OR THE ADDITION OF ADDITIONAL PULL/JUNCTION BOXES WILL NOT BE PERMITTED. IN THE EVENT A CABLE IS CUT, DAMAGED, OR REQUIRES RELOCATION, THE CABLE(S) SHALL BE RESTORED BACK TO THE ORIGINAL CONFIGURATION. ORIGINAL CONFIGURATION IS DEFINED AS SYSTEM STATUS, LAYOUT, AND DESIGN PRIOR TO ANY WORK COMMENCING.
4. FOR UTILITIES TO BE RELOCATED BY THE UTILITY PROVIDER, CONTRACTOR SHALL COORDINATE DEMOLITION SCHEDULE WITH UTILITY PROVIDERS. DEMOLITION OF SIDEWALKS AND DRIVEWAYS SHALL OCCUR PRIOR TO UTILITY RELOCATIONS.
5. ALL PAINT WITHIN THE STATE RIGHT-OF-WAY (R/W) SHOULD BE THERMOPLASTIC.
6. SIGNS WITHIN THE STATE RIGHT-OF-WAY (R/W) NEEDS TO BE MOUNTED TO ROUND ALUMINUM COLUMN (POST).

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE ROW OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

FDOT NOTES:

1. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARD PLANS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL

STORMWATER MANAGEMENT:

STORMWATER RUNOFF FROM THE SITE IMPROVEMENTS PROPOSED ONSITE SHALL BE MANAGED THROUGH A COMBINATION OF PROPOSED DRY DETENTION PONDS AND UNDERGROUND STORMTECH CHAMBERS LOCATED UNDER THE PAVEMENT AREAS AS SHOWN. THE STORMWATER MANAGEMENT SYSTEM HAS BEEN DESIGNED IN PART WITH "POND 1" WITHIN TUSKAWILLA CROSSINGS SUBDIVISION.

SITE SIGNAGE:

PERMANENT SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

LANDSCAPING:

ALL LANDSCAPING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF WINTER SPRINGS LAND DEVELOPMENT CODE.

SIDEWALK NOTE:

ANY BROKEN OR NON ADA COMPLIANT SIDEWALK IN THE PUBLIC RIGHT-OF-WAY FRONTING THE PROJECT SITE SHALL BE REPLACED AS PART OF THIS PROJECT.

UTILITY CONFLICT NOTE:
CAUTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION THIS SHALL INCLUDE CALLING UTILITY LOCATE, POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

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PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABILITY SERVICES
PERMITTING SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — No. 77085 — LICENSE — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: c=US, o=BOHLER ENGINEERING, CN=Kyle Morel, cn=BOHLER ENGINEERING FL, LLC/1.3.6.1.4.1.311.60.2.1.3=Florida, S=Florida, SERIALNUMBER=MAS20400280738, C=US
Date: 2025.02.11 15:56:37-05'00'
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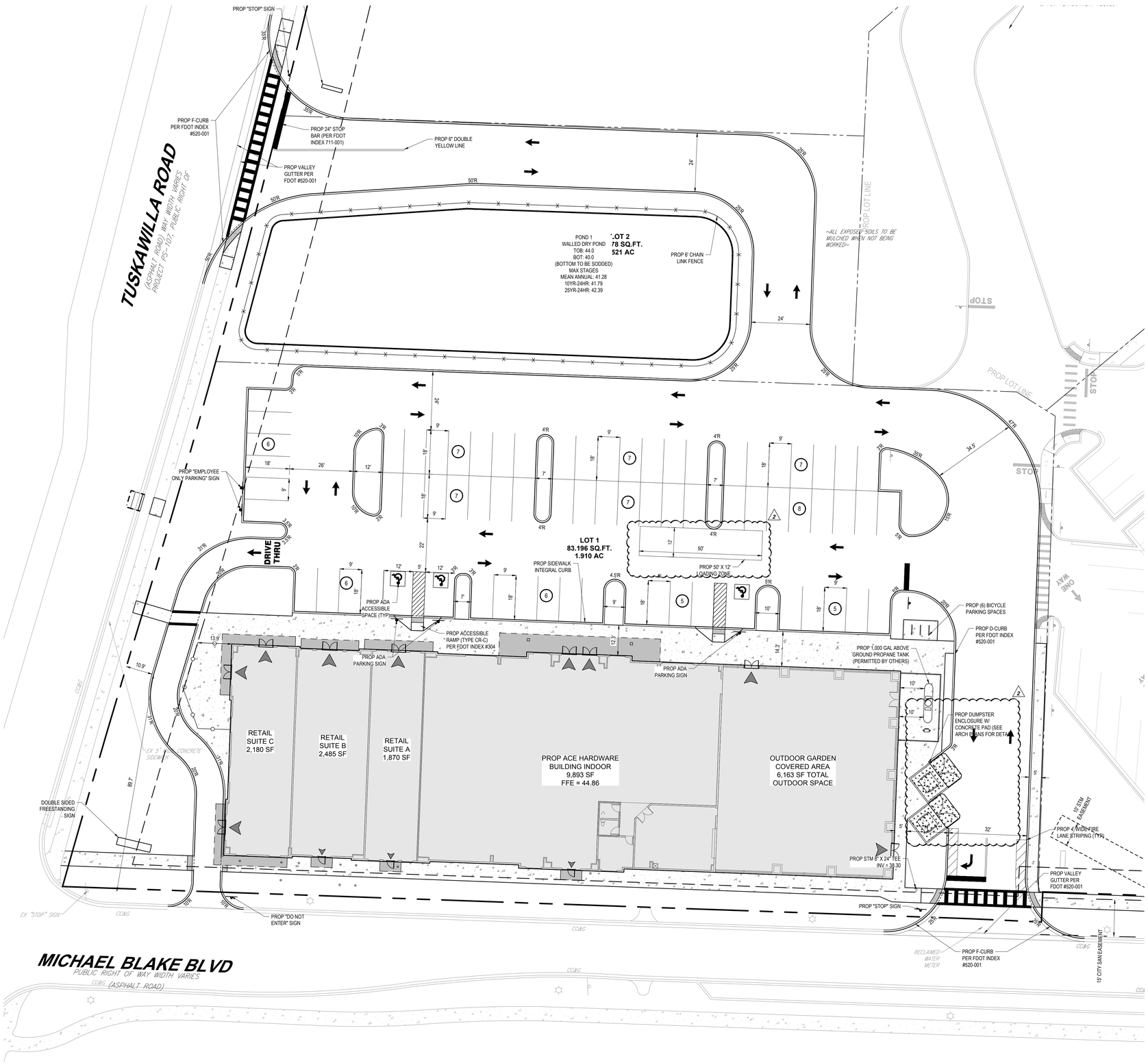
OVERALL SITE PLAN

SHEET NUMBER:

C-301

REVISION 2 - 01/28/2025

Feb 11, 2025
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KK





LEGEND

EX. PROPERTY LINE	
EX. ADJACENT PROPERTY LINE	
EX. ROADWAY C/L	
PROP. PROPERTY LINE	
PROP. BUFFER	
PROP. SETBACK	
PROP. PARKING COUNT	
PROP. SIGN	
PROP. BUILDING ENTRANCES	
PROP. CONCRETE SIDEWALK	
PROP. HEAVY DUTY CONCRETE	

SITE DATA TABLE

TAX PARCEL NUMBER(S):	01-21-30-501-0000-0010 & 26-20-30-5AR-0A00-008D/H
PROJECT ADDRESS:	UNDEVELOPED LAND EAST OF TUSKAWILLA RD WINTER SPRINGS, FL
PARCEL AREA:	6.14 AC
EXISTING ZONING:	T-5 URBAN CENTER ZONE
PROPOSED ZONING:	T-5 URBAN CENTER ZONE
EXISTING LAND USE:	VACANT - WOODED
FUTURE LAND USE:	COMMERCIAL
PROPOSED USE:	COMMERCIAL
MAX. BUILDING HEIGHT:	75 FEET

BUILDING SETBACKS

FRONT:	25' MIN. (TUSKAWILLA RD)
SIDE:	10' MIN. (NORTH)
SIDE:	10' MIN. (MICHAEL BLAKE BLVD)
REAR:	25' MIN. (SR 434)
INTERNAL LOT:	0'

IMPERVIOUS CALCULATIONS

MAXIMUM ALLOWABLE IMPERVIOUS AREA = 100% (6.14 AC)	
MCMILLIAN LOT 1 (1.91 AC)	
BUILDING AREA:	23,517 SF = 0.54 AC
PAVEMENT (IMPERVIOUS):	42,125 SF = 0.96 AC
CONCRETE:	9,475 SF = 0.21 AC
TOTAL IMPERVIOUS AREA:	56,042 SF = 1.71 AC
85% ASSUMED IMPERVIOUS AREA FOR FUTURE DEVELOPMENT	

PARKING CALCULATIONS

PARKING:	72 SPACES (INCLUDING 2 ADA SPACES)

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PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

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FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAC2D40B67B26, OU=FL
Date: 2025.02.11 15:57:06-05'00'

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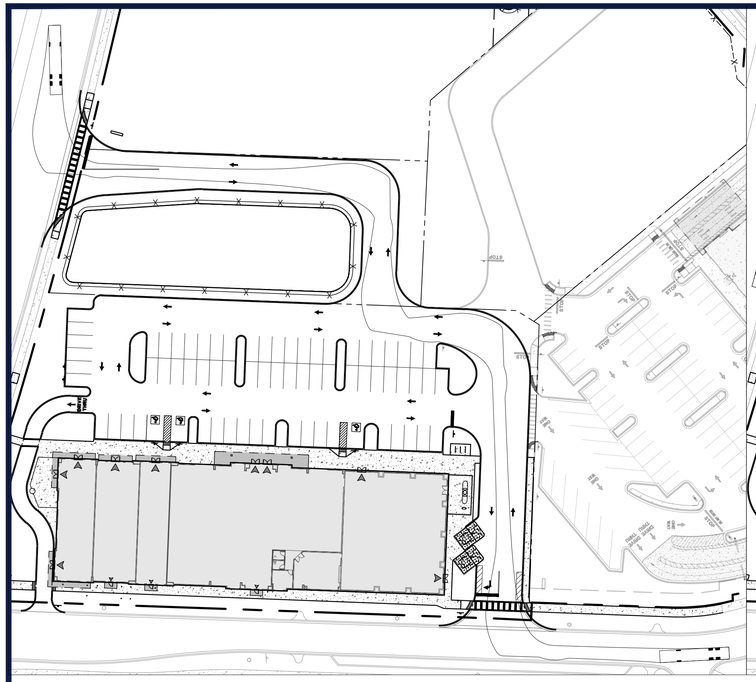
SITE PLAN

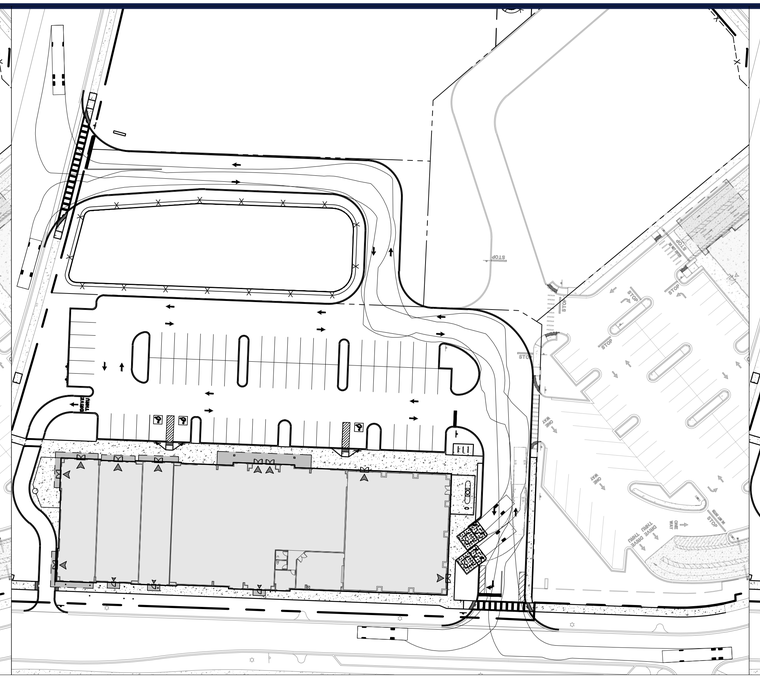
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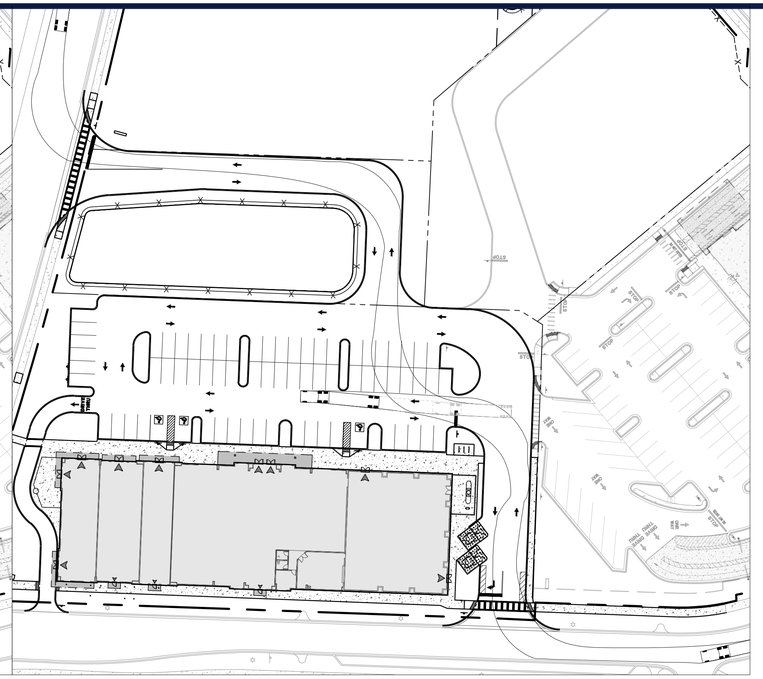
C-302

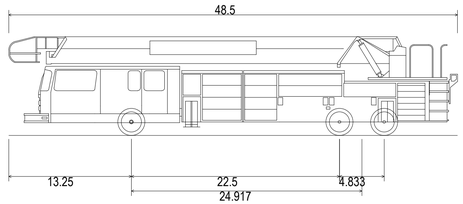
REVISION 2 - 01/28/2025

Feb 11, 2025
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KK



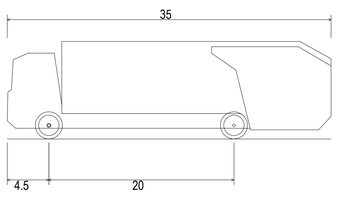






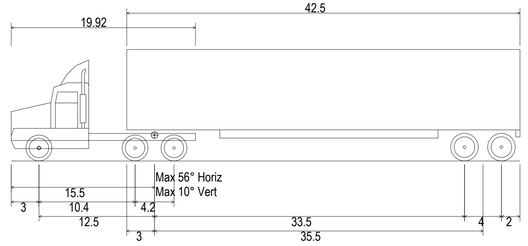
FIRE TRUCK - WINTER SPRINGS, FL

Overall Length	48.500ft
Overall Width	8.333ft
Overall Body Height	10.685ft
Min Body Ground Clearance	0.920ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Wall to Wall Turning Radius	48.420ft



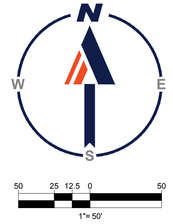
Rear-Load Garbage Truck

Overall Length	35.000ft
Overall Width	8.375ft
Overall Body Height	10.546ft
Min Body Ground Clearance	1.000ft
Track Width	8.375ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	29.300ft



WB-50 - Intermediate Semi-Trailer

Overall Length	55.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	45.000ft



UTILITY CONFLICT NOTE:

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Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-SITE-FLA240162.00-0A-----LAYOUT C-303 - TRUCK TURNING PLAN
KK

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LSPD / KK/KM

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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-SITE

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER

E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER

600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O=BOHLER ENGINEERING FL, LLC, L=Boca Raton, S=Florida, SERIALNUMBER=MA025083807382 6, C=US
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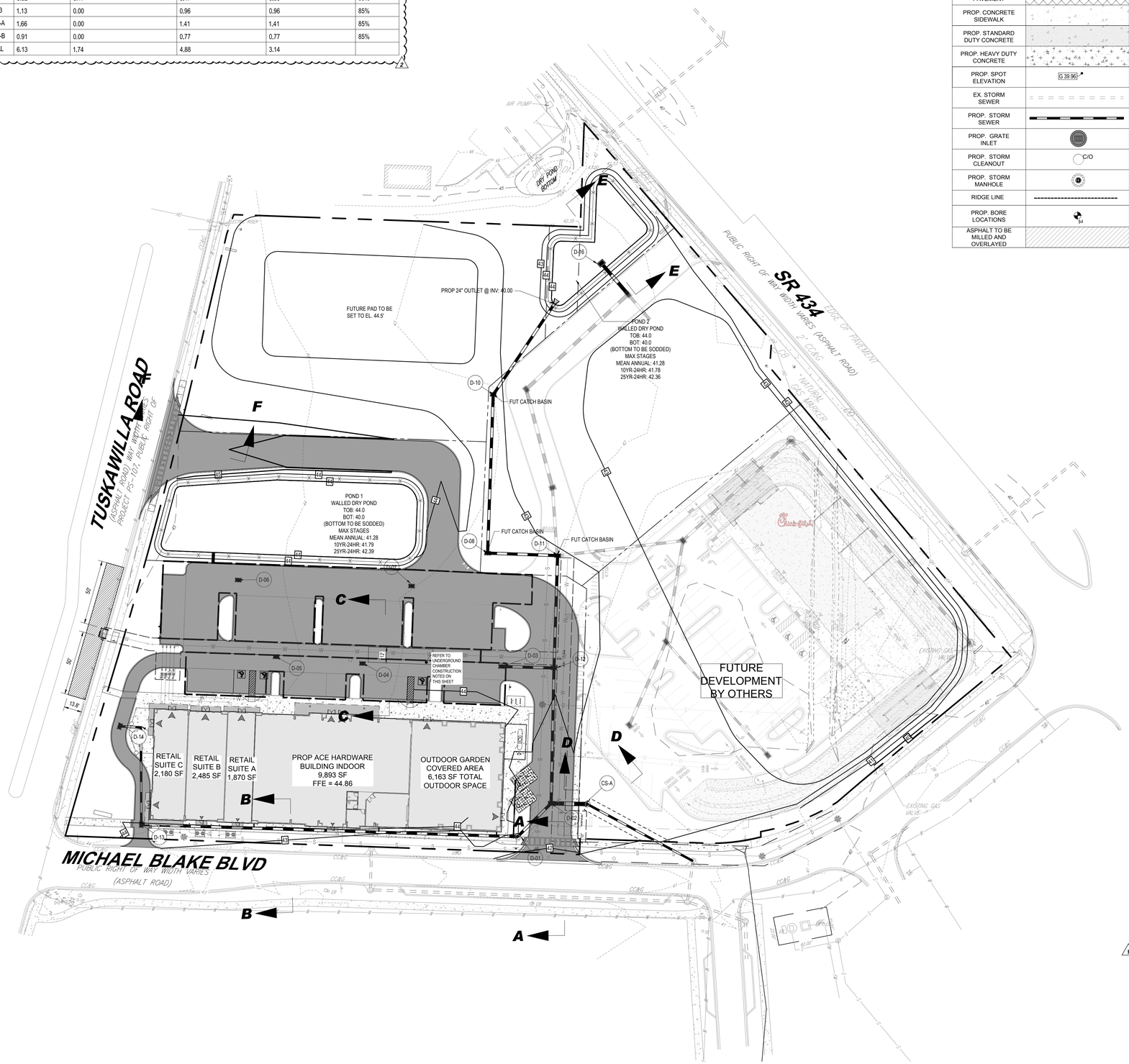
SHEET NUMBER:

C-303

REVISION 2 - 01/28/2025

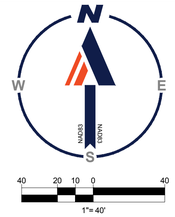
LOT	AREA (AC)	PROPOSED IMPERVIOUS AREA (AC)	TOTAL ALLOWABLE IMPERVIOUS (AC)	TOTAL REMIAINING IMPERVIOUS (AC)	%
LOT 1	1.91	1.57	1.57	0.00	82%
LOT 2	0.52	0.17	0.17	0.00	33%
LOT 3	1.13	0.00	0.96	0.96	85%
LOT 4-A	1.66	0.00	1.41	1.41	85%
LOT 4-B	0.91	0.00	0.77	0.77	85%
TOTAL	6.13	1.74	4.88	3.14	

2



LEGEND

PROPERTY LINE	
PROP. ASPHALT PAVING	
PROP. PERVIOUS PAVEMENT	
PROP. CONCRETE SIDEWALK	
PROP. STANDARD DUTY CONCRETE	
PROP. HEAVY DUTY CONCRETE	
PROP. SPOT ELEVATION	G 39.96
EX. STORM SEWER	
PROP. STORM SEWER	
PROP. GRATE INLET	
PROP. STORM CLEANOUT	C/O
PROP. STORM MANHOLE	
RIDGE LINE	
PROP. BORE LOCATIONS	S4
ASPHALT TO BE MILLED AND OVERLAYED	



GENERAL NOTES:

1. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CASTING STRUCTURES.
3. COORDINATE ALL UTILITY LEADS AND BUILDING CONNECTIONS WITH THE ARCHITECTURAL PLANS.
4. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS."
5. ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY WILL NEED TO BE SODDED.

PAVING AND GRADING NOTES:

A. GENERAL:
1. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE SURVEYOR'S BENCHMARKS AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUNDBREAK.
2. ALL GRADES SHOWN REFERENCE PROPOSED ELEVATIONS AT EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. "TC" = TOP OF CURB ELEVATION; "G" = FINISHED GRADE; "MEG" = PROPOSED GRADE TO MATCH EXISTING GRADE; T/W = TOP OF RETAINING WALL ELEVATION; B/W = BOTTOM OF RETAINING WALL ELEVATION.
3. THE ALTA/ACSM LAND TITLE SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
4. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
5. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF LIMEROCK BASE.
6. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
7. WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAWCUT TO ENSURE A PROPER JOINT.
8. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.

B. MATERIALS:
1. BASE COURSE SHALL BE ABC-3 PER F.D.O.T. SPECIFICATIONS OR EQUIVALENT LIMEROCK THICKNESS W/ MINIMUM LBR-100 (MAX. 6" LIFTS).
2. ASPHALT SURFACES SHALL BE TYPE S-III ASPHALTIC CONCRETE, UNLESS OTHERWISE SPECIFIED ON THE PLANS, SHALL BE A MINIMUM OF 1-1/2" THICK, AND SHALL BE CONSTRUCTED IN TWO 3/4" LIFTS, WITH TACKCOAT BETWEEN LIFTS.
3. REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" x 6" NO. 6 GAUGE WIRE MESH.

C. INSTALLATION:
1. SUBGRADE FOR ROADWAY SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY (AASHTO T-180), SHALL BE A MINIMUM 12", AND SHALL HAVE A MINIMUM LBR 40.
2. BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 6" PLACED IN ONE LIFT. ADDITIONALLY, BASE COURSE MATERIAL SHALL HAVE A MINIMUM MARSHALL STABILITY OF 1000, UNLESS OTHERWISE INDICATED (OR LBR-100).
3. BASE COURSE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
4. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM TO THE REQUIREMENTS OF THE D.O.T. STANDARD SPECIFICATIONS FOR TYPE S-III ASPHALTIC CONCRETE OR THE LATEST REVISION.

D. TESTING
1. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
2. DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.
3. ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE CONTRACTOR.
4. DENSITY TESTS ON THE STABILIZED SUBGRADE SHALL BE SUPPLIED TO AND APPROVED BY THE ENGINEER OF RECORD AND GEOTECHNICAL ENGINEER BEFORE ANY BASE IS CONSTRUCTED.
5. DENSITY TESTS AND "AS-BUILTS" ON THE FINISHED BASE SHALL BE SUPPLIED TO AND APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE ANY ASPHALT PAVEMENT IS CONSTRUCTED.

STORM DRAINAGE NOTES:

A. GENERAL:
1. DISTANCES AND LENGTHS OF PIPE SHOWN ON PLANS ARE REFERENCED TO THE CENTER OF STRUCTURES.

B. MATERIALS:
1. REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM C-76, CLASS III, WALL THICKNESS "B", LATEST REVISION. RUBBER GASKETS OR OTHER MANUFACTURER SUPPLIED JOINT SEALER SHALL BE USED.
2. ALL PVC DRAINAGE PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 35, WITH PUSH-ON RUBBER GASKET JOINTS.
3. ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.

C. INSTALLATION:
1. PIPE SHALL BE PLACED ON A MINIMUM OF 8" STABLE GRANULAR MATERIAL FREE OF ROCK FORMATION AND OTHER FOREIGN FORMATIONS, AND CONSTRUCTED TO A UNIFORM GRADE AND LINE.
2. BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6" TO A HEIGHT OF 12" ABOVE PIPE AS SHOWN ON THE PLANS.
3. PROVIDE A MINIMUM PROTECTIVE COVER OF 18" OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.

D. CONNECTIONS TO EXISTING STORM STRUCTURES:
1. THE HOLE INTO THE EXISTING STRUCTURE SHALL BE SAW CUT OR CORE DRILLED.
2. USE NON-SHRINKING GROUT TO FILL ALL GAPS AROUND THE JOINT.
3. AFTER PIPE IS CONNECTED WITH THE INLET, THE END OF THE PIPE MUST BE CUT FLUSH WITH THE INSIDE SURFACE OF THE INLET.
4. REFER TO F.D.O.T. STANDARD PLAN INDEX 425-001 FOR FILTER FABRIC WRAP ON GROUTED PIPE TO STRUCTURE JOINT DETAIL.

GRADING NOTES:

1. STRUCTURAL FILL REQUIRED TO ATTAIN FINAL GRADES SHALL BE COMPRISED OF CLEAN SAND WITH NO MORE THAN 10 PERCENT PASSING THE U.S. NO. 200 SIEVE. THE FILL SHALL BE PLACED IN MAXIMUM 12-INCH THICK LIFTS AND COMPACTED TO A MINIMUM DENSITY EQUIVALENT TO 95 PERCENT OF THE SOILS MAX. MODIFIED PROCTOR DENSITY VALUE (ASTM D-1557) HAS BEEN ACHIEVED.
2. CONTRACTOR SHALL FOLLOW THE GUIDANCE AND RECOMMENDATIONS AS SPECIFIED IN THE SUBSOIL AND GROUNDWATER LEVEL INVESTIGATION GEOTECHNICAL ENGINEERING REPORT PREPARED BY YOVAISH ENGINEERING SERVICES DATED OCTOBER 12, 2023.

DRAINAGE NOTES:

1. ALL STORM PIPE MATERIAL SHALL BE IN ACCORDANCE WITH THE CITY OF WINTER SPRINGS STANDARDS AND SPECIFICATIONS.
2. FINAL RIM OR TOP OF CATCH BASIN ELEVATIONS FOR FUTURE CATCH BASINS SHOULD NOT BE FINALIZED UNTIL PAVEMENT AREAS OF FUTURE DEVELOPMENTS ARE DESIGNED.
3. ALL POND AREAS SHALL BE VEGETATED.
4. ANY BARE SOIL AREAS NOT COVERED BY IMPERVIOUS SURFACES SHALL BE STABILIZED (HYDROSEEDING OR EQUIVALENT).
5. ALL INLETS FROM STORMTECH CHAMBER SYSTEM SHALL BE INSTALLED WITH SEDIMENT SUMP.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

DEWATERING NOTE:

CONTRACTOR SHALL SUBMIT DEWATERING PLAN TO THE DISTRICT, 14 DAYS PRIOR TO COMMENCEMENT. SUBJECT PLANS SHALL BE REVISED AS NECESSARY.

ENGINEER'S CERTIFICATION NOTE:

"I, KYLE MOREL, P.E. HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE ALL EXISTING UTILITIES HAVE BEEN FIELD LOCATED AND THE LOCATION AND ELEVATION DEPICTED ON THESE PLANS IS BASED ON ACTUAL SURVEY, GROUND PENETRATING RADAR, SOFT DIG EXCAVATIONS, AND OTHER INDUSTRY METHODS. I FURTHER CERTIFY THAT ALL MEASURES HAVE BEEN TAKEN WITH REGARD TO UTILITY PROVIDERS' NOTIFICATION TO MARK UTILITIES IN ACCORDANCE WITH CHAPTER 556 F.S., SUNSHINE STATE ONE CALL".

1

UNDERGROUND CHAMBER CONSTRUCTION NOTES:

1. EXCAVATE BELOW UNDERGROUND CHAMBER BOTTOM PASSED FIRST LAYER OF CLAY LAYER AND REPLACE WITH CLEAN FILL, MINIMUM PERMEABILITY OF 20 FT / DAY HORZ & 10 FT / DAY VERT.
2. PRIOR TO CERTIFICATION, CONTRACTOR TO PROVIDE SUPPORTING GEOTECHNICAL DATA (DRI TEST OR SIMILAR) TO CONFIRM PERMEABILITY RATES. SHOULD TESTING NOT MEET THESE REQUIREMENTS, REMEDIATION EFFORTS WILL BE REQUIRED. PLEASE CONTACT EOR IMMEDIATELY.
3. CONTRACTOR TO MAINTAIN BEST MANAGEMENT SWPPP PRACTICES DURING CONSTRUCTION AND SHALL ENSURE NO CLAYS OR OTHER UNSUITABLE MATERIAL IS MIXED WITHIN THE VICINITY OF THE PROPOSED STORMWATER POND.

THIS PLAN TO BE UTILIZED FOR GRADING, DRAINAGE AND UTILITIES PURPOSES ONLY

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CITY OF WINTER SPRINGS

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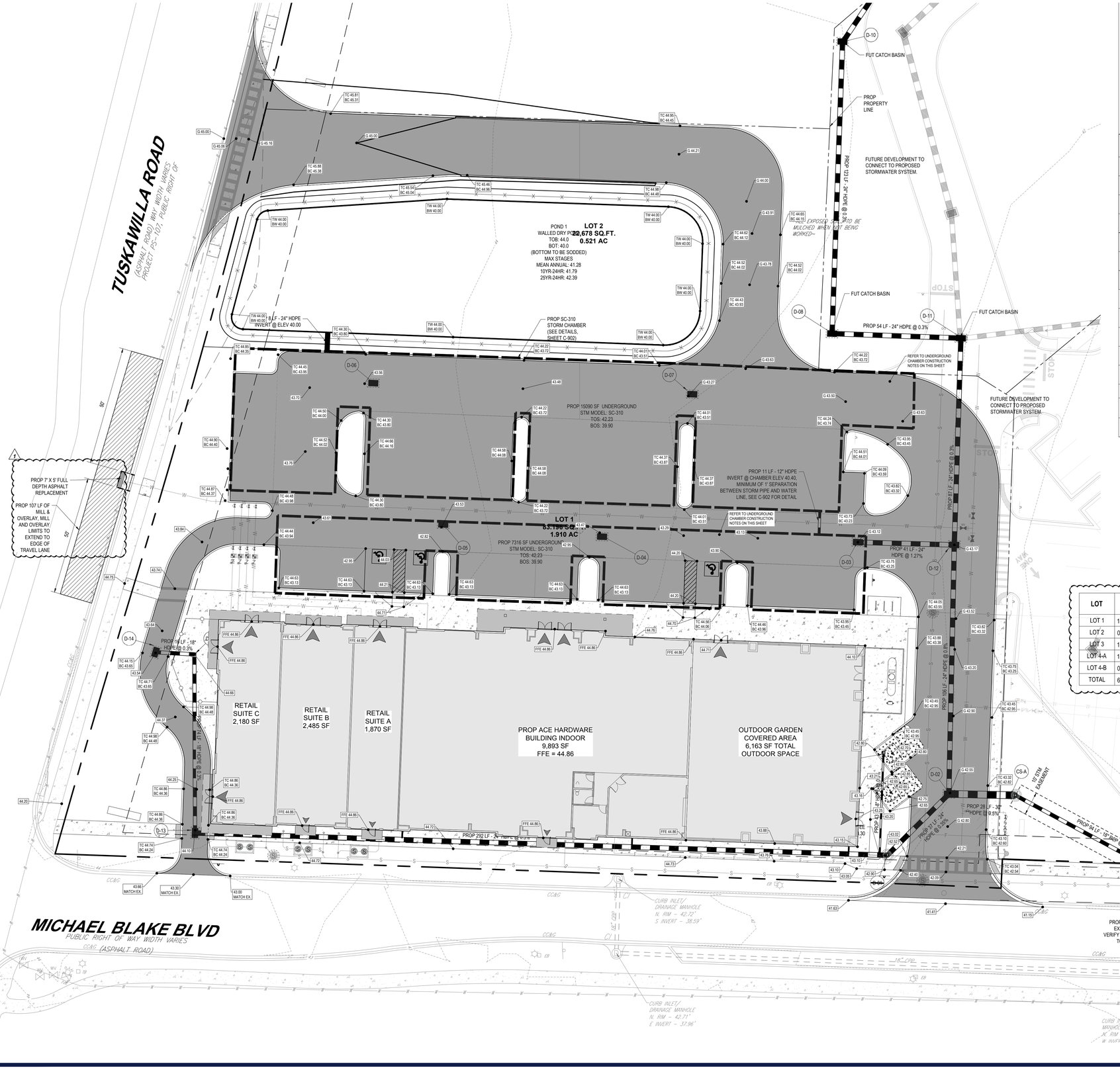
OVERALL PAVING GRADING AND DRAINAGE PLAN

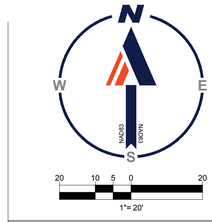
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C-401

REVISION 2 - 01/28/2025

Feb 11, 2025
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KK1





LEGEND

PROPERTY LINE	
PROP. ASPHALT PAVING	
PROP. PERVIOUS PAVEMENT	
PROP. CONCRETE SIDEWALK	
PROP. STANDARD DUTY CONCRETE	
PROP. HEAVY DUTY CONCRETE	
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PROP. GRATE INLET	
PROP. STORM CLEANOUT	C/O
PROP. STORM MANHOLE	
RIDGE LINE	
PROP. BORE LOCATIONS	
ASPHALT TO BE MILLED AND OVERLAYED	

DOWNSPOUT NOTE:

CONNECT ALL ROOF DOWNSPOUTS TO 6-INCH HDPE LATERALS. LATERALS SHALL BE CONNECTED TO 12-INCH HDPE TRUNK LINES EXTENDING TO STRUCTURES WITH MIN. 0.5% SLOPE.

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
CS-A	STORM MANHOLE CONTROL STRUCTURE PER FDOT INDEX #425-001 RIM = 43.50 WEIR ELEV. = 41.20 W INV IN=38.00 (30" HDPE) SE INV OUT = 38.00 (18" RCP)
D-01	STORM MANHOLE PER FDOT INDEX #425-001 RIM = 43.00 N INV IN = 38.27 (24" HDPE) W INV IN = 38.27 (24" HDPE)
D-02	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 42.55 E INV IN = 38.14 (30" HDPE) S INV OUT = 38.14 (24" HDPE) N INV OUT = 38.14 (24" HDPE)
D-03	TYPE "D" INLET RIM = 43.12 E INV OUT = 39.50 (24" HDPE)
D-04	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.47 W INV IN = 40.40 (12" HDPE) E INV OUT = 40.40 (12" HDPE)
D-05	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.53 E INV OUT = 40.04 (12" HDPE)
D-06	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.56 E INV OUT = 40.33 (12" HDPE)
D-07	TYPE "D" INLET W/ 1.5' SUMP RIM = 43.27 W INV IN = 38.89 (12" HDPE)
D-08	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 43.85 E INV IN = 39.41 (24" HDPE) N INV OUT = 39.41 (24" HDPE)
D-10	TYPE "D" INLET RIM = 43.06 S INV IN = 39.66 (24" HDPE) NE INV IN = 39.66 (24" HDPE)
D-11	TYPE "D" INLET PER FDOT INDEX #425-052 RIM = 43.40 S INV IN = 39.24 (24" HDPE) W INV OUT = 39.24 (24" HDPE)
D-12	TYPE "D" INLET RIM = 43.17 S INV IN = 38.98 (24" HDPE) W INV IN = 38.98 (24" HDPE) N INV OUT = 38.98 (24" HDPE)
D-13	TYPE "D" INLET RIM = 44.10 N INV IN = 39.16 (18" HDPE) E INV OUT = 39.16 (24" HDPE)
D-14	TYPE "D" INLET RIM = 43.54 E INV OUT = 39.58 (18" HDPE)
D-15	STORM DRAIN RIM = 44.66 W INV OUT = 39.53 (18" HDPE) S INV OUT = 39.53 (18" HDPE)
D-16	TYPE "C" BUBBLE STRUCTURE RIM: 40.00 30" INV: 35.25 (W/ WEEP HOLE PER FDOT INDEX #425-001)

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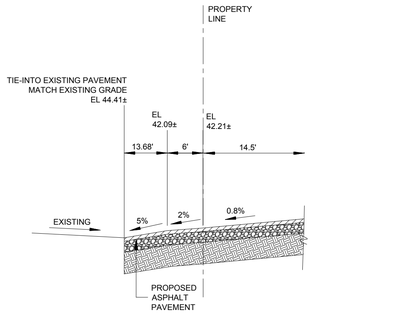
PAVING GRADING AND DRAINAGE PLAN

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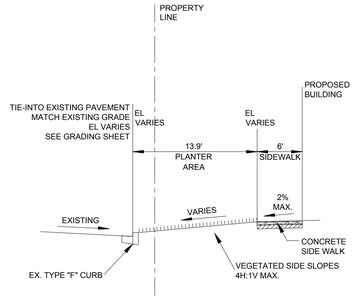
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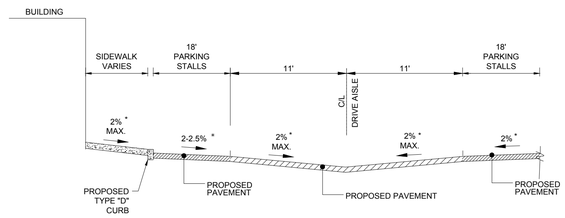
Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-GRDR-FLA240162.00-0A-----LAYOUT: C-402 - PAVING GRADING & DRAINAGE
KK



MICHAEL BLAKE ENTRANCE SECTION A-A
N.T.S.

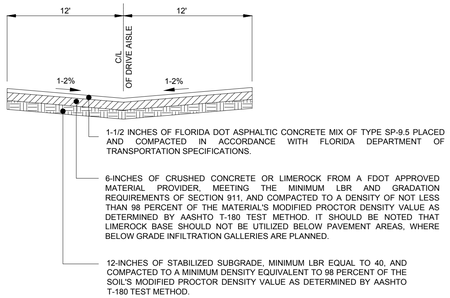


MICHAEL BLAKE PARKING SECTION B-B
N.T.S.

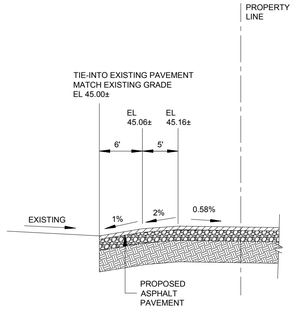


DRIVE AISLE SECTION C-C
N.T.S.

*CROSS-SLOPES OF PARKING STALLS & DRIVE AISLE SHALL BE AS NOTED ON SECTION DETAIL, UNLESS OTHERWISE NOTED FROM SPOT ELEVATIONS ON SHEET C5.1.

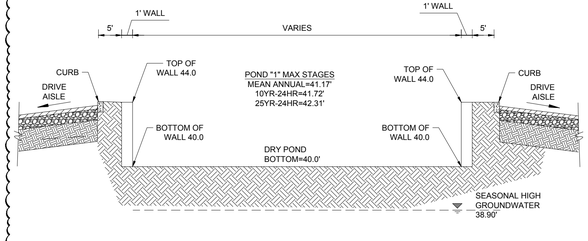


TYPICAL DRIVE AISLE PAVEMENT SECTION
N.T.S.

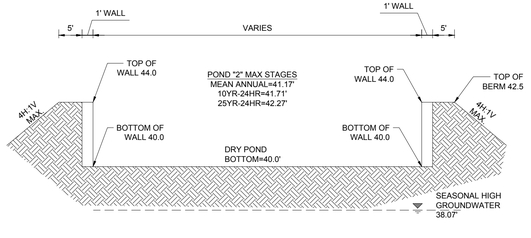


TUSKAWILLA ENTRANCE SECTION F-F
N.T.S.

2



POND 1
SECTION D-D
N.T.S.



POND 2
SECTION E-E
N.T.S.

Feb 11, 2025
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2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-GRDR

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O=BOHLER ENGINEERING FL, LLC, L=Rock Rdge, S=Florida, SERIALNUMBER=MA52024082867382 6, C=US
Date: 2025.02.11 10:58:05-05'00'

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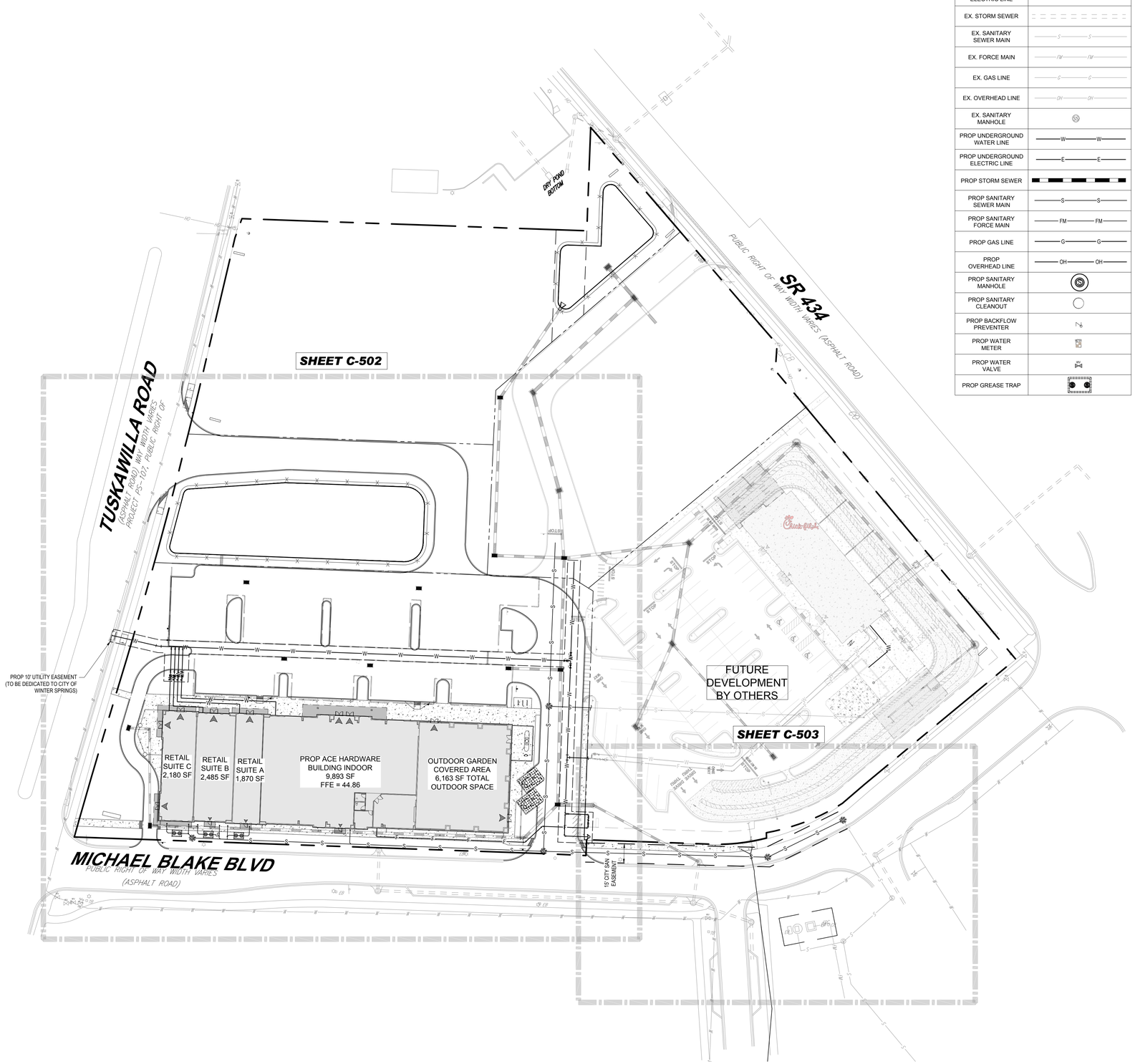
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CROSS SECTIONS

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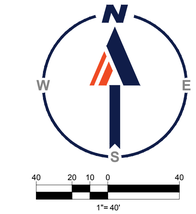
C-403

REVISION 2 - 01/28/2025



LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	



GENERAL NOTE:

ALL ONSITE WATER AND SEWER DISTRIBUTION/COLLECTION LINES/MAINS TO BE PRIVATELY OWNED & MAINTAINED UNLESS OR UNTIL A UTILITY EASEMENT IS DESCRIBED & APPROVED BY ALL INVOLVED PARTIES.

SANITARY SEWER NOTES:

A. GENERAL:

1. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.
2. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR TO TELEVISE EXISTING SANITARY SEWER LINE FROM POINT OF CONNECTION THROUGH THE NEXT SEQUENTIAL DOWNSTREAM RUN OF PIPE. ADDITIONALLY, PRIOR TO COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL TELEVISE THE NEWLY INSTALLED SANITARY SEWER MAIN TO ENSURE NO DIPS OR DEBRIS WITHIN LINE.
3. EXISTING SERVICES WITHIN MANHOLES SHALL BE RELOCATED TO NEW SEWER.
4. BYPASS PUMPING MAY BE REQUIRED AND SANITARY SERVICE MAINTAINED WHILE EXISTING SEWER IS BEING REPLACED.
5. CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH CITY WITH MAKING CONNECTION TO PUMP STATION / MANHOLE.
6. CONTRACTOR MUST COORDINATE WITH CITY AND SHOPPING CENTER AND PROVIDE AT LEAST 48-HOURS NOTICE PRIOR TO REPLACING SERVICES.

B. MATERIALS:

1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.
2. ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
3. ALL SANITARY CLEANOUTS WITHIN PAVEMENT SHALL HAVE A LID THAT IS H20 LOADING.

C. INSTALLATION:

1. PIPE AND FITTINGS:
   a. SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, AND THE UNI-BELL PLASTICS PIPE ASSOCIATION'S 'RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE.'
   b. BEDDING AND INITIAL BACKFILL (12") OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. PEA ROCK OR 3/4 " WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.
2. CLEANOUTS:
   a. CLEANOUTS SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM CLEAN SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
   b. ALL OPENINGS AND JOINTS SHALL BE SEALED WATER-TIGHT.
3. SERVICE:
   a. MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE 1.00%.
   b. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED PLUG.
   c. CONNECTION OF SERVICES TO BUILDING'S PLUMBING SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

D. TESTING:

1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER.
3. SEWER PIPE LEAKAGE ALLOWABLE SHALL NOT EXCEED 150 GALLONS PER DAY PER INCH DIAMETER PER MILE IN A TWO HOUR TEST PERIOD FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED.
4. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO THE CERTIFICATION TO ANY AGENCY.
5. GENERAL CONTRACTOR SHALL EMPLOY AN INDEPENDENT INSPECTOR FOR 1-⅛ CONTINUOUS INSPECTION OF THE BEDDING AND BACKFILL OPERATION. COMPACTION TEST SHALL BE TAKEN AT THE BOTTOM OF TRENCH AND AT EACH LIFT OF BACKFILL.
6. GENERAL CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR AS-BUILT TOP OF PIPE ELEVATIONS TAKEN WHEN BEDDING OPERATIONS IS 75% COMPLETE. THESE ELEVATIONS SHALL BE TAKEN AT POINTS OF CONNECTION, CHANGES IN DIRECTION AND AT MINIMUM 20' INTERVALS ALONG THE LENGTH OF THE PIPE. THESE ELEVATIONS SHALL BE RECORDED AS AS-BUILT DIMENSIONS ON SITE PLAN REVIEW BY PROJECT ENGINEER.
7. ALL SANITARY LINES ARE TO BE FLUSHED PRIOR TO CONTRACTOR TURNOVER OF THE FACILITY.

WATER DISTRIBUTION NOTES:

1. CONTRACTOR SHALL FOLLOW GUIDELINES AND PROCEDURES OUTLINED BY UTILITY PROVIDER, AND HAVE UTILITY PROVIDER'S MANUAL ON-SITE AT ALL TIMES. THIS POLICY MANUAL SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS AS IT PERTAINS TO APPROVED MATERIALS, INSTALLATION METHODS, INSPECTION NOTIFICATION, AND AS-BUILT/PROJECT CLOSEOUT REQUIREMENTS.
2. ALL HIGH DENSITY POLYETHYLENE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M - 294 LATEST REVISIONS. ALL PIPING TO BE NON-PERFORATED TUBING.
3. CONTRACTOR TO COORDINATE WITH COUNTY AND ADJACENT PROPERTY OWNERS AND BUSINESSES FOR ANY ANTICIPATED WATER INTERRUPTIONS FOR CONNECTION TO EXISTING WATER LINE.
4. CONTRACTOR TO DEFLECT OR BEND WATER LINES AS NECESSARY TO MAINTAIN 12" VERTICAL SEPARATION FROM STORM SEWER PER FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SANITARY SEWER GRAVITY NOTES:

1. IF REQUIRED, THE CONTRACTOR SHALL RECONSTRUCT THE BENCH IN THE EXISTING MANHOLE TO ACCOMMODATE THE NEW FLOW DIRECTION.
2. WASTEWATER FLOW IN THE EXISTING SEWER MUST BE MAINTAINED DURING THE INSTALLATION OF THE LATERAL. IF A BY-PASS IS REQUIRED, THE CONTRACTOR MUST SUBMIT DETAILS OF THE SYSTEM FOR REVIEW AND APPROVAL TO THE CITY OF WINTER SPRINGS PUBLIC WORKS DEPARTMENT PRIOR TO STARTING CONSTRUCTION.

DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY

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PROJECT:

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E SR 434 & MICHAEL BLAKE BLVD.
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CITY OF WINTER SPRINGS

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Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MAS20240528073826, C=US
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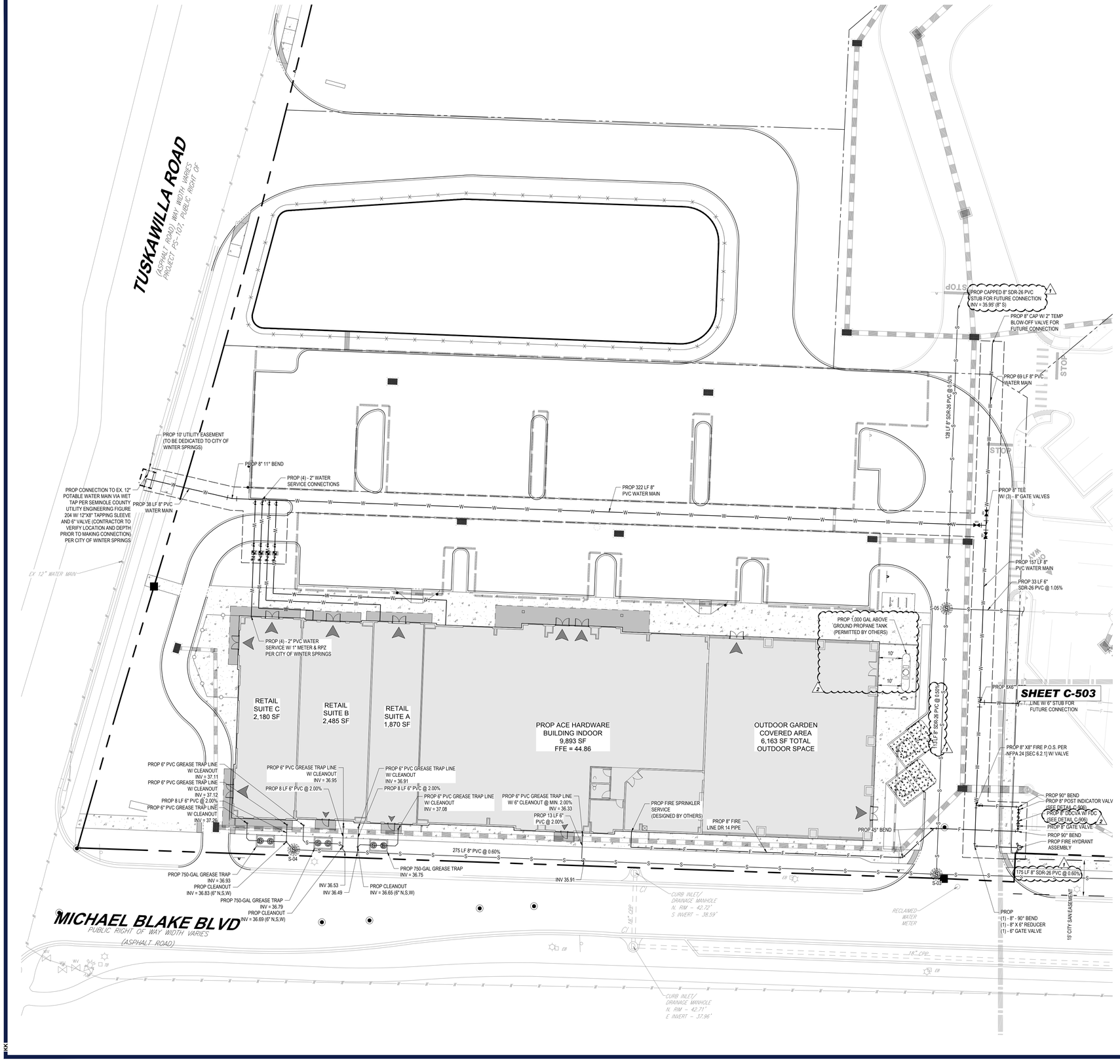
OVERALL UTILITY PLAN

SHEET NUMBER:

C-501

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KK



FIRE NOTES:

1. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1, 16.1.4).
2. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
3. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1).
4. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3).
5. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
6. A 36 IN. CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 21/2 IN. NFPA 1, 18.5.7.
7. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10.
8. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH. NFPA 1, 18.2.2.2.

FIRE SPRINKLER NOTES

A) AT MINIMUM, A CLASS FIVE CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1-FOOT ABOVE THE FINISHED FLOOR.

B). THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.

C). NO OTHER WATER CONNECTION SHALL BE OFF OF THE FIRE LINE

D). THE FIRE DEPARTMENT CONNECTION SHALL BE WITH-IN 100 FEET OF THE FIRE HYDRANT IF STANDPIPE SYSTEM IS PROVIDED.

E). THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.

F). ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPT. BEFORE BEING COVERED.

SANITARY SEWER STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
S-01	SANITARY MANHOLE RIM = 40.23 PROP INV IN (SW)= 33.03 (8" PVC) EX. INV: 32.93
S-02	SANITARY MANHOLE RIM = 41.00 W INV IN = 33.78 (8" PVC) NE INV OUT = 33.68 (8" PVC)
S-03	SANITARY MANHOLE RIM = 42.01 W INV IN = 34.93 (8" PVC) E INV OUT = 34.83 (8" PVC) N INV IN = 34.93 (8" PVC)
S-04	SANITARY MANHOLE RIM = 43.32 E INV OUT = 36.58 (8" PVC)
S-05	SANITARY MANHOLE RIM = S INV OUT = 35.50 (8" PVC) E INV IN = 35.60 (6" PVC) N INV IN = 35.60 (8" PVC)

WATER DEMAND

TENANT:	TOTAL WATER USAGE (GPD):
ACE HARDWARE	219 GPD
RETAIL A	411 GPD
RETAIL B	376 GPD
RETAIL C	300 GPD

FIRE FLOW REQUIREMENTS

FIRE FLOW CALCULATION BASED ON NFPA-17TH EDITION CHAPTER 18 TABLE 18.4.5.2.1

BUILDING TYPE: VB
AREA PER IBC: 22,591 SF (1-STORY)
SPRINKLER SYSTEM: SPRINKLED
REQUIRED FLOW PER NFPA-17TH 18.4.5.3.2: 1,000 GPM @ 2 HOUR DURATIONS (75% REDUCTION)
REQUIRED SPRINKLER DEMAND: 600 GPM @ 40 PSI
PROVIDED FLOW: 2,273 GPM @ 20 PSI
PEAK DOMESTIC DEMAND: 4 GPM

RECLAIM WATER DEMAND

IRRIGATION SYSTEM

3 SPRAY ZONES @ 114 GPM X (20 MINUTES PER CYCLE) = 2,280 GALLONS PER CYCLE
7 DRIP ZONES @ 154.2 GPM X (30 MINUTES PER CYCLE) = 4,626 GALLONS PER CYCLE
2 BUBBLER ZONES @ 27 GPM X (20 MINUTES PER CYCLE) = 540 GALLONS PER CYCLE
TOTAL GALLONS = 7,446 GALLONS PER CYCLE

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LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
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PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND FIRE LINE	F F
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	

PROVIDE SIGNAGE FOR ALL PROPOSED FIRE DEPARTMENT CONNECTIONS (F.D.C.) INDICATING ITS LOCATION AND THE BUILDING IT SERVICES.

NEW AND EXISTING FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF SECTION 18.5 OF NFPA 1.

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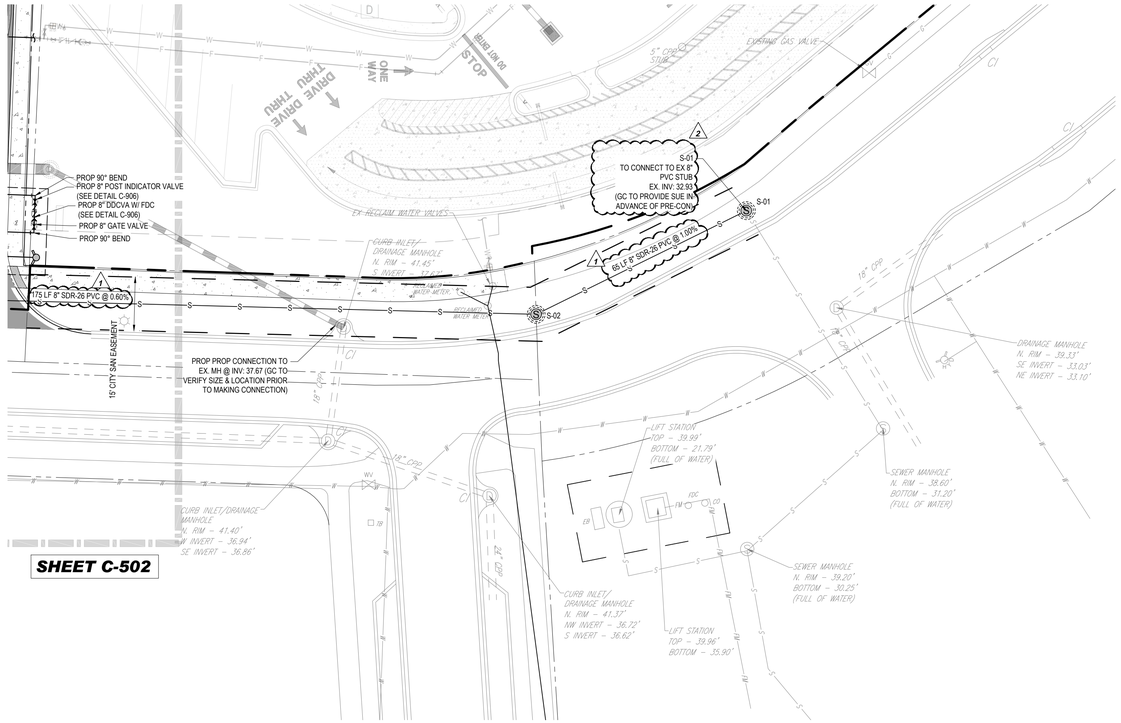
UTILITY PLAN

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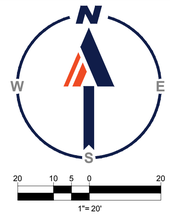
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REVISION 2 - 01/28/2025

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KK



SHEET C-502



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1. FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1, 16.1.4).
2. A SECOND ENTRANCE/EXIT MIGHT BE REQUIRED PER AHJ IF THE RESPONSE TIME FOR EMERGENCY IS EXCEEDED PER NFPA 1, SECTION 18.2.3.3 MULTIPLE ACCESS ROADS.
3. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1).
4. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3).
5. FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.
6. A 36 IN. CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 21/2 IN. NFPA 1, 18.5.7.
7. HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10.
8. ACCESS TO GATED SUBDIVISIONS OR DEVELOPMENTS SHALL PROVIDE FIRE DEPARTMENT ACCESS THROUGH AN APPROVED SOS AND SEMINOLE COUNTY KNOX KEY SWITCH. NFPA 1, 18.2.2.2.

FIRE SPRINKLER NOTES

A) AT MINIMUM, A CLASS FIVE CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1-FOOT ABOVE THE FINISHED FLOOR.

B). THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.

C). NO OTHER WATER CONNECTION SHALL BE OFF OF THE FIRE LINE

D). THE FIRE DEPARTMENT CONNECTION SHALL BE WITH-IN 100 FEET OF THE FIRE HYDRANT IF STANDPIPE SYSTEM IS PROVIDED.

E). THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.

F). ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPT. BEFORE BEING COVERED.

SANITARY SEWER STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
S-01	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 40.23 PROP INV IN (SW)= 33.03 (8" PVC) EX. INV: 32.93
S-02	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 41.00 W INV IN = 33.78 (8" PVC) NE INV OUT = 33.68 (8" PVC)
S-03	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 42.01 W INV IN = 34.93 (8" PVC) E INV OUT = 34.83 (8" PVC) N INV OUT = 34.93 (8" PVC)
S-04	SANITARY MANHOLE (PER CITY OF WINTER SPRINGS SPECIFICATIONS) RIM = 43.32 E INV OUT = 36.58 (8" PVC)

LEGEND

EX. UNDERGROUND WATER LINE	W W
EX. UNDERGROUND ELECTRIC LINE	E E
EX. STORM SEWER	
EX. SANITARY SEWER MAIN	S S
EX. FORCE MAIN	FM FM
EX. GAS LINE	G G
EX. OVERHEAD LINE	OH OH
EX. SANITARY MANHOLE	
PROP UNDERGROUND WATER LINE	W W
PROP UNDERGROUND FIRE LINE	F F
PROP UNDERGROUND ELECTRIC LINE	E E
PROP STORM SEWER	
PROP SANITARY SEWER MAIN	S S
PROP SANITARY FORCE MAIN	FM FM
PROP GAS LINE	G G
PROP OVERHEAD LINE	OH OH
PROP SANITARY MANHOLE	
PROP SANITARY CLEANOUT	
PROP BACKFLOW PREVENTER	
PROP WATER METER	
PROP WATER VALVE	
PROP GREASE TRAP	

PROVIDE SIGNAGE FOR ALL PROPOSED FIRE DEPARTMENT CONNECTIONS (F.D.C.) INDICATING ITS LOCATION AND THE BUILDING IT SERVICES.

NEW AND EXISTING FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF SECTION 18.5 OF NFPA 1.

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY

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LAND SURVEYING
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1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-UTIL

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlering.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Hines Ridge, S=Florida, SERIALNUMBER=MA52024082967382 6, C=US
Date: 2025.02.13 15:58:51-05'00'

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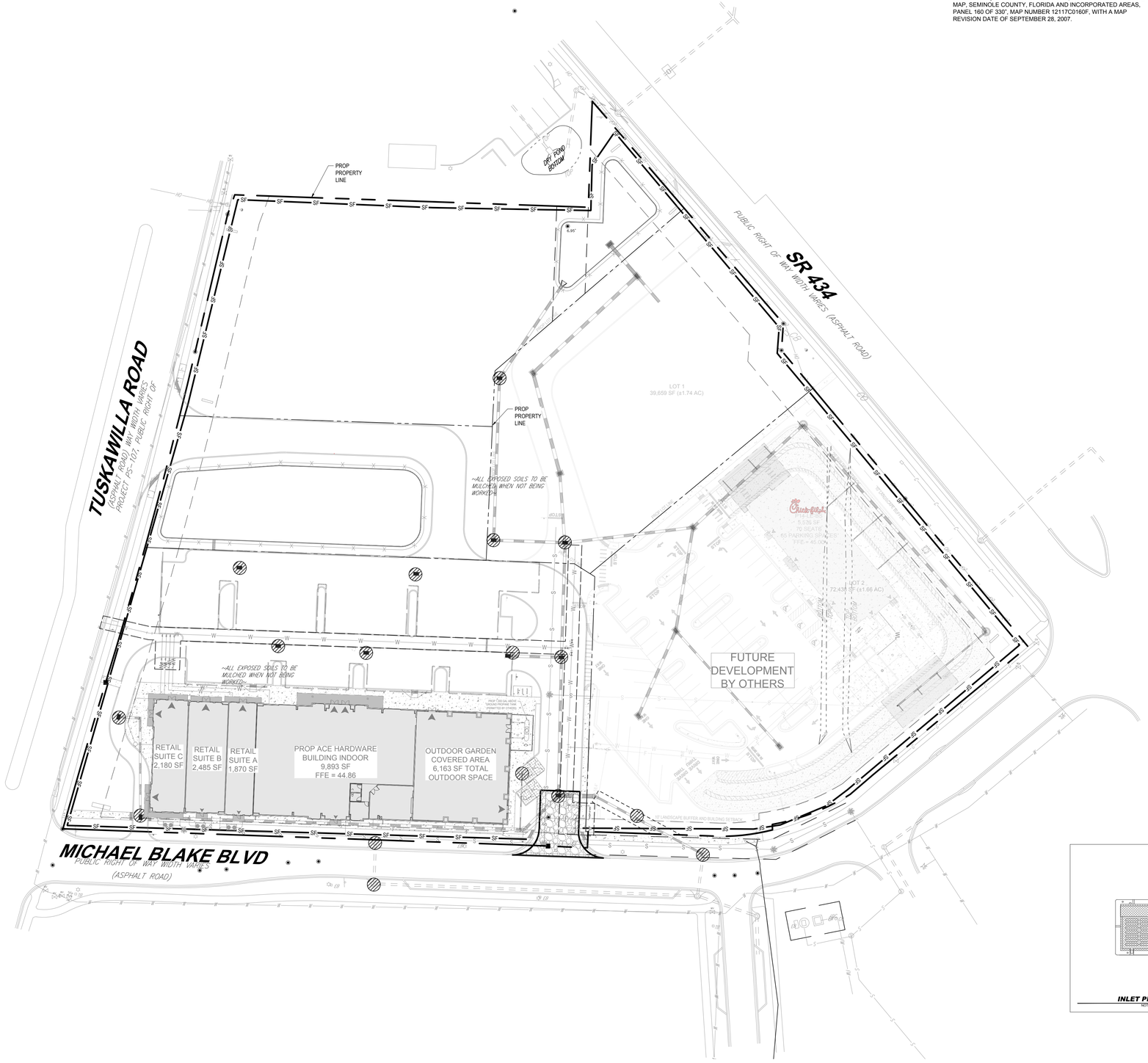
UTILITY PLAN

SHEET NUMBER:

C-503

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-UTIL-FLA240162.00-0A.----:LAYOUT: C-503 - UTILITY PLAN
KK



DATUM NOTE:

TOPOGRAPHIC ELEVATIONS ARE BASED ON SEMINOLE COUNTY BENCHMARK DESIGNATION #4733701, ELEVATION 44.45' NAVD 88 DATUM.

FEMA NOTE:

THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, SEMINOLE COUNTY, FLORIDA AND INCORPORATED AREAS, PANEL 160 OF 330", MAP NUMBER 12117C0160F, WITH A MAP REVISION DATE OF SEPTEMBER 28, 2007.

N
W E
S

40 20 10 0 40
1"= 40'

LEGEND

ONSITE PROPERTY LINE / R.O.W. LINE	
ADJACENT PROPERTY LINE	
EX. OVERHEAD WIRE	OH OH OH
EX. SPOT ELEVATION	126.03 +
PROP. STORM PIPE	
PROP.RIDGE LINE	
PROP.SILT FENCE	SF SF
PROP. INLET PROTECTION	

KEYNOTES:

(IP) INLET PROTECTION

(SCE) STABILIZED CONSTRUCTION ENTRANCE

(SCE) CONSTRUCTION ENTRANCE

POLLUTION PREVENTION NOTES:

1. EROSION AND SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THESE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS. BMP'S SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH FEDERAL, STATE, AND LOCAL REGULATIONS. [THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]
2. OFF SITE SURFACE WATER DISCHARGES, DISCHARGES TO ONSITE WETLANDS, OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU'S) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.
3. THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4)(C)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.
4. FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
5. IF CONTAMINATED SOIL AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE AND WATER RESOURCES SHALL BE CONTACTED.
6. PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.
7. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:
   - A. NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT IN ACCORDANCE WITH RULE 62-621.300(4)(a), F.A.C.
   - B. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(A) PART III.C.2, F.A.C.
   - C. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE PROVIDED TO WATER RESOURCES IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART III.D.1, F.A.C.
   - D. THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART V.D.6, F.A.C.
   - E. A COPY OF THE SWPPP, AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE; AND SHALL BE READILY AVAILABLE TO COUNTY OR STATE INSPECTORS.
8. THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

MAINTENANCE NOTES:

N.P.D.E.S. PERMIT COMPLIANCE REQUIRES INSPECTIONS EVERY 7 CALENDAR DAYS BY A NPDES QUALIFIED INSPECTOR AND PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL EVENT OF 0.5" OR GREATER. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS FURTHER MAINTENANCE AS OUTLINED BELOW. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE N.P.D.E.S. COMPLIANCE.

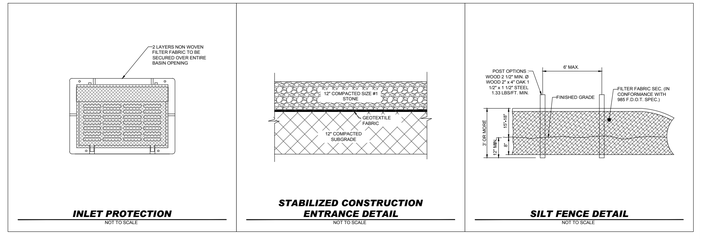
1. INSPECTIONS BY CONTRACTOR MUST OCCUR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM EVENT 0.5" OR GREATER.
2. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
3. CATCH BASIN INLET AND CONCRETE FLUME FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. WEEKLY INSPECTIONS WILL BE PERFORMED EVERY 7 CALENDAR DAYS. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT BY CONTRACTOR.
4. CONSTRUCTION ACCESS AND TRACKING MAT MUST BE MAINTAINED BY CONTRACTOR. REPLENISH CRUSHED AGGREGATE IF PRESENT LAYER IS FILLED WITH SEDIMENT, POOLING WATER, OR HAS RUTS. A NEW LAYER MAY BE ADDED IF OLD LAYERS BECOME COMPACTED.
5. SILT FENCE IS TO BE INSPECTED DAILY BY CONTRACTOR AND EVERY 7 CALENDAR DAYS BY N.P.D.E.S. QUALIFIED INSPECTOR. IF REPAIRS OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED IMMEDIATELY. THE SILT FENCE SHOULD BE TRENCHED IN, BACK-FILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT. WHEN THE SEDIMENT ACCUMULATES TO 1/3 OF THE HEIGHT OF THE FENCE, CONTRACTOR MAY HAVE TO REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL THE FENCE IF IT FAILS. IT WOULD ALSO BE NECESSARY TO REINSTALL IF ANY PORTION OF THE FENCING WAS DAMAGED BY CONSTRUCTION MACHINERY.
6. SEEDING OR RESEEDING MAY BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
7. THE CONTRACTOR SHALL CONTINUOUSLY ENSURE THAT THE PERIMETER OF THE SITE, INCLUDING CONSTRUCTION ENTRANCES, IS SECURED FROM ALLOWING DEBRIS TO LEAVE THE SITE DUE TO CONSTRUCTION ACTIVITY OR RAINFALL EVENTS. A WEEKLY LOG SHALL BE UPDATED AND KEPT ON-SITE IN ACCORDANCE WITH THE N.P.D.E.S. PERMIT. BY BIDDING DOCUMENTS CONTRACTOR ACKNOWLEDGES HE/SHE IS AWARE OF N.P.D.E.S. GUIDELINES AND POLICIES AS WELL AS BEST MANAGEMENT PRACTICES AND ASSUMES SOLE RESPONSIBILITY FOR FINES IMPOSED BY GOVERNMENTAL AGENCIES DUE TO VIOLATIONS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER,PARKING, LAYDOWN, PORTABLE RESTROOMS, WHEELED WASTE DISPOSAL DUMPSTER(S), WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC. IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN THEIR LOCATIONS ON THE SITE MAP.

PHASE 1
1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND INSTALL SILT FENCE.
2. INSTALL INLET PROTECTION AT EXISTING INLET(S).
3. PREPARE CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
4. INSTALL STORMWATER CONVEYANCE STRUCTURES AND CULVERTS, ENSURE THAT NEW INLETS ARE PROTECTED PRIOR TO MAKING THE OUTFALL CONNECTION.

PHASE 2
1. PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
2. START CONSTRUCTION OF THE PROPOSED BUILDING PAD AND STRUCTURES.
3. TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT THE CONSTRUCTION DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE AS REQUIRED BY THE GENERIC PERMIT.



INLET PROTECTION NOT TO SCALE

STABILIZED CONSTRUCTION ENTRANCE DETAIL NOT TO SCALE

SILT FENCE DETAIL NOT TO SCALE

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PROJECT No.:	FLA240162.00-0A
DRAWN BY:	PD
CHECKED BY:	KK
DATE:	12/23/2024
CAD I.D.:	P-CIVL-EROS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O=BOHLER ENGINEERING FL LLC, L=Ruskin, S=Florida, SERIALNUMBER=MA52024082967382 6, C=US
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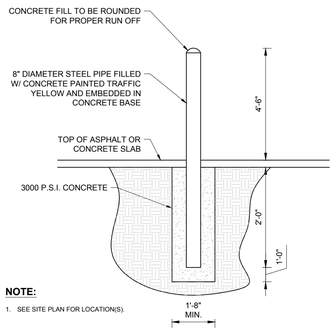
SOIL EROSION CONTROL PHASE II PLAN

SHEET NUMBER:

C-801

REVISION 2 - 01/28/2025

Feb 11, 2025
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KK

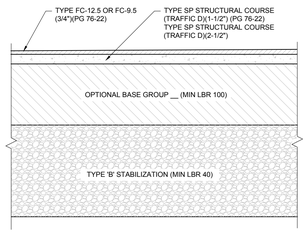


NOTE:

1. SEE SITE PLAN FOR LOCATION(S).

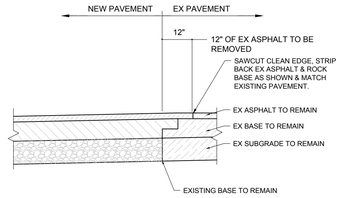
PIPE BOLLARD

NOT TO SCALE (MS-S070101 - 06/2023)



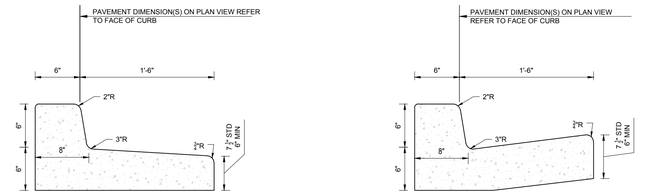
TYPICAL PAVEMENT SECTION FOR FDOT R/W

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ASPHALT SAWCUT

NOT TO SCALE (FL-S010103 - 09/2024)

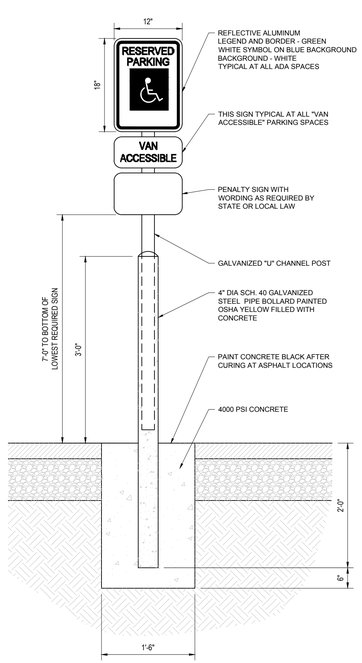


NOTES:

1. CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. @ 28 DAYS.
2. CONSTRUCTION STAKING FOR CURB INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
3. AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
4. CONTRACTION JOINTS SHALL BE PLACED @ 10'-0" O.C. TOOLED 1/4" (±1/16") WIDE, 1" DEEP. EXPANSION JOINTS SHALL BE PLACED @ 40'-0" INTERVALS, MAXIMUM, AND ALL P.C.'S.
5. GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.
6. GUTTER TYPE TO MATCH PAVEMENT SLOPE DIRECTION. CONTRACTOR TO FIELD ADJUST AS NECESSARY.
7. REFER TO FDOT STANDARD PLANS INDEX 522-001 FOR CURB SPECIFICATIONS

FDOT INDEX 520-001 - TYPE F CURB AND GUTTER

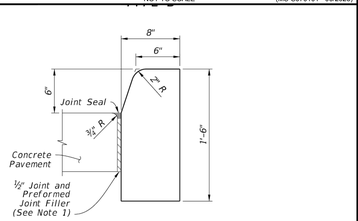
NOT TO SCALE (FL-S020201 - 09/2024)



NOTES:
ONE AT EACH ADA SPACE, WHERE ADA SPACES FACE EACH OTHER WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH SIDES

BOLLARD MOUNTED ADA PARKING SIGN

NOT TO SCALE (FL-S060101 - 09/2024)

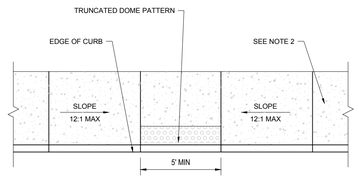


NOTE: *For use adjacent to concrete or flexible pavement, concrete shown.*

TYPE D

NOTES:

1. *For Type A, Type B, and Type D Curb: Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see Sheet 3.*
2. *For Type E, Type F, Drop Curb, and Valley Gutter: When used on high side of roadways, match the cross slope of the gutter to the cross slope of the adjacent pavement. The thickness of the lip is 6", unless otherwise shown on Plans.*
3. *For Type RA, rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.*
4. *For details depicting usage of Type A Curb adjacent to flexible pavement see Sheet 3.*

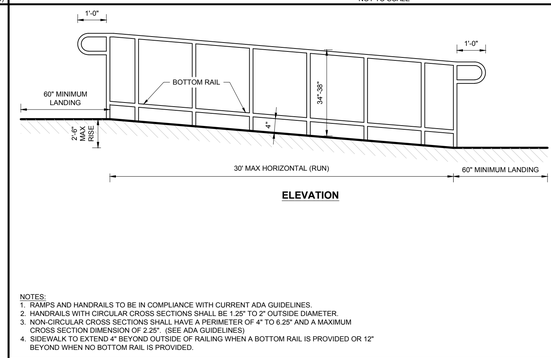


NOTES:

1. ADA ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO CURRENT ADA ACCESSIBLE GUIDELINES.
2. LEVEL LANDING AT TOP OF RAMP TO BE 4' DEEP IF NO CHANGE IN DIRECTION, OR 5'X5' MINIMUM IF A CHANGE IN DIRECTION OCCURS.

FDOT INDEX 522-022 - ADA ACCESSIBLE RAMP

NOT TO SCALE (BE-X010101 - MM/YYYY)

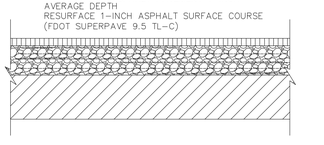


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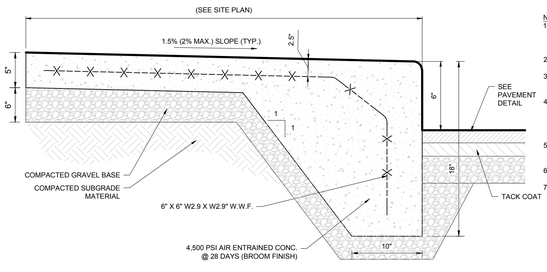
1. RAMPS AND HANDRAILS TO BE IN COMPLIANCE WITH CURRENT ADA GUIDELINES.
2. HANDRAILS WITH CIRCULAR CROSS SECTIONS SHALL BE 1.25" TO 2" OUTSIDE DIAMETER.
3. NON-CIRCULAR CROSS SECTIONS SHALL HAVE A PERIMETER OF 4" TO 6.25" AND A MAXIMUM CROSS SECTION DIMENSION OF 2.25". (SEE ADA GUIDELINES)
4. SIDEWALK TO EXTEND 4" BEYOND OUTSIDE OF RAILING WHEN A BOTTOM RAIL IS PROVIDED OR 12" BEYOND WHEN NO BOTTOM RAIL IS PROVIDED.

TYPICAL ADA RAMP AND HANDRAIL

NOT TO SCALE (FL-S030501 - 09/2024)



TYP. MILL & RESURFACE SECTION
N.T.S.

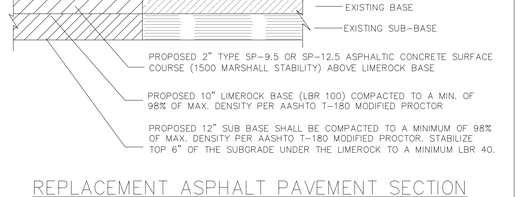


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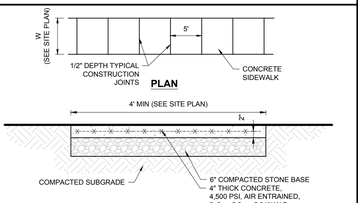
1. ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH ADDITIONAL GRAVEL BASE.
2. DUMMY JOINTS (FORMED) SHALL BE INSTALLED MIDWAY BETWEEN EXPANSION JOINTS.
3. THE 6" CURB REVEAL IS TYPICAL. CONTRACTOR TO REVIEW GRADING PLAN FOR AREAS WHERE REVEAL IS TO BE MODIFIED.
4. PROVIDE CONTROL JOINTS 5'-0" O.C. MIN. & EXPANSION JOINTS SHALL BE RECESSED ½" FROM THE FRONT FACE AND TOP OF THE CURB. REFER TO SIDEWALK CONSTRUCTION JOINT DETAILS.
5. PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED ADJACENT TO AND AROUND EXISTING STRUCTURES.
6. MIN CROSS SLOPE 1/4" PER FOOT PITCHED AWAY FROM BUILDING.
7. PROVIDE 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT AT INTERFACE WITH BUILDING. REFER TO ARCH PLANS AT DOOR LOCATIONS.

MONOLITHIC CURB AND SIDEWALK

NOT TO SCALE (BE-S030201 - 06/2024)



REPLACEMENT ASPHALT PAVEMENT SECTION
NTS

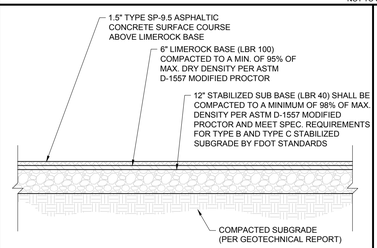


NOTE:

1. CROSS SLOPE 1/4" PER FOOT PITCHED TOWARD ROADWAY, DRIVEWAY, OR PARKING AREA IN NON ACCESSIBLE ROUTES.
2. FOR ACCESSIBLE ROUTES THE CROSS SLOPE, LONGITUDINAL (RUNNING) SLOPE AND WIDTH SHALL COMPLY WITH FEDERAL, LOCAL AND STATE ACCESSIBILITY REQUIREMENTS. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL ADA INSTRUCTIONS.
3. PROVIDE CONTROL JOINTS 5'-0" O.C. MIN. & EXPANSION JOINTS 20'-0" O.C. MIN. REFER TO SIDEWALK CONSTRUCTION JOINT DETAILS.
4. PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED ADJACENT TO AND AROUND EXISTING STRUCTURES.
5. MIN CROSS SLOPE 1/4" PER FOOT PITCHED AWAY FROM BUILDING.
6. PROVIDE 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT AT INTERFACE WITH BUILDING. REFER TO ARCH PLANS AT DOOR LOCATIONS.

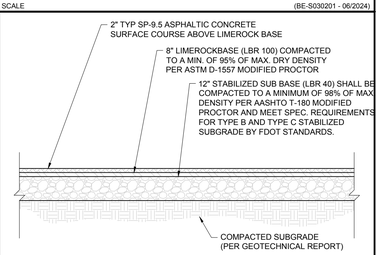
CONCRETE SIDEWALK

NOT TO SCALE (BE-S030202 - 06/2024)



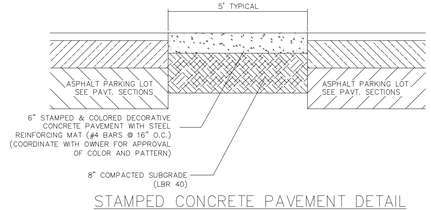
LIGHT DUTY ASPHALT PAVEMENT

NOT TO SCALE (FL-S010101 - 09/2024)



HEAVY DUTY ASPHALT PAVEMENT

NOT TO SCALE (FL-S010101 - 09/2024)



STAMPED CONCRETE PAVEMENT DETAIL
NTS (OPTION FOR DECORATIVE WALKWAY)

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS
FOR
SUTTON CROSSINGS
PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: cn=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MA52004829673826, Date: 2025.02.11 10:59:41-05'00'

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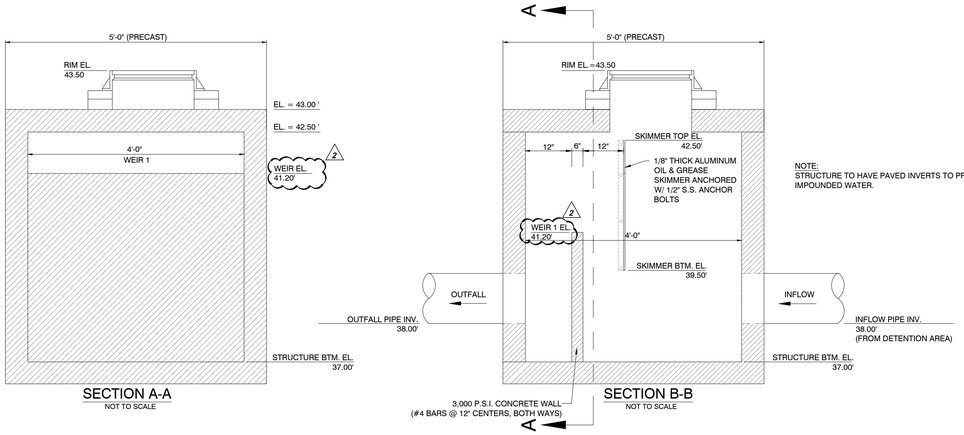
CONSTRUCTION DETAILS

SHEET NUMBER:

C-901

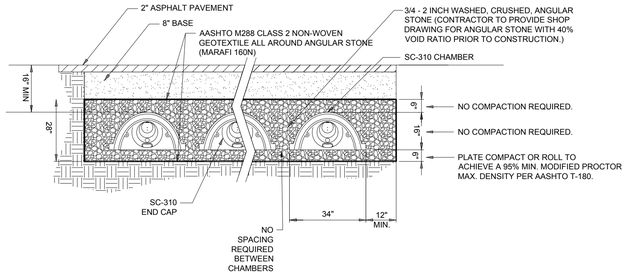
REVISION 2 - 01/28/2025

Feb 11, 2025
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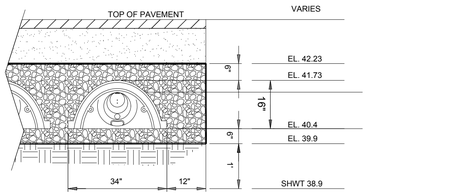


CONTROL STRUCTURE DETAIL CS-A
N.T.S.

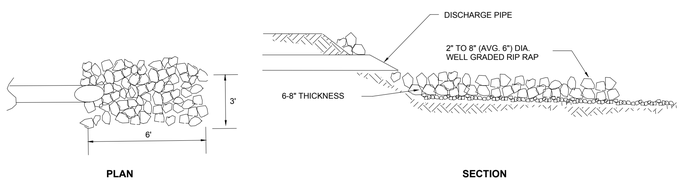
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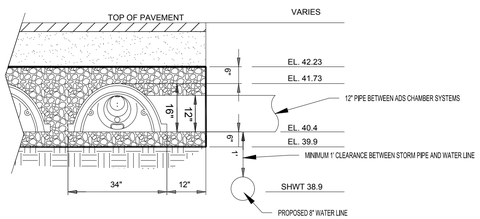
STORMTECH SC-310 CHAMBER DETAIL
N.T.S.



STORMTECH CHAMBER
AREA 'A'
N.T.S.



CULVERT OUTFALL ROCK PAD
N.T.S.



WATER LINE CLEARANCE DETAIL
N.T.S.

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVIL-OCDS-FLA240162.00-SA-----LAYOUT, C-902 - DRAINAGE DETAILS
KK

BOHLER

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DRAWN BY: PD
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PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

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KYLE STEVEN MOREL, PE, No. 77085, STATE OF FLORIDA, PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", L=Tampa, S=Florida, SERIALNUMBER=MA52204082867382600, C=US
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DRAINAGE DETAILS

SHEET NUMBER:

C-902

REVISION 2 - 01/28/2025

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

Advanced Drainage Systems, Inc.

SiteAssist® FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

SUTTON CROSSINGS

WINTER SPRINGS, FL, USA

SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/% , THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONE/SHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

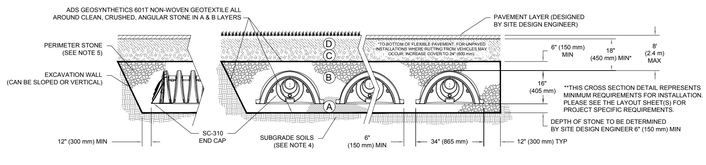
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETES	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETES	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.2,3

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

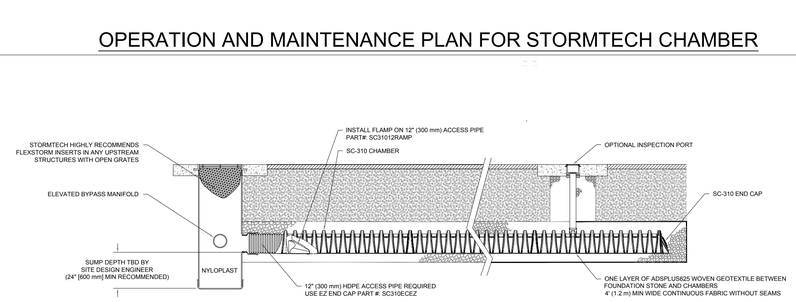
SUTTON CROSSINGS — WINTER SPRINGS, FL, USA — DRAWN: EH — CHECKED: N/A — DATE: — PROJECT #: — DATE | BY | CHK | DESCRIPTION

StormTech® Chamber System — 888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD — HILLIARD, OH 43026 — 1.800.733.7473

SHEET 5 OF 8

OPERATION AND MAINTENANCE PLAN FOR STORMTECH CHAMBER



SC-310 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.*

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

*INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM. THIS INCLUDES SEDIMENT SUMPS FOR EACH INLET TO THE SYSTEM. INSPECTION SHOULD BE DONE EVERY 6 MONTHS FOR THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON THE PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.

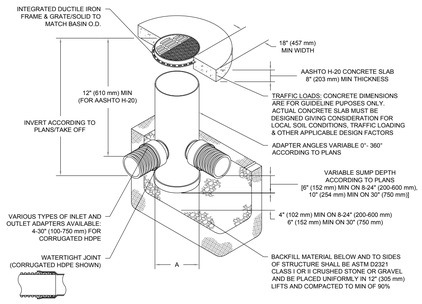
SUTTON CROSSINGS — WINTER SPRINGS, FL, USA — DRAWN: EH — CHECKED: N/A — DATE: — PROJECT #: — DATE | BY | CHK | DESCRIPTION

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4640 TRUEMAN BLVD — HILLIARD, OH 43026 — 1.800.733.7473

SHEET 6 OF 8

NYLOPLAST DRAIN BASIN
NTS

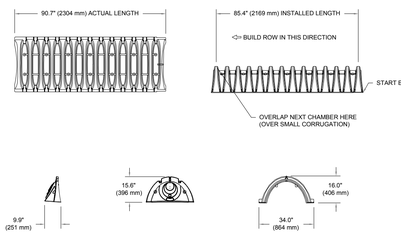


NOTES

1. B-30* (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30* (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: WWW.NYLOPLAST-US.COM
6. TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

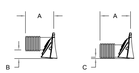
SC-310 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4" (864 mm X 406 mm X 2169 mm)	
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 9" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "SR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310ECEZ*	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310ECEZ THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

SUTTON CROSSINGS — WINTER SPRINGS, FL, USA — DRAWN: EH — CHECKED: N/A — DATE: — PROJECT #: — DATE | BY | CHK | DESCRIPTION

Nyloplast® — 770.932.2641 | WWW.NYLOPLAST-US.COM

4640 TRUEMAN BLVD — HILLIARD, OH 43026 — 1.800.733.7473

SHEET 8 OF 8

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SITE CIVIL AND CONSULTING ENGINEERING
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PROGRAM MANAGEMENT
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	KK/KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS
FOR
SUTTON CROSSINGS
PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER

600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101

FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: C=US, E=kmorel@bohlereng.com, CN=Kyle C Morel, O="BOHLER ENGINEERING FL, LLC", L=Boca Raton, S=Florida, SERIALNUMBER=MA52324082907382DL
Date: 2025.02.11 16:00:08-05'00'

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SHEET TITLE:

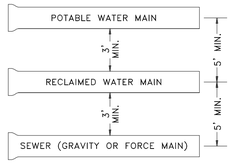
DRAINAGE DEATILS

SHEET NUMBER:

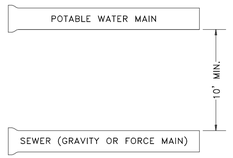
C-903

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVL-OCDS-FLA240162.00-0A-----LAYOUT: C-903 - DRAINAGE DETAILS
KK1

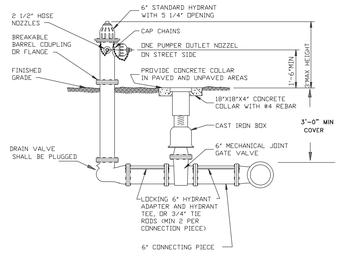


A MINIMUM HORIZONTAL SEPARATION OF 5' (CENTER TO CENTER) OR 3' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWER COLLECTION LINES.



A MINIMUM HORIZONTAL SEPARATION OF 10' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN SEWER COLLECTION LINES AND POTABLE WATER MAINS.

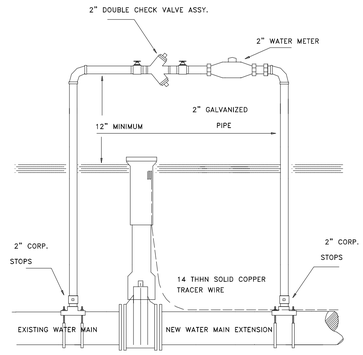
MINIMUM HORIZONTAL SEPARATION REQUIREMENTS FOR POTABLE, RECLAIMED, AND SEWER LINES



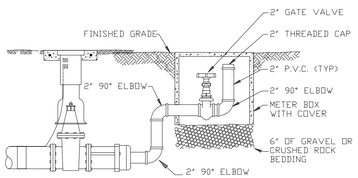
NOTES:

1. THE HYDRANTS ACCEPTABLE TO THE CITY OF WINTER SPRINGS SHALL BE EITHER THE CLOW # 42 MEDALION AMERICAN DARLING B84B, OR THE MUELLER A-423.
2. THE BARREL SHALL BE PAINTED YELLOW AND TOP WHITE
3. GRIP RING OR MEGA LUG RESTRAINTS MAY USED IN PLACE OF ALL THREAD RODS

FIRE HYDRANT ASSEMBLY



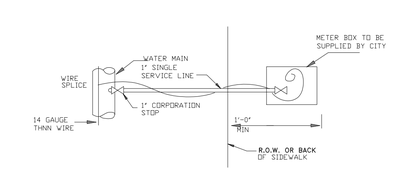
TEMPORARY BYPASS



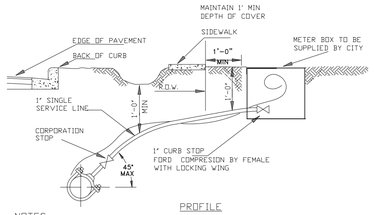
NOTE:

ALL PIPE AND FITTINGS MUST BE GALVANIZED IRON PIPE OR SCHEDULE 80 P.V.C.

BLOWOFF VALVE



PLAN

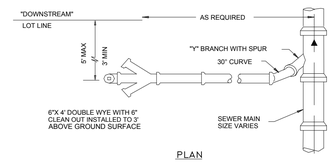


PROFILE

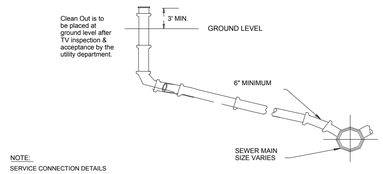
NOTES:

1. METER BOX INSTALLED BY THE CITY OF WINTER SPRINGS
2. METER PURCHASED FROM AND INSTALLED BY THE CITY OF WINTER SPRINGS

POTABLE WATER SERVICE SINGLE



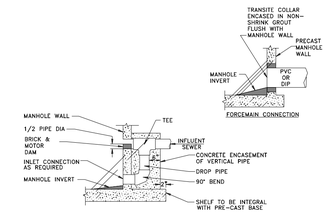
PLAN



NOTE:
SERVICE CONNECTION DETAILS SHOWN IS FOR A DOUBLE PVC SERVICE A SINGLE WYE WOULD BE USED FOR A SINGLE SERVICE

PROFILE

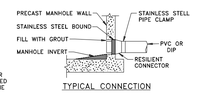
SEWER LATERAL DETAIL



DROP CONNECTION

NOTES:

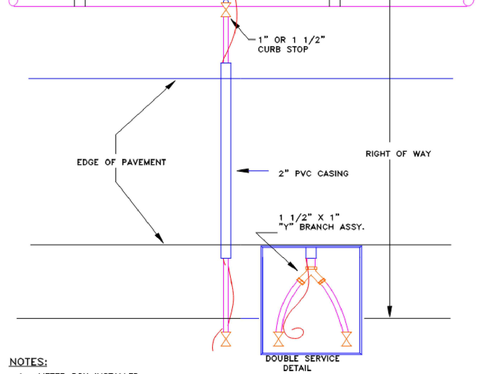
1. PENETRATION TO EXISTING MANHOLES SHALL BE CORE BORED
2. OUTSIDE DROP CONNECTION SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO FEET OR MORE ABOVE THE MAIN INVERT CHANNEL



TYPICAL CONNECTION

W.S. Detail 6-9-00

TYPICAL MANHOLE CONNECTIONS



NOTES:

1. METER BOX INSTALLED BY THE CITY OF WINTER SPRINGS
2. DOUBLE SERVICE LINES SHALL BE 1 1/2" PURPLE P.E TUBING WITH 1 1/2" X 1" Y BRANCH
3. ALL LINES UNDER PAVEMENT SHALL BE ENCASED IN 2" PVC PIPE

1" RECLAIMED WATER CURB STOP TO BE INSTALLED BY CONTRACTOR ON ALL RECLAIMED SERVICE LINES



AWWA C901-88 PE 3408 POLYETHYLENE TUBING

RECLAIMED WATER SERVICE CONNECTION

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2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LSI/PD / KK/KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVIL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED
RETAIL STRIP AND
DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL, No. 77085, STATE OF FLORIDA, PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL LLC", L=Tampa, S=Florida, SERIALNUMBER=MAIL2224052867382E, C=US
Date: 2025.02.13 08:00:22-05'00'

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SHEET TITLE:

CITY OF WINTER SPRINGS UTILITY DETAILS

SHEET NUMBER:

C-904

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SETS\P-CIVIL-OCDS-FLA240162.00-0A-----LAYOUT: C-904 - UTILITY DETAILS
KM

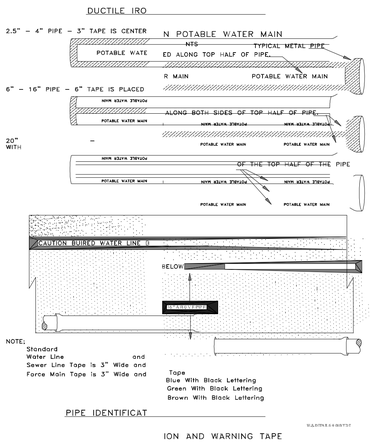
SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

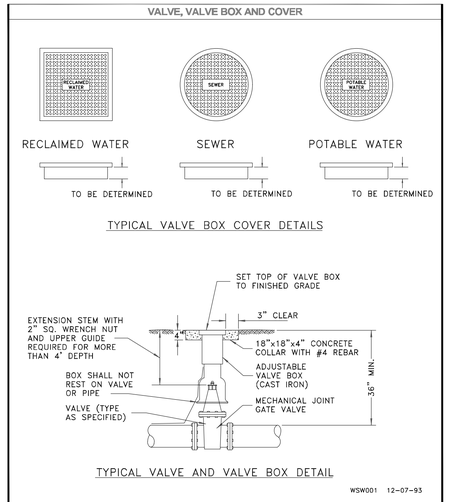
PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER		WASTEWATER (GRAVITY & FM)		STORM SEWER	
	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT
POTABLE WATER	3' NOTE 1	12"	3' NOTE 1 & 3	12" NOTE 3	6' NOTE 3	12" NOTE 3	3' NOTE 1 & 3	12"/18" NOTE 2 & 3
RECLAIMED WATER	3' NOTE 1 & 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12"/18" NOTE 2
WASTEWATER (GRAVITY AND FM)	6' NOTE 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12"/18" NOTE 2
RIGHT OF WAY	3' NOTE 1	N/A	3' NOTE 1	N/A	3' NOTE 1	N/A	N/A	N/A

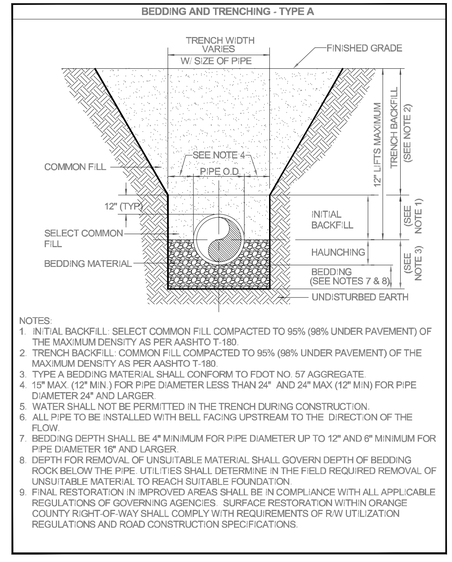
NOTES:

1. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTHS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
2. THE 18-INCH SEPARATION REQUIREMENT APPLIES WHEN THE STORM PIPE CROSSES ABOVE THE OCU MAIN, AND WHEN THE STORM PIPE HAS A DIAMETER EQUAL TO OR GREATER THAN 24 INCHES. OTHERWISE, THE REQUIRED SEPARATION IS 12 INCHES.
3. THIS SEPARATION REQUIREMENT COMPLIES WITH MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND OCU.
4. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.

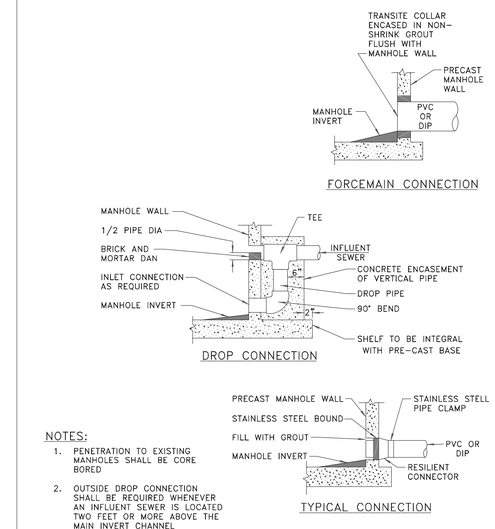


PIPE IDENTIFICAT ION AND WARNING TAPE



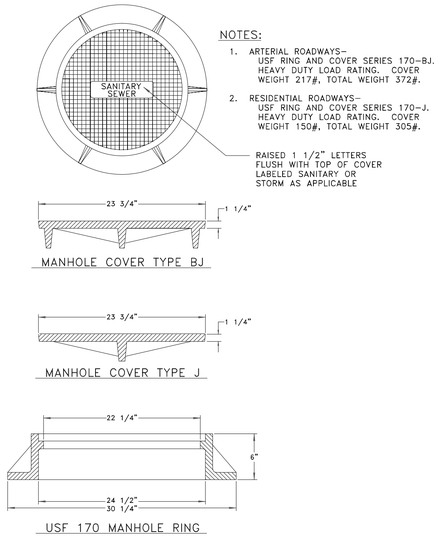


NOTES:
1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.



NOTES:
1. PENETRATION TO EXISTING MANHOLES SHALL BE CORE BORED
2. OUTSIDE DROP CONNECTION SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO FEET OR MORE ABOVE THE MAIN INVERT CHANNEL

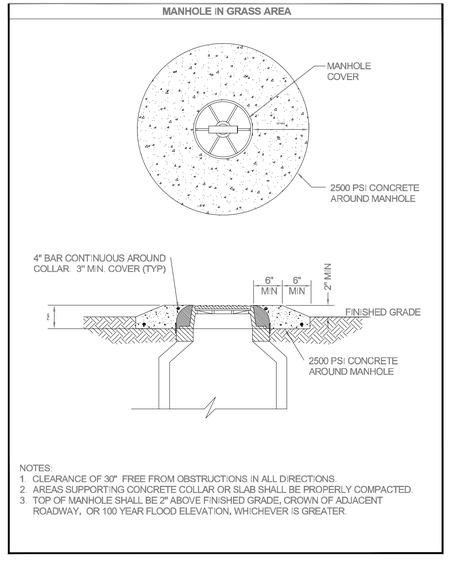
TYPICAL MANHOLE CONNECTIONS



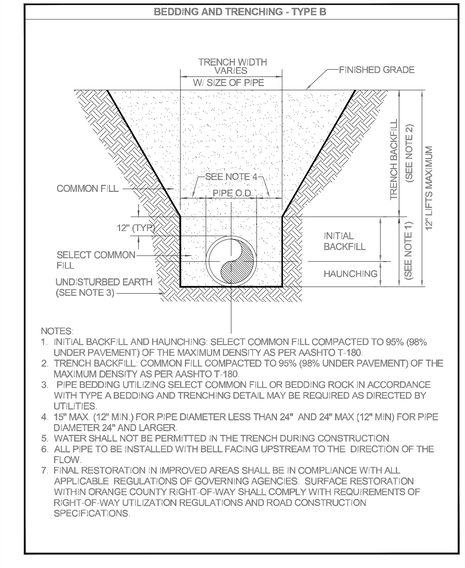
NOTES:
1. ARTERIAL ROADWAYS– USF RING AND COVER SERIES 170–BJ. HEAVY DUTY LOAD RATING. COVER WEIGHT 217#, TOTAL WEIGHT 372#.
2. RESIDENTIAL ROADWAYS– USF RING AND COVER SERIES 170–J. HEAVY DUTY LOAD RATING. COVER WEIGHT 150#, TOTAL WEIGHT 305#.

MANHOLE FRAME & COVER

W.S. Detail 6-9-00



NOTES:
1. CLEARANCE OF 30" FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.
2. AREAS SUPPORTING CONCRETE COLLAR OR SLAB SHALL BE PROPERLY COMPACTED.
3. TOP OF MANHOLE SHALL BE 2" ABOVE FINISHED GRADE, CROWN OF ADJACENT ROADWAY, OR 100 YEAR FLOOD ELEVATION, WHICHEVER IS GREATER.



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LS/PD / KK/KM

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PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlerengineering.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL, LLC", C=US, SERIALNUMBER=6A4323A0E0B7382B, G=Kyle
Date: 2025.02.11 16:00:33-05'00'

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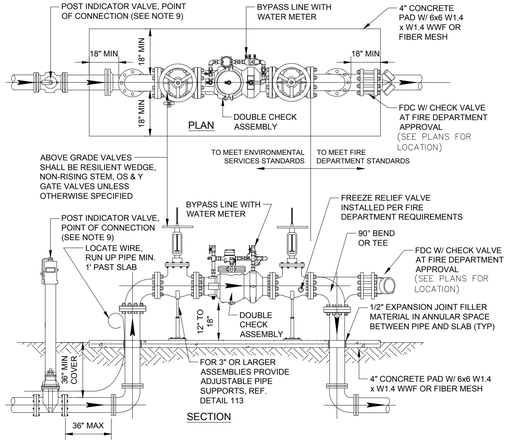
CITY OF WINTER SPRINGS UTILITY DETAILS

SHEET NUMBER:

C-905

REVISION 2 - 01/28/2025

Feb 11, 2025
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KM

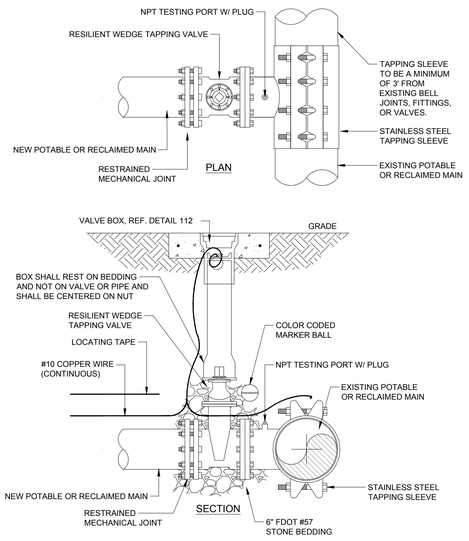


NOTES:
1. BY-PASS METER ASSEMBLY SHALL BE REQUIRED ON MONITORED FIRE SPRINKLER PROTECTION SYSTEMS.
2. THREE (3) INCH DIAMETER AND GREATER METER AND BACKFLOW ASSEMBLIES SHALL MEET REQUIREMENTS SET BY SEMINOLE COUNTY CROSS-CONNECTION CONTROL ORDINANCE 270.11, OR LATEST EDITION.
3. THE OWNER/CUSTOMER, AT HIS OR HER OWN EXPENSE, SHALL INSTALL, OPERATE, TEST, AND MAINTAIN APPROVED BACKFLOW PREVENTION ASSEMBLIES, AS DIRECTED BY SEMINOLE COUNTY ENVIRONMENTAL SERVICES.
4. ALL PIPE AND FITTINGS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
5. THREE (3) INCH DIAMETER AND GREATER ABOVE GRADE PIPE AND FITTINGS SHALL BE FLANGED DUCTILE IRON WITH 316 S.S. HARDWARE. BELOW GRADE FITTINGS SHALL BE RESTRAINED MECHANICAL JOINTS.
6. THREE (3) INCH DIAMETER AND GREATER FIRE LINES SHALL BE DUCTILE IRON PIPE FROM THE CONNECTION TO THE MAIN TO THE ASSEMBLE IF BOTH ARE LOCATED ON THE SAME SIDE OF THE STREET.
7. THE CHECK VALVE ASSEMBLY, VALVES, PIPING, BYPASS METER AND DOUBLE CHECK SHALL BE COATED IN ACCORDANCE TO THE SEMINOLE COUNTY UTILITY ENGINEERING MANUAL..
8. BYPASS METER AND BACKFLOW PREVENTER SHALL BE ASSEMBLED WITH APPROPRIATE FITTINGS TO ALLOW REMOVAL AND RE-INSTALLATION.
9. POST INDICATOR VALVE SHALL BE INSTALLED UPSTREAM OF DOUBLE DETECTOR CHECK VALVE ASSEMBLY AND DOWNSTREAM OF ALL OTHER POTABLE WATER CONNECTIONS.
10. CONCRETE PAD SHALL EXTEND 18 INCHES OUT FROM OUTSIDE EDGE OF ABOVE GRADE PIPING, ALL AROUND, AND SHALL BE A CONTINUOUS MONOLITHIC POUR, REINFORCED WITH 6"x6" W1.4xW1.4 WWF OR FIBER-MESH.
11. TAMPER SWITCHES SHALL BE INSTALLED PER AND INSPECTED BY FIRE DEPARTMENT.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION

FIGURE: 203

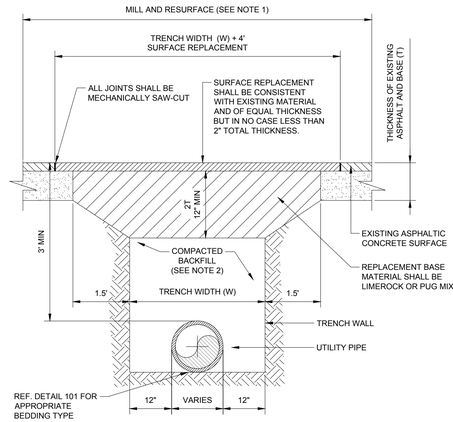
DOUBLE DETECTOR CHECK VALVE ASSEMBLY



NOTES:
1. THIS DETAIL IS INCOMPLETE WITHOUT ACCOMPANYING DETAIL 111 AND 112.
2. TAPPING SLEEVE AND VALVE SHALL BE INSTALLED AND TESTED UNDER WITNESS OF A REPRESENTATIVE FROM SEMINOLE COUNTY UTILITY ENGINEERING DIVISION.
3. TAPPING SLEEVE SHALL BE INSTALLED TO EXISTING MAIN PER MANUFACTURES INSTRUCTIONS, ALL HARDWARE TO BE TORQUED TO MANUFACTURES SPECIFICATIONS.
4. TAPPING SLEEVE AND VALVE SHALL BE PRESSURE TESTED IN ACCORDANCE TO THE UTILITY ENGINEERING MANUAL (150 PSI FOR 15 MINUTES FOR POTABLE AND RECLAIM WATER MAINS) PRIOR TO TAPPING EXISTING MAIN.
5. VALVE EXTENSION STEM REQUIRED IF TOP OF VALVE OPERATING NUT IS GREATER THAN 3' FROM FINISHED GRADE.
6. REF. STANDARD DETAIL 109 - PIPE MATERIAL LOCATION FOR FULL MATERIAL LOCATION REQUIREMENTS.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION — DATE: 05/18/21

POTABLE & RECLAIM MAIN WET TAP — FIGURE: 204



NOTES:
1. MILL AND RESURFACING REQUIREMENTS PER SEMINOLE COUNTY PUBLIC WORKS REQUIREMENTS OR WHICH EVER GOVERNING MUNICIPALITY.
2. BACKFILL SHALL BE PLACED IN 6" LAYERS FROM BENEATH THE HAUNCHES OF THE PIPE TO THE BASE AND COMPACTED TO 98% DENSITY PER AASHTO T-180 MODIFIED PROCTER.
3. BASE MATERIALS SHALL BE PLACED IN TWO OR THREE LAYERS ROLLED AND TAMPED TO ABOVE SPECIFIED DENSITY.
4. PARTIAL LANE REPLACEMENT SHALL HAVE FULL LANE WIDTH MILLED AND RESURFACED.
5. REF. DETAIL 104 FOR PIPE RESTRAINT REQUIREMENTS.

SEMINOLE COUNTY ENVIRONMENTAL SERVICES - UTILITY ENGINEERING DIVISION — DATE: 05/18/21

EXISTING ROADWAY OPEN CUT — FIGURE: 102

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CHECKED BY:	KK
DATE:	12/23/2024
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PROJECT:

PROP. SITE PLAN DOCUMENTS

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KYLE STEVEN MOREL — LICENSE — No. 77085 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle E. Morel, O="BOHLER ENGINEERING FL, LLC", L=Tampa, S=Florida, SERIALNUMBER=MA1202408286738 26, C=US
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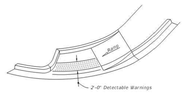
CITY OF WINTER SPRINGS UTILITY DETAILS

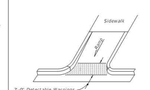
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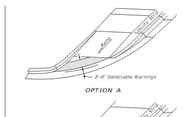
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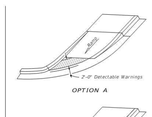
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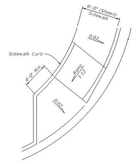
Feb 11, 2025
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KK

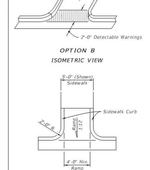


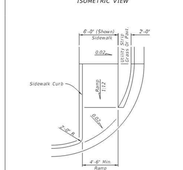


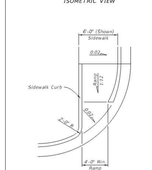












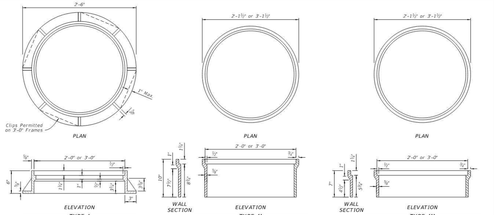
SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

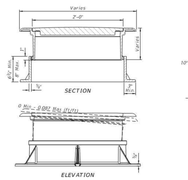
LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 4 of 7

TABLE 1
WEIGHT OF CASTINGS (lb)

Frame Type	2'-0" OPENING		3'-0" OPENING		
	Frame	Cover (Std.)	Frame	2-Piece Cover Inside/Solid	Total
I	155	180	230	180 / 200	410
II	155	180	155	180 / 200	355
III	190	190	180	190 / 230	420

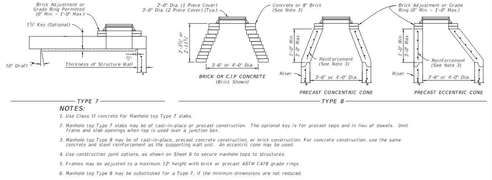
NOTE: Frame Type 1 in Table 1, includes Adjustable Frames.





TYPE 1 ADJUSTABLE FRAME

MANHOLE FRAMES



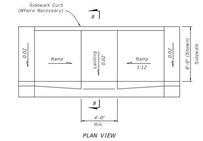
TYPE 7 TYPE 8

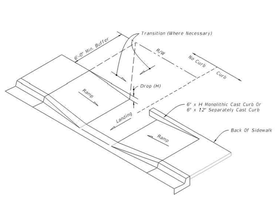
NOTES:
1. Use Class II concrete for Manhole top Type 7 slabs.
2. Manhole top Type 7 slabs may be of cast-in-place or precast construction. The optional key is for precast tops and in lieu of dowels. Omit frame and slab openings when top is used over a junction box.
3. Manhole top Type 8 may be of cast-in-place, precast concrete construction, or brick construction. For concrete construction, use the same concrete and steel reinforcement as the supporting wall unit. An eccentric cone may be used.
4. Use construction joint options, as shown on Sheet 6 to secure manhole tops to structures.
5. Frames may be adjusted to a maximum 12" height with brick or precast ASTM C478 grade rings.
6. Manhole top Type 8 may be substituted for a Type 7, if the minimum dimensions are not reduced.
7. Manhole top Type 7 may be substituted for Type 8, if the minimum thickness (h) above pipe opening cannot be maintained with Type 8.

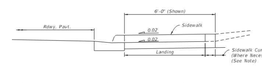
MANHOLE TOPS

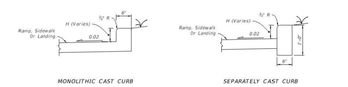
MANHOLE FRAMES AND MANHOLE TOPS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX 425-001	SHEET 2 of 8





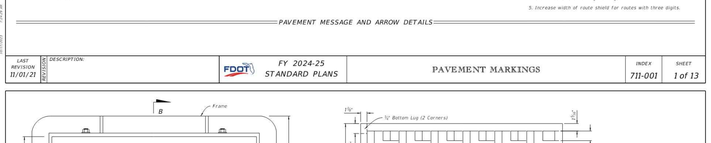




SIDEWALK CURB OPTIONS

SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 3 of 7



PAVEMENT MESSAGES NOTES:
1. Place all pavement messages 25' back from the stop line.
2. Dimensions are within 3" ±.
3. All grids are 4" x 4".
4. All pavement messages must be white except Route Shields and In Pavement Warning Markings.
5. Increase width of route shield for routes with three digits.

PAVEMENT MESSAGE AND ARROW DETAILS

LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 1 of 13

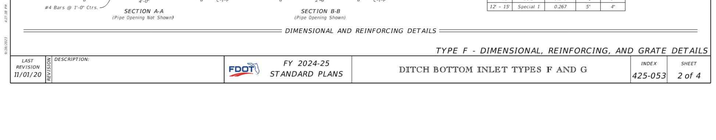


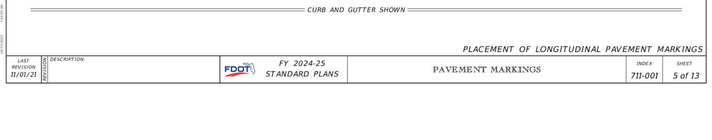
TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWR
0' - 4'	A12	0.200	12"	8"
4' - 7'	A8	0.200	8"	5"
7' - 12'	B5.5	0.240	9½"	5"
12' - 15'	Special 1	0.267	5"	4"

DIMENSIONAL AND REINFORCING DETAILS

TYPE F - DIMENSIONAL, REINFORCING, AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	DITCH BOTTOM INLET TYPES F AND G	INDEX 425-053	SHEET 2 of 4



LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 5 of 13

FRAME AND GRATE DETAILS

FRAME AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	CURB INLET TYPE 9	INDEX 425-024	SHEET 2 of 3

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/14/2025	JURISDICTIONAL COMMENTS	PD / KK
2	01/28/2025	CITY OF WINTER SPRINGS COMMENTS	LSP/D / KK/KM

Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: FLA240162.00-0A
DRAWN BY: PD
CHECKED BY: KK
DATE: 12/23/2024
CAD I.D.: P-CIVIL-OCDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

SUTTON CROSSINGS

PROPOSED RETAIL STRIP AND DAYCARE CENTER
E SR 434 & MICHAEL BLAKE BLVD.
WINTER SPRINGS, FL 32708
CITY OF WINTER SPRINGS

BOHLER
600 N. WESTSHORE BLVD. SUITE 950
TAMPA, FLORIDA 33609
Phone: (813) 812-4100
Fax: (813) 812-4101
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

KYLE STEVEN MOREL LICENSE No. 77085 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Kyle Morel
DN: E=kmorel@bohlereng.com, CN=Kyle Morel, O="BOHLER ENGINEERING FL LLC", L=Hillsborough, S=Florida, C=US, 1.2.840.113549.1.9.2=MAS2024082867.3826, OID.2.5.4.65=
Date: 2025.02.13 18:01:10-05'00'
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE STEVEN MOREL, PE, ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET TITLE:

FDOT STANDARD DETAILS

SHEET NUMBER:

C-907

REVISION 2 - 01/28/2025

Feb 11, 2025
H:\2024\FLA240162.00\CAD\DRAWINGS\PLAN SET\SP-CIVL-OCDS-FLA240162.00-0A.dwg — LAYOUT: C-907 • FDOT STANDARD DETAILS
KK

SUTTON CROSSINGS

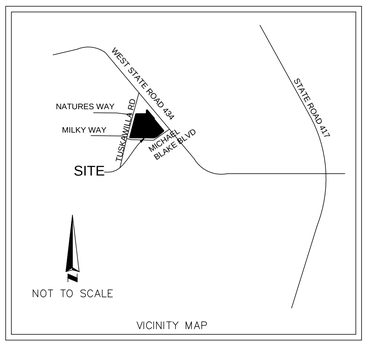
A REPLAT OF LOTS 1, 2, A PORTION OF LOTS 3 & 4, A PORTION OF LOT 8, BLOCK A, AND A 30 FEET RIGHT OF WAY, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, PLAT BOOK 1, PAGE 5, BEING IN SECTION 16, TOWNSHIP 21 SOUTH, RANGE 32 EAST, CITY OF WINTER SPRINGS, SEMINOLE COUNTY, FLORIDA,

LEGAL DESCRIPTION

LOTS 1, 2, A PORTION OF LOTS 3 AND 4, A PORTION OF LOT 8, BLOCK A, AND A 30 FEET RIGHT OF WAY, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGE 5, IN THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE INTERSECTION OF THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MICHAEL BLAKE BOULEVARD, AS RECORDED IN OFFICIAL RECORDS BOOK 10181, PAGE 1010, OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA AND THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF STATE ROAD 434, PER RIGHT OF WAY MAP SECTION 77070-2516; THENCE ALONG THE NORTHWESTERLY RIGHT-OF-WAY LINE OF SAID MICHAEL BLAKE BOULEVARD, THE FOLLOWING FOUR COURSES: (1) SOUTH 50°22'25" WEST, A DISTANCE OF 153.21 FEET; (2) THENCE SOUTH 49°13'20" WEST, A DISTANCE OF 22.84 FEET, TO A POINT OF CURVATURE OF A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 21°34'04" AND A CHORD DISTANCE OF 63.61 FEET WHICH BEARS SOUTH 68°52'38" WEST; (3) THENCE SOUTHWESTERLY, ALONG THE ARC OF SAID CURVE, A DISTANCE OF 63.99 FEET, TO A POINT ON THE FORMER WEST RIGHT OF WAY LINE OF CSX RAILROAD, SAID POINT BEING ON A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 00°03'47" AND A CHORD DISTANCE OF 4.09 FEET WHICH BEARS SOUTH 01°43'08" EAST; (4) THENCE SOUTHERLY, ALONG SAID WEST LINE AND THE ARC OF A CURVE, A DISTANCE OF 4.09 FEET TO A POINT ON THE NORTH LINE OF MICHAEL BLAKE BOULEVARD, AS RECORDED IN OFFICIAL RECORDS BOOK 8943, PAGE 877, OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA, SAID POINT BEING THE POINT OF CURVATURE OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 151.67 FEET, A CENTRAL ANGLE OF 15°35'16", AND A CHORD DISTANCE OF 41.14 FEET, WHICH BEARS SOUTH 83°10'40" WEST; THENCE WESTERLY, ALONG THE ARC OF SAID CURVE, A DISTANCE OF 41.26 FEET; THENCE CONTINUE ALONG SAID NORTHERLY RIGHT OF WAY LINE, NORTH 87°58'43" WEST, A DISTANCE OF 99.59 FEET, TO A POINT ON THE EAST RIGHT OF WAY LINE, 30.00 FEET IN WIDTH, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGE 5, IN THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE ALONG SAID EAST LINE, SOUTH 02°39'13"WEST, A DISTANCE OF 12.36 FEET; THENCE DEPARTING SAID EAST LINE, NORTH 87°17'27" WEST, A DISTANCE OF 15.00 FEET, TO A POINT ON THE NORTH LINE RIGHT OF WAY LINE OF MICHAEL BLAKE DRIVE, TUSCAWILLA CROSSINGS, PHASE 1, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 83, PAGES 75 THRU 89, INCLUSIVE, OF THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA; THENCE ALONG THE NORTH LINE, NORTH 87°17'27" WEST, A DISTANCE OF 15.00 FEET, TO A POINT ON THE WEST RIGHT OF WAY LINE OF AFORESAID RIGHT OF WAY , 30.00 FEET IN WIDTH; THENCE CONTINUING ALONG SAID NORTH RIGHT OF WAY LINE OF MICHAEL BLAKE DRIVE, NORTH 87°58'12" WEST, A DISTANCE OF 369.65 FEET, TO A POINT ON A CURVE ON THE EAST RIGHT OF WAY LINE OF TUSCAWILLA ROAD, ACCORDING TO SEMINOLE COUNTY RIGHT OF WAY MAP, PROJECT NO. PS-107, SAID POINT ALSO BEING THE NORTHWEST CORNER OF MICHAEL BLAKE BOULEVARD PER THE AFORESAID PLAT OF TUSCAWILLA CROSSINGS, SAID POINT ALSO BEING ON A NON-TANGENT CURVE, CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 5677.58 FEET, A CENTRAL ANGLE OF 1°10'21, AND A CHORD DISTANCE OF 116.18 WHICH BEARS NORTH 16°18'25"EAST; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE AND SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 116.18 FEET TO THE POINT OF A REVERSE CURVE. CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 4040.18 FEET, A CHORD DISTANCE OF 260.82 FEET AND A CHORD THAT BEARS NORTH 15°08'17" EAST; THENCE ALONG THE ARC OF SAID CURVE AND SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 260.86 FEET, TO A POINT OF TANGENCY; THENCE NORTH 13°17'18" EAST, A DISTANCE OF 107.66 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE, 30.00 FEET IN WIDTH, ACCORDING TO AFORESAID PLAT OF , D.R. MITCHELL'S SURVEY; THENCE NORTH 19°56'30" EAST, A DISTANCE OF 15.76 FEET, ALONG THE EAST LINE OF TUSCAWILLA ROAD TO A POINT IN THE CENTERLINE OF SAID 30.00 FOOT RIGHT OF WAY; THENCE, ALONG SAID CENTERLINE, SOUTH 87°59'01" EAST, A DISTANCE OF 269.39 FEET; THENCE DEPARTING SAID CENTERLINE, NORTH 02°00'59"EAST, A DISTANCE OF 15.00 FEET, TO A POINT ON THE NORTH RIGHT OF WAY LINE AND THE SOUTHEAST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 8150, PAGE 1049; THENCE ALONG THE EAST LINE OF SAID LANDS, NORTH 02°11'57" EAST, A DISTANCE OF 65.79 FEET, TO THE SOUTHWESTERLY RIGHT OF WAY LINE OF STATE ROAD 434; THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY LINE, THE FOLLOWING THREE COURSES: (1) SOUTH 40°38'14" EAST, A DISTANCE OF 223.39 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF THE FORMER CSX RAILROAD, SAID POINT BEING ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 3707.33 FEET, A CENTRAL ANGLE OF 0°18'53", A CHORD DISTANCE OF 20.37 FEET, AND A CHORD THAT BEARS SOUTH 04°03'09" WEST; (2) THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE AND THE FORMER RIGHT OF WAY LINE, A DISTANCE OF 20.37 FEET; THENCE DEPARTING SAID WESTERLY RIGHT OF WAY LINE, SOUTH 39°46'41" EAST, A DISTANCE OF 293.34 FEET TO THE POINT OF BEGINNING.

CONTAINING 267,190 SQUARE FEET OR 6.134 ACRES, MORE OR LESS.



VICINITY MAP

SURVEYOR'S NOTES:

1. BEARINGS ARE BASED ON THE EAST RIGHT OF WAY LINE OF TUSCAWILLA ROAD, AS BEING, N13°17'18"E, PER FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE 901, NAD 83, PER SEMINOLE COUNTY

2. THE FLORIDA STATE PLANE COORDINATES SHOWN HEREON ARE RELATIVE TO FLORIDA EAST ZONE (901), NAD 83 DATUM, (2011 ADJUSTMENT). DISTANCES ARE IN U.S. SURVEY FEET.

3. PERMANENT REFERENCE MONUMENTS AND LOT CORNERS SET IN ACCORDANCE WITH FLORIDA STATUTES CHAPTER 177, PART 1. THERE ARE NO PERMANENT CONTROL POINTS ASSOCIATED WITH THIS PLAT.

4. ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES. THIS SECTION SHALL NOT APPLY TO THOSE PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.

5. ALL LINES ARE NON-RADIAL UNLESS MARKED AS RADIAL (RAD)

6. ALL LOT CORNERS ARE TO BE 1/2" IRON RODS LB6300 (SET AFTER CONSTRUCTION)

7. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF SEMINOLE COUNTY, FLORIDA.

REPUBLIC NATIONAL
480 NEEDLES TRAIL
LONGWOOD, FLORIDA 32779
RNSURVEYS@REPUBLICNATIONAL.NET
PHONE: (407) 862-4200 FAX: (407) 862-6229

NOTICE:
THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREON AND WILL IN ON CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

PLAT BOOK PAGE

SUTTON CROSSINGS

DEDICATION

KNOW ALL MEN BY THESE PRESENTS that _____, is the lawful owner of the lands described in the caption hereon, hereafter referred to as "Owner", and that he has caused the same to be surveyed, and this plat, made in accordance with said survey, is here by adopted as the true and correct plat of said lands. The Owner dedicates said lands and plat for the uses and purposes therein expressed and dedicates the drainage easements, utility easements, unless otherwise noted, to the perpetual use of the public.

IN WITNESS WHEREOF, the undersigned, _____ has caused these presents to be executed and acknowledged by its undersigned _____thereunto duly authorized on this _____ day of _____, 2024.

Owner

By: _____

Print Name: _____

Title: _____

Signed and sealed in the presence of:

_____ Witness signature

_____ Witness signature

_____ Witness printed name

_____ Witness printed name

STATE OF FLORIDA
COUNTY OF SEMINOLE

The foregoing instrument was acknowledged before me this _____ day of _____, 2024, by _____, as _____ of _____ in its capacity as the managing partner of _____ said person ( ) is personally known to me or ( ) has produced_____as identification.

Printed Name_____
Notary Public
Commission Number_____

My Commission Expires _____

CERTIFICATE OF APPROVAL BY MUNICIPALITY

THIS IS TO CERTIFY, That on _____ the forgoing plat was approved by the City of Winter Springs, Florida

By: _____

_____

ATTEST: _____

CERTIFICATE OF REVIEW BY CITY SURVEYOR

I have reviewed this plat and find it to be in conformity with Chapter 177 Florida Statutes

By: _____ Date: _____, 2024

_____
Florida Registration No._____
City Surveyor for the City of Winter Springs, Florida

CERTIFICATE OF CLERK OF CIRCUIT COURT

I hereby certify, that I have examined the foregoing plat and find that it complies in form with all the requirements of Chapter 177, Florida Statutes, and was filed for record on _____, 2024, File No._____

_____
Clerk of the Circuit Court in and for Seminole County, Florida

CERTIFICATE OF SURVEYOR

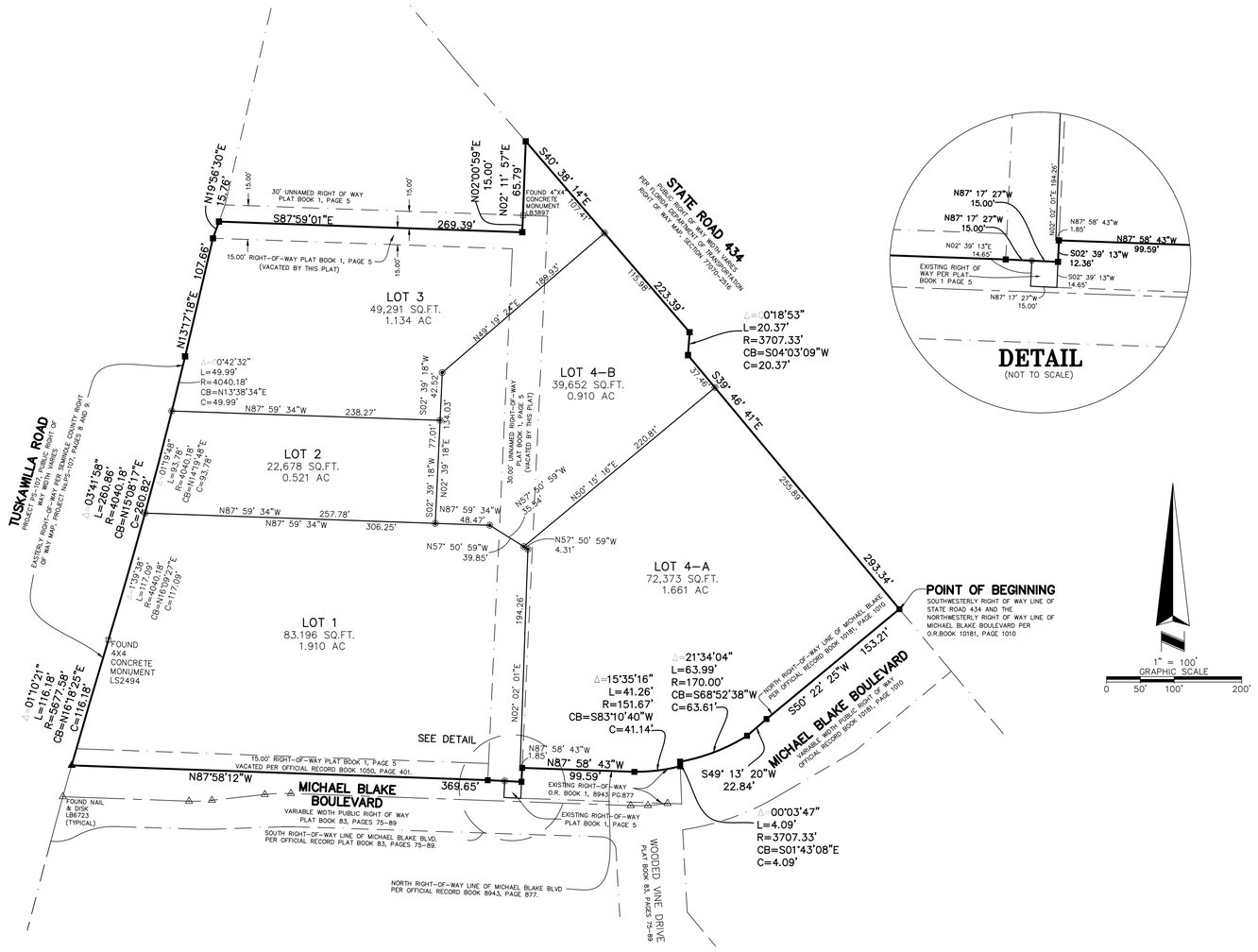
This plat was prepared under my direction and supervision. This plat complies with all of the survey requirements of Chapter 177, Florida Statutes.

_____
Surveyor's name: Michael W. Solitro Date:
Registration Number: LS4458
Professional Land Surveyor
Registration Number of Legal Entity: LB6300
Republic National Inc.
480 Needles Trail
Longwood, Florida 32779

PLAT BOOK PAGE

SUTTON CROSSINGS

A REPLAT OF LOTS 1, 2, A PORTION OF LOTS 3 & 4, A PORTION OF LOT 8, BLOCK A, AND A 30 FEET RIGHT OF WAY, D.R. MITCHELL'S SURVEY OF THE LEVY GRANT, PLAT BOOK 1, PAGE 5, BEING IN SECTION 16, TOWNSHIP 21 SOUTH, RANGE 32 EAST, CITY OF WINTER SPRINGS, SEMINOLE COUNTY, FLORIDA.



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LONGWOOD, FLORIDA 32779
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PHONE: (407) 862-4200 FAX: (407) 862-6229

LEGEND:

- FOUND 4"X4" CONCRETE MONUMENT AS NOTED
- SET 4"X4" CONCRETE MONUMENT PERMANENT REFERENCE MONUMENT LB6300, 24" IN LENGTH
- SET 1/2" IRON ROD & CAP "REPUBLIC NATIONAL" LB6300
- FOUND MONUMENT FOUND AS DESCRIBED
- FOUND NAIL & DISK LB6723
- SET NAIL & DISK LB6300
- LB LICENSED BUSINESS
- C.C.R. CERTIFIED CORNER RECORD