COURTROOM
1 MUNICIPAL PLAZA
BEACON, NY 12508

Len Warner
Karen Quiana
Kevin Byrne
Donna Francis
J. Randall Williams
David Jensen
Chair John Gunn

**January 14, 2025**
**7:00 PM**
**Planning Board Agenda**

The Planning Board will meet in the Municipal Center Courtroom at 7:00 p.m. A work session will take place at 7:00 p.m. for a training workshop, discussion of agenda items and/or topics of interest to the Planning Board. The regular meeting will begin immediately thereafter, but no later than 7:30 p.m.

**Approval of December 10, 2024, minutes**

**Regular Meeting**

1. Continue review of application for Site Plan and Subdivision Approval, Mixed-Use Commercial and Residential, 45 Beekman Street, High Street, and High Street, submitted by Beekman Arts Center LLC and Bay Ridge Studios LLC.
2. Continue review of applications for Site Plan Approval and Subdivision Approval, Mixed-Use Commercial Use and Residential, 420-430 Fishkill Avenue, submitted by DK HHH Realty, LLC.
3. Continue review of application for Site Plan Approval, Mixed-Use Commercial and Residential, 291 Main Street, submitted by Telephone Building Beacon, LLC.
4. Continue review of application for Site Plan Approval, 14 N Cedar Street, 4-unit multi-family dwelling, submitted by Cervone-Perrucci Realty.

**City of Beacon Planning Board Agenda**
**01/14/2025**

**Title:**

Continue review of application for Site Plan and Subdivision Approval, Mixed-Use Commercial and Residential, 45 Beekman Street, High Street, and High Street, submitted by Beekman Arts Center LLC and Bay Ridge Studios LLC.

**ATTACHMENTS**

45 Beekman PB 1.14.25 Supplemental Submission cvr ltr (6292878.2)(6293327.1).pdf

45 Beekman PB 1.14.25 Attachment 1 - Full Site Plan Set CED rev 1-2-25.pdf

45 Beekman PB 1.14.25 Attachment 2 - Aryeh Siegel 12-31-24.pdf

45 Beekman PB 1.14.25 Attachment 3 - SWPPP CED rev 1-2-25.pdf

45 Beekman PB 1.14.25 Exhibit A - CED Response 1-2-25.pdf

45 Beekman PB 1.14.25 Exhibit B - Architect Response 1-2-25(6293321.1).pdf

Lanc & Tully 45 Beekman Street 01-12-25 review.pdf

KARC Review PB_45 Beekman_2025.01.14.pdf

45 Beekman Street - Draft FEAF Part 2 (4912-7389-2623.1).pdf

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January 2, 2025

**VIA E-MAIL AND HAND DELIVERY**
Hon. John Gunn
and Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Application for Site Plan & Subdivision Approval for Proposed Mixed-Use Development
Supplemental Submission –SEQR Analysis Further Supporting a Negative Declaration
Property: 45 Beekman Street, High Street, & High Street Beacon, New York
Tax Parcel IDs: (5955-19-706012, 5954-26-689990 & 5954-26-781983)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of Beekman Arts Center LLC and Bay Ridge Studios LLC (the "Applicants"), the owners of the above-referenced Premises, we respectfully submit this letter in furtherance of an Application for Site Plan and Subdivision Approval (the "Application"), proposing to redevelop the Premises by constructing two (2) new mixed-use buildings on the Property (the "Project").

**SITE PLAN REFINEMENTS, RESPONSE TO CONSULTANT COMMENTS, & REVISED ENGINEERING REPORT:**

In response to comments provided by this Board and its consultants at the December 10, 2024 meeting, the Applicants have revised the Project by redesigning the access hardscape to and the landscaping around the Beekman Building from the NYS Route 9D/Beekman Street intersection. The layout includes curvilinear walkways with both steps and ramp to address the elevation change between the Building and the street elevation, while the landscaping proposes low plantings in front of the access area so as to no impede any sightlines of the entrance. The proposal for a sculpture display area remains a component of the design. Additionally, the proposed landscaping on the northwest side of the site, which provides buffering and screening for the neighboring properties, has been enhanced with additional shade/canopy trees and additional species of evergreen trees for a more diverse plant palette. *See* enclosed Site Plan Set prepared by Colliers Engineering & Design ("CED").

A Full Site Plan Set and Architectural Plan Set prepared by the Applicants' engineering consultant, CED and architect, Aryeh J. Siegel, have been enclosed for the Board and its consultants' review. CED has also prepared a revised Stormwater Pollution Prevention Plan ("SWPPP") and responses to the outstanding SWPPP comments by the City Engineer. *See* attached SWPPP and **Exhibit A** – CED Response to City Engineer SWPPP Comments.[1]

**THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS UNDER THE STATE ENVIRONMENTAL QUALITY REVIEW ACT ("SEQR"):**

In order to further assist the Planning Board in its continued SEQR environmental review, the below narrative has been prepared to address the environmental review factors as they relate to the instant proposal. This demonstrates that an exhaustive analysis has been undertaken relating to all potential environmental considerations, and that the state of the record supports a Determination of Significance that the instant proposal *will not* create any potentially significant adverse environmental impacts (i.e., a Negative Declaration).

## I. Land

Consistent with its nature as a redevelopment proposal with large areas of existing impervious surfaces and prior development activities (also including a former residence prior to urban renewal and as a contractor's yard), new land disturbance and impervious surface is limited in amount. The Project involves implementation of several soil erosion measures to ensure that there will be no measurable increase in erosion or flooding. The Project will not result in any increased risk to surrounding properties and proper drainage and land restoration practices will be followed. The stormwater management system mitigates post-developed runoff rates to be less than pre-development rates. *See* Sheets 5-7 and 10-11of the Site Plan Set. The Project is single-phased, with construction expected to last for eighteen (18) months. Accordingly, the Project will not result in any significant adverse environmental impacts from the proposed physical alteration of land.

[1] Note: The SWPPP was originally submitted to this Board on January 30, 2024 and a supplemental Stormwater Calculation Memorandum was provided to this Board on June 25, 2024. Per the Applicants' discussion with the City Engineer, one (1) hard copy of the extensive document has been provided with this submission for their review, along with an electronic copy.

## II. Geological Features

There are no unique geological features on the Premises. The Project will not result in any adverse environmental impacts to geological features.

## III. Surface Water, Groundwater, and Flooding

The Proposed Action will not cause any significant adverse impact on surface or groundwater quality or quantity, or on drainage flows or patterns of surface water runoff.

A full SWPPP has been provided for the Project. As detailed therein, to meet stormwater requirements, a bioretention basin, subsurface detention system, and hydrodynamic separator are proposed as part of the Project. These stormwater features have been designed in accordance with the July 31, 2024 New York State Stormwater Management Design Manual and City of Beacon requirements. *See* SWPPP dated December 31, 2024 prepared by CED; Sheets 5-7 of the Site Plan Set. The Project involves implementation of several soil erosion measures to ensure that there will be no measurable increase in erosion or flooding. *See* Sheets 10-11 of the Site Plan Set. No wetlands or wetland buffer area will be disturbed by the Project.[2]

## IV. Air

The Project does not require federal or state air emission permits. Although construction activities related to grading and excavation may result in temporary air quality impacts, given the limited site disturbance proposed and temporary nature of proposed construction operations, air quality in the immediate vicinity is not expected to be significantly impacted.

The Proposed Action nonetheless incorporates several measures to mitigate and limit any potential impacts. For instance, the Applicants will schedule construction operations to minimize the amount of disturbed areas at any one time. The Applicants will also apply temporary soil stabilization practices, such as mulching, seeding, and spraying water, as needed. Lastly, structural measures will be installed in disturbed areas in an effort to prevent any dust accumulation. *See* Sheet 10 of the Site Plan Set. Accordingly, the Project will not have a significant

[2] Note: Regarding utilities and specifically sewer connections, the Applicant is seeking confirmation of whether the surrounding residential properties are connected to the site's existing sewer line. It is the Applicants' intent to remove any such connections, and service such residence to the existing sanitary sewer main in Tompkins Avenue.

adverse environmental impact on air quality.

## V. Plants and Animals

The Project will not result in a significant adverse environmental impact to plants or animals. The Project proposes ample native landscaping throughout the Premises, at an appropriate scale for the developed lot and surrounding urban environment. Canopy street trees and additional low landscaping are proposed in front of the development. Ample trees and shrubbery are proposed throughout the Premises in an effort to offer beauty for both the Premises and residents of the adjacent developments, as well as visitors and citizens of Beacon and to screen views from the neighboring developments. *See* Sheet 12 of the Site Plan Set.

The previously submitted FEAF indicates the Premises does not contain any rare plant or animals and may contain or serve as a habitat to the Atlantic Sturgeon, Shortnose Sturgeon, and Indiana Bat. Given the Project's location in a densely developed urban area and the Premises' existing improvements, it is impossible that the Premises serves as a habitat for sturgeon and unlikely it serves as a habitat area for bats. Indeed, the existing landscape is largely a barren food desert for wildlife, with extensive impervious surfaces. In contrast, when the Project is completed, the Premises will be flush with native plants that will flower and attract insects, which could lead to benefits for birds and bats. Accordingly, the Project enhances the landscape for all wildlife and leaves the landscape ecologically healthier than it is now, as well as beautified for human enjoyment.

## VI. Agricultural Resources

There are no agricultural resources located on the Premises. The Project will not result in any significant adverse environmental impacts to same.

## VII. Aesthetic Resources

The Project will not have a significant adverse environmental impact on any aesthetic resources.

The nearest viewshed to the Premises as articulated in the City's LWRP is the viewshed located at the intersection of Main Street and NYS Route 9D. The LWRP describes the viewpoint as follows: "The traffic light at the intersection of Route 9D and Main Street is the western entrance to the City's business district. Due to urban renewal demolition, the view to the west is unobstructed

from an elevation of 100 feet. In the foreground the land is bulldozed stumps and some weed trees. The middle ground is dominated by Beekman Street and the old residential neighborhood of High Street. The background is a clear view of the Hudson River, the Newburgh waterfront to the City's center and the hills beyond." This described viewshed is located to the southeast of the Property.

The Project will have no impact on the relevant viewshed. The foreground has changed since the time of the LWRP's adoption to now include trees that dominate and restrict views of the middle ground (Beekman Street). Moreover, the Premises are tucked down below the street level from Route 9D and Beekman Street and separated from Route 9D by NYSDOT property that is not subject to the land acquisition request, further restricting visibility of the Project. As a result, the Project and any future improvement will be sufficiently screened and have no impact on the public viewshed, making the Project consistent with the City's LWRP.

## VIII. Historic and Archeological Resources

The Project will not cause a significant adverse environmental impact on historic or archeological resources. The Premises is located approximately 0.05 miles from the Bogardus DeWindt House, and 0.10 miles from the Lower Main Street Historic District. The Bogardus DeWindt House is surrounded by heavy landscape screening and separated from the Premises by Tompkins Avenue and residential developments. The proposed improvements will not be visible from the DeWindt House, as they are well within the Premises. The Historic District consisting of said residences is similarly screened by existing foliage, which screening will be bolstered by the Applicants' landscaping plan.

## IX. Open Space and Recreation

The Project is neither designated in an open space area in the City of Beacon nor will it eliminate any existing open or recreational space. The Premises consist of a fully developed lot that is improved with driveway access lanes, parking area, and several story building, and two small vacant lots that have historically been utilized as landscaping and storage yards. Therefore, the Project will not have a significant adverse impact on open space and recreation.

## X. Critical Environmental Area

The Project is not located within a Critical Environmental Area. The Project will not result in any

significant adverse impacts to same.

## XI. Transportation

The Project will not have any potentially significant adverse environmental impacts on traffic and parking operating conditions in the vicinity of the Premises and the proposed mitigation measures will help to address existing deficiencies in the area. This conclusion is supported by the Traffic and Parking Study (the "Study") prepared by CED dated November 28, 2023 revised January 26, 2024 and June 24, 2024. This Study is based upon the standards established by the Institute of Transportation Engineers ("ITE") and set forth in the Parking Generation Manual, 6th Edition, in addition to data provided by the NYSDOT and collected on the ground by CED. As detailed further therein, the Study assesses future traffic conditions under non build and build scenarios, focusing on several surrounding intersections and access to the Premises. The Study's analysis of future traffic conditions is conservative because no credit has been taken for the potential reduction in the Project's traffic generation resulting from the Project's proximity to the Beacon Metro-North Train Station. It is anticipated that a portion of the Project's residents will utilize the nearby public transportation on a regular basis reducing the overall vehicle trips generated by the Project. Based on this conservative analysis summarized therein, the additional Project generated traffic is not anticipated to have a significant adverse environmental impact on traffic conditions in the vicinity of the site.

Notwithstanding this conclusion, the Applicants have identified several potential measures to accommodate existing and future development, including, *inter alia*, (1) continued monitoring of the Route 9D/Tompkins Avenue intersection to assess actual traffic volumes derived from the instant Project; (2) traffic signal phasing and timing modifications for the intersection of North Avenue (NYS Route 9D) at Beekman Street/Church Street to improve the overall operation of the intersection and specifically the southbound North Avenue and eastbound Beekman Street approaches; and (3) Traffic signal timing modifications have also been identified for the intersection of North Avenue (NYS Route 9D) at Main Street/Municipal Plaza. These traffic signal timing modifications for the Main Street/Municipal Plaza intersection have been identified to maintain coordination of the traffic signal with the North Avenue (NYS Route 9D) at Beekman Street/Church Street.

The Study also assessed the Dutchess County Transportation Council's ("DCTC") Complete Streets Analysis for Beekman Street dated January 29, 2018 (the "DCTC Analysis"). In addressing the DCTC Analysis, it found that the Project does not interfere with the implementation of any of

the recommendations contained therein. Furthermore, the Traffic Study acknowledges that any modifications at the intersection of North Avenue/Beekman Street intersection will consider the recommendation of the DCTC Analysis.

The revised Study also incorporates and assesses additional traffic data for approved developments in the area and historical crash data from the NYSDOT for several surrounding area intersections. As is further detailed therein, the calculated accident rate for the selected intersections was generally found to be comparable to the statewide average accident rate for similar type intersections.

As requested by the Planning Board, the Applicant's traffic consultant, CED, also conducted additional studies assessing a separate southbound right turn lane on North Avenue (NYS Route 9D) for vehicles turning onto Beekman Street. As is more fully detailed in CED's Southbound Right Turn Lane Memorandum dated July 30, 2024 (the "Right Turn Memo"), the Study ". . . did not find that a southbound right turn lane is merited or necessary to mitigate any minimal potential traffic generated by the Project . . ." Instead, the key improvements to the overall Level of Service in this corridor were those previously highlighted in CED's Study–namely "fair share" traffic signal phasing and timing modifications. Further, the Right Turn Memo highlights that.

CED also prepared a supplemental Parking Memorandum confirming that the proposed off-street parking facilities conform with the City's recently adopted parking regulation updates. *See* Parking Memorandum, prepared by Colliers Engineering & Design P.C., dated September 23, 2024. As detailed therein, the shared parking analysis prepared for the Project indicated that 88 parking spaces would be the appropriate number of spaces needed to service the Project. Notably, this figure did not account for the potential of internal trips between the residential units and commercial space or the proximity of the Project to the nearby Beacon Metro-North Train Station. While the previously proposed number of spaces was based on an analysis that is already conservative and the Applicant's traffic consultant believes it would be sufficient for the Project, the Project proposes 91 off-street parking spaces in response to comments made by the City's Traffic Consultant. *See* CED Response to Comments dated November 26, 2024. Accordingly, the Applicants respectfully submit that the number of spaces provided on the Premises are appropriate and will not result in an adverse environmental impacts.

## XII. Energy

The Project does not require a new substation or upgrades to an existing substation, and the Project does not require an extension of an energy transmission or supply system. Instead, existing energy infrastructure will serve the Project. Accordingly, the Project will not result in

significant adverse environmental impact on energy.

## XIII. Noise, Odor, and Light

The Project will not result in any significant adverse impacts resulting from odor, light, or noise. The Project will not produce any noxious odors. All proposed lighting will be dark sky compliant. *See* Sheet 13 of the Site Plan Set. Any use on the Applicant's property will involve vehicles entering and existing the property; deliveries; refuse collection and garbage trucks; patron/pedestrian voices – all conditions that are similar to and consistent with the existing use on the Premises, and at the abutting properties and development in the nearby urban area.

## XIV. Human Health

The Proposed Action does not include construction or implementation of a solid waste facility and the Premises have never been used as a solid waste management facility. According to the NYSDEC Site Remediation Database, there has not been a reported spill at the Premises. The Project will not result in a significant adverse impact on human health.

## XV. Community Plans

The Project was designed in furtherance of the City's efforts to bring mixed-use, high density residential developments to certain portions of Beekman Street located within the Linkage District ("L District"), such as where the Project is proposed.[3] The L District was established in order to assist with the transition between the Main Street core and waterfront area based upon the planning and development goals, objectives, and recommendations set forth in the City of Beacon Comprehensive Plan, dated April 3, 2007 (the "Comprehensive Plan") and the Comprehensive Plan Update, dated 2017 ("Comprehensive Plan Update").[4]

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[3] *See* CITY OF BEACON COMPREHENSIVE PLAN, at page 7 (Population and Residential Development Goal).

[4] *See* CITY OF BEACON COMPREHENSIVE PLAN UPDATE (2017), at page 152 ("In keeping with the 2007 Comprehensive Plan recommendations, the City adopted the Linkage Zoning District, to promote residential development that reinforces connections between the Main Street and waterfront area.") Notably, these planning objectives resulted from feedback from City residents regarding improving the connection between the train station and Main Street by "encouraging residential development along Beekman Street to provide for a more attractive and interesting streetscape"). COMPREHENSIVE PLAN, at page 59.

The Comprehensive Plan explicitly calls for: "encourage[ing] the development of high density housing along Beekman Street"; [5] "increase[ing] densities of housing located around the central commercial hub and the waterfront/train station area of Beacon";[6] and the "development of residential and/or other uses along Beekman Street and Wolcott Avenue to improve the pedestrian streetscape between Main Street and the train station".[7] The City's Comprehensive Plan Update similarly provides that "[t]he primary focus area for the 2017 Plan is the waterfront and train station area… The vision for this area is to create a destination that serves as a "gateway" to Beacon, to reclaim the riverfront and to **link that riverfront to downtown Beacon**."[8] The Local Waterfront Revitalization Program ("LWRP") and its appended City of Beacon Harbor Management Plan, which includes the property within its boundaries, echoes these sentiments by outlining a goal that the "[t]he waterfront should be linked to and integrated with downtown Beacon and other points of interest".[9]

Notably, both the Comprehensive Plan and the Comprehensive Plan Update identify the Premises as a location for future development of high-density residential development.[10] These recommendations are reflected in the purpose underlying the L District regulations, which is to "… encourage residential development to help support Main Street businesses and to create a vibrant, economically successful, walkable, and environmentally sustainable connection between Beacon's Central Main Street District and the train station and riverfront".[11]

The Applicants respectfully submit that the proposed mixed-use Project will achieve the City's goals of creating and enhancing the transition between Main Street and the City's waterfront area. This Project will mesh with the fabric of the existing built environment at Main Street's crossroads

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[5] COMPREHENSIVE PLAN, at pages 12-13 and 106-07 (Land Use Goal, Waterfront/Train Station Area Objective).

[6] COMPREHENSIVE PLAN, at page 7 (Population and Residential Development Goal, Density Objective).

[7] COMPREHENSIVE PLAN, at pages 8 & 66 (Commercial, Office and Industrial Development Goal, Waterfront/Train Station Area Objective, Connection Recommendation).

[8] CITY OF BEACON, 2017 COMPREHENSIVE PLAN UPDATE, at page 10 (emphasis added).

[9] CITY OF BEACON LWRP, APPENDIX C: HARBOR MANAGEMENT PLAN, at page 8.

[10] COMPREHENSIVE PLAN, Appendix "Proposed Land Use Plan"; COMPREHENSIVE PLAN UPDATE Figure 11-1 "Future Land Use Map; Comprehensive Plan Appendix "Connecting Beacon's Main Street with the Hudson River and Railroad Station" prepared by Dutchess County Department of Planning and Development, dated March 6, 2007 (including a sketch depicting the Premises with compact development located along High Street and Beekman Street).

[11] CITY OF BEACON ZONING CODE § 223-41.19

with North Avenue (NYS Route 9D), while supporting a vibrant, economically successful and environmentally sustainable Beekman Street. The Applicants desire to redevelop the Premises will increase the attractiveness of the frontages along North Avenue and Beekman Street and support the vitality and sustainability of the Beekman Street corridor with commercial mixed-uses. Moreover, this location is well-suited for mixed-use development, given the character of the surrounding commercial and residential developments, and that the future use of the site will be woven into the fabric of downtown Beacon as an important link between the Beacon Metro-North Train Station and Main Street.[12]

Accordingly, the Applicants respectfully submit that this mixed-use Project is consistent with and achieves the goals set forth in the City's planning documents, including the Zoning Code, Comprehensive Plan and the LWRP.

## XVI. Community Character

The Proposed Action will not result in any potential adverse impacts to the character of the surrounding community by virtue of the surrounding development, proposed mitigation measures, and nature of the proposal.

The surrounding area includes commercial, multi-family (including high-density multi-family residential development at The View, West End Lofts and River Ridge Views), and single-family developments, in addition to other retail uses along the City's Main Street.[13] Most nearby developments (including West End Lofts and River Ridge Views) were recently built as a part of Beacon's ongoing renewal and revitalization process, and to "increase the vitality, attractiveness and marketability of the of the City of Beacon lying between Main Street and the Metro North Train Station . . . as recommended in the City of Beacon Comprehensive Plan adopted on December 17, 2007, and the Comprehensive Plan update adopted on April 3, 2017." The majority of the adjacent residential neighborhoods are representative of higher-density urban living[14] and the proximity of these developments to Main Street, the Fire Department, the riverfront, and the MTA Metro-North station already establish the surrounding area as an active and pedestrian-

[12] Zoning Code 223-41.20 provides in relevant part that "[i]n order to encourage mixed uses, more than one permitted use shall be allowed on any lot or parcel, subject to all approval criteria contained herein."

[13] Note: A 62-unit four (4)-story multi-family residential development was recently approved at 16 West Main Street (which is known as Beacon Commons).

[14] *See* CITY OF BEACON 2017 COMPREHENSIVE PLAN, Figure 11-1 Future Land Use Map (characterizing the majority of surrounding properties as "High Density Residential").

friendly neighborhood with a flexible mix of uses.

Furthermore, it is respectfully submitted that the Project's current design and appearance is in line with the surrounding area's community character, as demonstrated by the numerous refinements directed by the Planning Board and the Board's Architectural Review Board ("ARB") Subcommittee. Indeed, the Project has undergone extensive review by the Planning Board and the Board's Architectural Review Board ("ARB") Subcommittee with respect to the Project's design. At the September 10, 2024 meeting, the Planning Board referred the Application to the ARB Subcommittee for review of the Project. The Applicants then met with the Subcommittee for an initial meeting on October 7, 2024, at which time the Subcommittee provided preliminary feedback on the Applicants' design and incorporation of the buildings amongst the surrounding developed, urban landscape. The Applicants revised the plans in accordance with the Subcommittee's initial feedback by, amongst other things, updating the arcade walkway, fenestration and corner tower to reflect less divisions and balancing various façade components. The Applicants have since met with the Subcommittee on November 8, 2024 and December 6, 2024 to present additional Project refinements. Since then, the Project's review before the ARB has completed and it has been referred back before the entire Board for consideration of the revised design, which has been altered to create a more coherent and compatible development relative to the surrounding area.

Accordingly, the Applicants respectfully submit that this mixed-use Project is consistent with the community character of the surrounding area.

**CONCLUSION**:

The Applicant believes that an exhaustive analysis has been done relating to the environmental factors noted above and that the state of the record supports a Determination of Significance that the Project will not create any significant adverse environmental impacts. If the Planning Board has further questions or wishes to have additional information relative to its environmental review, we ask that the Board ask for such information.

It is important to note that the adoption of a Determination of Significance does not end this Board's review of the Project. The Applicant will continue to appear before this Board to secure various approvals and to appear before the Zoning Board of Appeals for variance relief. The Planning Board has ample authority, under its site plan and subdivision jurisdiction, to continue

to discuss and evaluate the Project as the review moves forward, and we look forward to continued discussions with the Board.

**INDEX OF ENCLOSURES:**

In support of this Application, enclosed please find five (5) copies of the following documents:

**Exhibit A**: Response to Comments Memorandum prepared by Colliers Engineering and Design, P.C., dated January 2, 2024, providing responses to the City Engineering Consultant Lanc & Tully's memorandum dated February 14, 2024; and

**Exhibit B**: Response to Comments Memorandum prepared by Aryeh Siegel Architect, dated January 2, 2025, providing responses to the City Planning Consultant, KARC Planning Consultants Memoranda dated December 5, 2024.

In further support of this Application, we respectfully submit five (5) copies of the following additional enclosures:

- Site Plan Set entitled "Preliminary Site Plan", prepared by Colliers Engineering and Design, P.C. and Aryeh Siegel, Architect, dated January 30, 2024, last revised December 31, 2024 numbered and titled as follows (unless otherwise noted):
    - Sheet 1 of 19 – Cover Sheet.
    - Sheet 2 of 19 – Existing Conditions & Site Demolition Plan.
    - Sheet 3 of 19 – Tree Removal Plan.
    - Sheet 4 of 19 – Dimension Plan.
    - Sheet 5 of 19 – Grading Plan (Overall).
    - Sheet 6 of 19 – Grading Plan (West).
    - Sheet 7 of 19 – Grading Plan (East).
    - Sheet 8 of 19 – Utility Plan (West).
    - Sheet 9 of 19 – Utility Plan (East).
    - Sheet 10 of 19 – Soil Erosion & Sediment Control Plan.

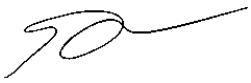
- Sheet 11 of 19 – Soil Erosion & Sediment Control Details.
- Sheet 12 of 19 – Landscape Plan.
- Sheet 13 of 19 – Lighting Plan.
- Sheet 14 of 19 – Construction Details.
- Sheet 15 of 19 – Construction Details.
- Sheet 16 of 19 – Construction Details.
- Sheet 17 of 19 – Construction Details.
- Sheet 18 of 19 – Construction Details.
- Sheet 19 of 19 – Construction Details.

- Architectural Plan Set entitled "Site Plan Application", prepared by Aryeh Siegel, Architect, dated November 28, 2023, last revised December 31, 2024, numbered and titled as follows (unless otherwise noted):
  - Sheet 1 of 6 - Building Plans – Beekman Street (A-101).
  - Sheet 2 of 6 - Building Plans – Beekman Street (A-102).
  - Sheet 3 of 6 - Building Plans – High Street. (A-103).
  - Sheet 4 of 6 - Site Section Diagram (A-104).
  - Sheet 5 of 6 - Site Section Diagram (A-105).
  - Sheet 6 of 6 - Elevations (A-106).

- Stormwater Pollution Prevention Plan ("SWPPP") prepared by CED dated December 31, 2024.

We look forward to appearing at this Board's regular meeting on January 14th to continue the Board's review of the Project and to answer any questions the Board may have. In the meantime, should this Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact us. Thank you in advance for your consideration of this matter.

Very truly yours,



Taylor M. Palmer

Enclosures

cc: Jennifer L. Gray, Esq.
John Russo, P.E., Lanc & Tully Engineering & Surveying, P.C.
Natalie Quinn, KARC Planning Consultants, Inc.
Creighton Manning Engineering, LLP
Aryeh J. Siegel Architect
Colliers Engineering & Design, P.C.
Allison Fausner, Esq.

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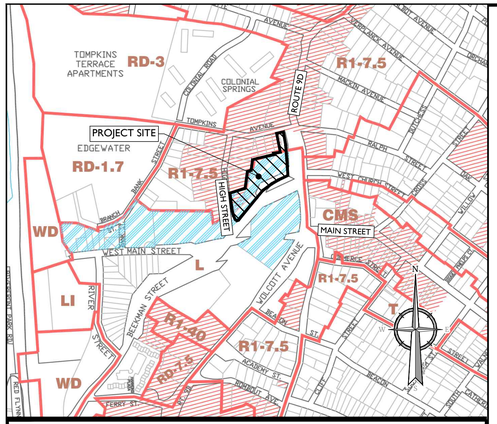
# PRELIMINARY SITE PLAN

FOR

# BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

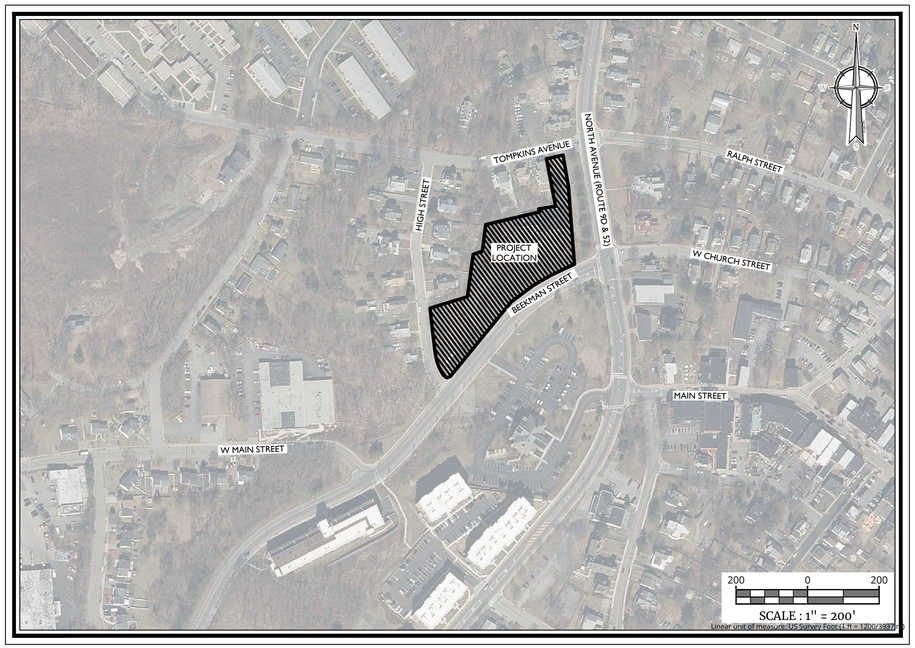
# TAX LOTS: 5955-19-706012, 5954-26-689990, 5954-26-781983

## CITY OF BEACON
## DUTCHESS COUNTY
## NEW YORK STATE




ZONING MAP

SCALE: 1" =500'
SOURCE: CITY OF BEACON ZONING MAP




# LOCATION MAP

SOURCE: NEW YORK STATE G.I.S. CLEARINGHOUSE

## INDEX OF SHEETS


| SHT. No. | DESCRIPTION | LATEST REVISION |
|---|---|---|
| 1 | COVER SHEET | 12/31/2024 |
| 2 | EXISTING CONDITIONS & SITE DEMOLITION PLAN | 12/31/2024 |
| 3 | TREE REMOVAL PLAN | 12/31/2024 |
| 4 | DIMENSION PLAN | 12/31/2024 |
| 5-7 | GRADING PLANS | 12/31/2024 |
| 8-9 | UTILITY PLANS | 12/31/2024 |
| 10 | SOIL EROSION & SEDIMENT CONTROL PLAN | 12/31/2024 |
| 11 | SOIL EROSION & SEDIMENT CONTROL DETAILS | 12/31/2024 |
| 12 | LANDSCAPE PLAN | 12/31/2024 |
| 13 | LIGHTING PLAN | 12/31/2024 |
| 14-19 | CONSTRUCTION DETAILS | 12/31/2024 |



UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.


## GENERAL INFORMATION

1. THE SUBJECT PROPERTIES ARE KNOWN BY THE FOLLOWING TAX IDS: 5955-19-706012, 5954-26-689990, 5954-26-781983 AS SHOWN ON THE DUTCHESS COUNTY TAX MAP OF THE CITY OF BEACON, DUTCHESS COUNTY, NEW YORK, TAX YEAR 2023.

2. THE PROPERTY IS LOCATED IN THE L (LINKAGE) ZONING DISTRICT AND IN THE R1-7.5 (RESIDENTIAL) CONTAINS A TOTAL TRACT AREA OF 2.06 ACRES.

OWNERS/APPLICANTS:
BEEKMAN ARTS CENTER LLC (TAX ID: 5955-19-706012)
268 MAIN STREET
BEACON, NY 12508

BAY RIDGE STUDIOS LLC (TAX ID: 5954-26-781983 & 5954-26-689990)
268 MAIN STREET
BEACON, NY 12508

3. BOUNDARY AND TOPOGRAPHICAL MAPPING IS TAKEN FROM A SURVEY TITLED "BOUNDARY SURVEY OF THE LANDS OF BEEKMAN ARTS CENTER, LLC & BAYRIDGE STUDIOS, LLC" PREPARED BY JONATHAN N. MILLEN NY, P.L.S. (LICENSE NO. 050746) OF AUTOMATED CONSTRUCTION ENHANCED SOLUTIONS, INC., DATED NOVEMBER 03, 2023 AND REVISED TO JUNE 06, 2024.

4. THIS SET OF PLANS IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS. COLLIERS ENGINEERING & DESIGN HAS PERFORMED NO EXPLORATORY OR TESTING SERVICES, INTERPRETATIONS, CONCLUSIONS OR OTHER SITE ENVIRONMENTAL SERVICES RELATED TO THE DETERMINATION OF THE POTENTIAL FOR CHEMICAL, TOXIC, RADIOACTIVE OR OTHER TYPE OF CONTAMINANTS AFFECTING THE PROPERTY AND THE UNDERSIGNED PROFESSIONAL IS NOT QUALIFIED TO DETERMINE THE EXISTENCE OF SAME. SHOULD ENVIRONMENTAL CONTAMINATION OR WASTE BE DISCOVERED, THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS.

5. THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HERON, IS NOT A SURVEY.

6. NO 100 YEAR FLOOD PLAINS ARE KNOW TO EXIST ON THE SITE PER THE FLOOD INSURANCE RATE MAP 36027C0463E DATED 05/02/2012, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

7. DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS ARE SHOWN THERETO.

8. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS REQUIRED HAVE BEEN OBTAINED, ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS HAVE BEEN STAMPED "ISSUED FOR CONSTRUCTION". THIS SHALL INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE PROJECT OWNER AND/OR MUNICIPAL ENGINEER.

9. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.

10. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL 811 TO REQUEST A UTILITY MARKOUT.

11. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES, A PRE-CONSTRUCTION MEETING SHALL BE CONDUCTED IN ACCORDANCE WITH MS4'S GP-0-24-001. PRESENT AT THE MEETING SHALL BE THE MS4 OPERATOR, CONTRACTOR(S) RESPONSIBLE FOR IMPLEMENTING THE SWPPP FOR CONSTRUCTION ACTIVITY, AND QUALIFIED STORMWATER INSPECTOR FOR THE PROJECT.

12. UPON COMPLETION OF PROJECT CONSTRUCTION, AN AS-BUILT SURVEY SHALL BE PREPARED OF THE PROJECT. THE AS-BUILT SURVEY SHALL INCLUDE THE LOCATION, SIZE, AND MATERIAL OF ALL UTILITIES INSTALLED ON THE PROJECT SITE.

13. INFORMATION HEREON INCORPORATES THE CONTENT IN THE FOLLOWING REPORTS:

- "PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN (PRELIMINARY SWPPP)" PREPARED FOR BEEKMAN ARTS CENTER LLC & BAYRIDGE STUDIOS LLC PREPARED BY COLLIERS ENGINEERING & DESIGN, DATED JANUARY 30, 2024.
- "TRAFFIC & PARKING STUDY" PREPARED FOR BEEKMAN ARTS CENTER LLC & BAYRIDGE STUDIOS LLC PREPARED BY COLLIERS ENGINEERING & DESIGN, DATED NOVEMBER 28, 2023 AND REVISED TO JUNE 24, 2024.

SITE NOTES

1. BUILDING FOOTPRINT DIMENSIONS SHOWN HEREON ARE APPROXIMATE. FINAL BUILDING FOOTPRINT DIMENSIONS FOR EACH BUILDING SHALL BE FURNISHED ON THE INDIVIDUAL ARCHITECTURAL PLANS AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. ALL STRUCTURES SHALL CONFORM TO THE APPROVED BULK ZONING REQUIREMENTS.

2. CURBS SHALL BE DEPRESSED FLUSH WITH PAVEMENT, AND ACCESSIBLE RAMPS INSTALLED WHERE SIDEWALKS AND CROSSWALKS INTERSECT SAME. DETECTABLE WARNINGS SHALL BE INCLUDED ON ACCESSIBLE RAMPS.

3. TRAFFIC SIGNAGE AND STRIPING SHALL CORRESPOND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

4. REFUSE AND RECYCLABLES SHALL BE STORED WITHIN OUTSIDE SCREENED TRASH ENCLOSURES AS NOTED ON THE PLANS, AND PICKED UP BY PRIVATE WASTE DISPOSAL HAULER.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL WASTE MATERIALS IN ACCORDANCE WITH GOVERNING REGULATIONS AND AGENCIES.

6. THERE SHALL BE NO ON-SITE BURIAL OF CONSTRUCTION MATERIALS, TREE BRANCHES, STUMPS, OR OTHER DELETERIOUS MATERIALS.

7. MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:

A. NEW YORK STATE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", 2018; AS SUPPLEMENTED.
B. CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS, AND REQUIREMENTS.
C. CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
D. CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.

UTILITY NOTES

1. EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTIONS, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS, AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE UNDER SIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.

2. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.

3. STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS OR INTERNALLY PRELUBRICATED GASKET (TYLOX SUPERSEAL OR EQUIVALENT. ADS N-12 HIGH DENSITY POLYETHYLENE PIPE (HDPE), AS NOTED ON THE PLAN, OR APPROVED EQUAL. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

4. WATER SERVICE SHALL BE PROVIDED FROM THE CITY OF BEACON. THE PROJECT SHALL CONNECT TO THE MUNICIPAL SYSTEM VIA THE EXISTING WATER MAINS IN TOMPKINS AVENUE AND HIGH STREET SUBJECT TO THE APPLICABLE REGULATIONS AND THE APPROVAL OF THE MUNICIPALITY & THE DUTCHESS COUNTY DEPARTMENT OF HEALTH.

5. SANITARY SEWER SERVICE SHALL BE PROVIDED BY CONNECTION TO THE EXISTING CITY OF BEACON SANITARY MAIN LOCATED IN HIGH STREET.

6. ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY SEWER LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE MUNICIPALITY.

7. AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.

8. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE OR LOCAL UTILITY COMPANIES REQUIREMENTS.

9. ALL UTILITY CONNECTION LOCATIONS MUST BE CONFIRMED WITH THE GOVERNING AUTHORITY & WITH A TEST PIT BY THE CONTRACTOR PRIOR TO INSTALLATION.

10. UTILITY INSTALLATION WITHIN THE NYSDOT RIGHT-OF-WAY TO BE COORDINATED WITH THE APPLICABLE NYSDOT PERMIT PLANS.

THESE GENERAL NOTES SHALL APPLY TO ALL SHEETS IN THIS SET.

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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| - | - | - | - |
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| - | - | - | - |

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ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Digitally signed by Justin E. Dates
Date: 2025.01.02 10:22:34-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE


Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING


| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-COVER

SHEET TITLE: COVER SHEET

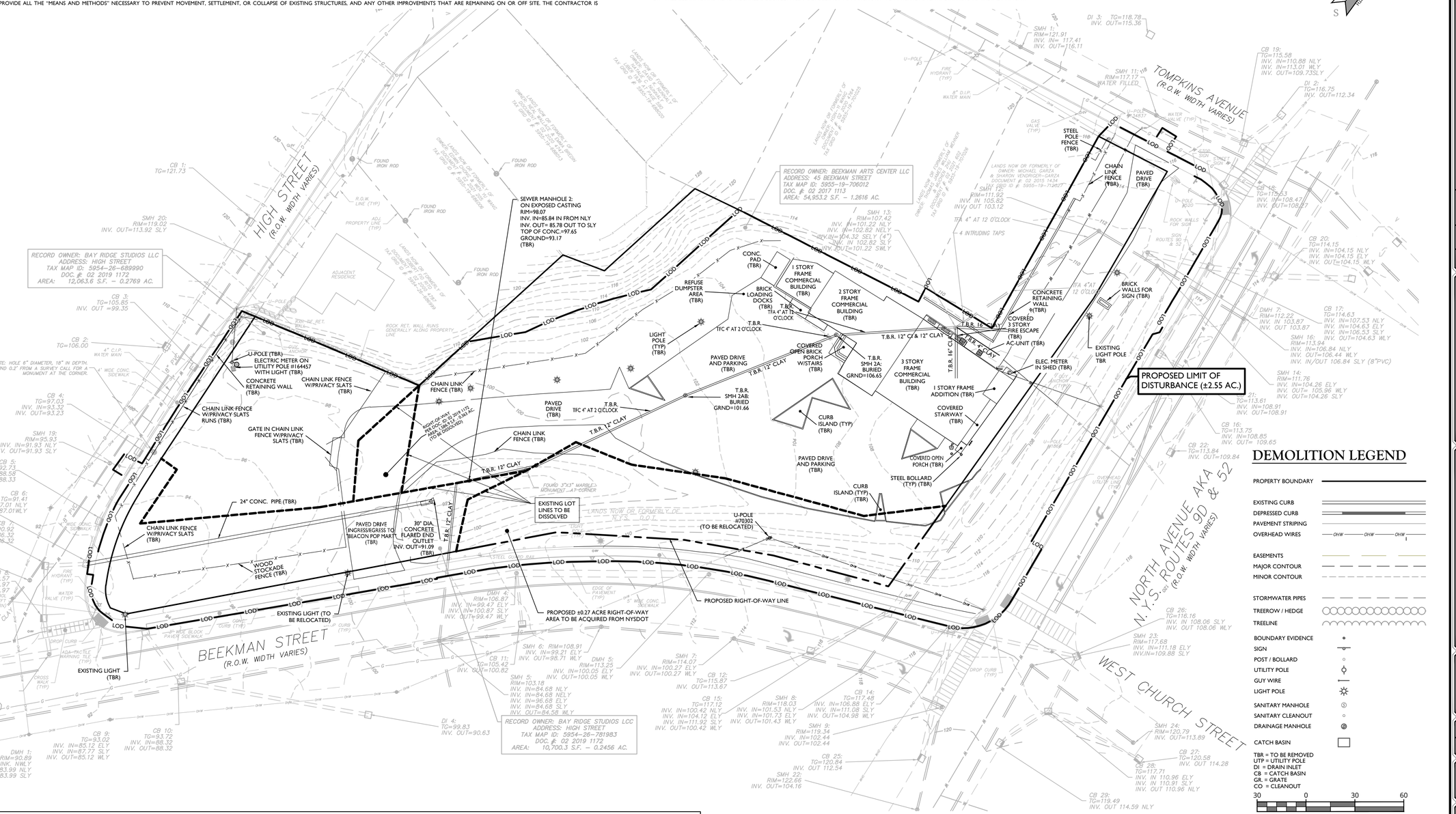
SHEET NUMBER: 01 of 19


2023\23010468A\Engineering\Site Plans\C-COVER.dwg|C-01 COVER By: KYLE SHALLOW


NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

# DEMOLITION NOTES:

1. THIS PLAN REFERENCES THE FOLLOWING DOCUMENTS AND INFORMATION:
   A. BOUNDARY AND TOPOGRAPHICAL MAPPING IS TAKEN FROM A SURVEY TITLED "BOUNDARY SURVEY OF THE LANDS OF BEEKMAN ARTS CENTER, LLC & BAYRIDGE STUDIOS, LLC" PREPARED BY JONATHAN N. MILLEN NY, P.L.S. (LICENSE NO. 050746) OF AUTOMATED CONSTRUCTION ENHANCED SOLUTIONS, INC., DATED NOVEMBER 03, 2023.
2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (29 U.S.C. 651 ET SEQ.) AND THE NEW YORK PROTECTION OF UNDERGROUND FACILITIES ACT (DIG SAFE LAW, 16 NYCRR PART 753) AS AMENDED.
3. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR SHALL ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
4. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK OF THIS PROJECT SHALL BE RAISED WITH ENGINEER, IN WRITING AND RESPONDED TO BY ENGINEER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY.
5. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR/TO:
   A. OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES HAVING JURISDICTION.
   B. NOTIFYING, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL DEPARTMENT OF PUBLIC WORKS, 72 HOURS PRIOR TO START OF WORK.
   C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
   D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT IN ADVANCE OF ANY EXCAVATION.
   E. LOCATING AND PROTECTING ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
   F. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
   G. ARRANGING FOR AND COORDINATING WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
   H. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
   I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY CEASE ALL WORK AND NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS.
6. COLLIERS ENGINEERING & DESIGN 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.
7. 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 CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION. SUCH REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.
8. THE CONTRACTOR SHALL NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE UNLESS IT IS IN STRICT ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
9. CONTRACTOR SHALL BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL SHALL BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS, AND SHALL BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND IN COMPLIANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. BACKFILLING SHALL OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND SHALL BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES SHALL BE GRADED TO PROMOTE POSITIVE DRAINAGE.
10. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND ALL APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
11. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS WELL AS FEDERAL, STATE AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT-OF-WAY.
12. CONTRACTOR SHALL 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 AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
13. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE AND/OR LIMIT OF DISTURBANCE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.
14. THE CONTRACTOR SHALL USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. 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.
15. 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.
16. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT LIMITED TO THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
17. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION AS TO THE MEANS AND METHODS TO BE USED TO ACCOMPLISH THAT WORK. ALL MEANS AND METHODS UTILIZED ARE TO BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
18. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROVIDED TO THE OWNER UPON REQUEST.
19. CONTRACTOR SHALL MAINTAIN A RECORD SET OF PLANS UPON WHICH IS INDICATED THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT SHALL BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER, AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK.
20. CONTRACTOR IS RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS, PAVEMENT, DRAINAGE STRUCTURES, ETC. WHICH ARE TO REMAIN. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING DAMAGE DONE TO THE AFOREMENTIONED ITEMS. THE REPAIR SHALL RESTORE SUCH TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS AND IN ACCORDANCE WITH ALL APPLICABLE CODES.
21. TREE CLEARING AND REMOVAL SHALL OCCUR BETWEEN OCTOBER 1ST TO MARCH 31ST, TO MITIGATE POTENTIAL IMPACTS TO THE INDIANA BAT.


HIGH STREET (R.O.W. WIDTH VARIES)
BEEKMAN STREET (R.O.W. WIDTH VARIES)
TOMPKINS AVENUE (R.O.W. WIDTH VARIES)
NORTH AVENUE AKA N.Y.S. ROUTES 9D & 52 (R.O.W. WIDTH VARIES)
WEST CHURCH STREET
RECORD OWNER: BAY RIDGE STUDIOS LLC
ADDRESS: HIGH STREET
TAX MAP ID: 5954-26-689990
DOC. #: 02 2019 1172
AREA: 12,063.6 S.F. - 0.2769 AC.
RECORD OWNER: BEEKMAN ARTS CENTER LLC
ADDRESS: 45 BEEKMAN STREET
TAX MAP ID: 5955-19-706012
DOC. #: 02 2017 1113
AREA: 54,953.2 S.F. - 1.2616 AC.
RECORD OWNER: BAY RIDGE STUDIOS LCC
ADDRESS: HIGH STREET
TAX MAP ID: 5954-26-781983
DOC. #: 02 2019 1172
AREA: 10,700.3 S.F. - 0.2456 AC.
PROPOSED LIMIT OF DISTURBANCE (±2.55 AC.)
EXISTING LOT LINES TO BE DISSOLVED
PROPOSED ±0.27 ACRE RIGHT-OF-WAY AREA TO BE ACQUIRED FROM NYSDOT
PROPOSED RIGHT-OF-WAY LINE
SEWER MANHOLE 2: ON EXPOSED CASTING RIM=98.07 INV. IN=85.84 IN FROM NLY INV. OUT= 85.78 OUT TO SLY TOP OF CONC.=97.65 GROUND=93.17 (TBR)
CHAIN LINK FENCE W/PRIVACY SLATS (TBR)
CHAIN LINK FENCE (TBR)
STEEL POLE FENCE (TBR)
PAVED DRIVE INGRESS/EGRESS TO "BEACON POP MART" (TBR)
30" DIA. CONCRETE FLARED END OUTLET INV. OUT=91.09 (TBR)
24" CONC. PIPE (TBR)
WOOD STOCKADE FENCE (TBR)
EXISTING LIGHT (TO BE RELOCATED)
EXISTING LIGHT (TBR)
U-POLE (TBR) ELECTRIC METER ON UTILITY POLE #164457 WITH LIGHT (TBR)
CONCRETE RETAINING WALL (TBR)
GATE IN CHAIN LINK FENCE W/PRIVACY SLATS (TBR)
CHAIN LINK FENCE W/PRIVACY SLATS RUNS (TBR)
U-POLE #70302 (TO BE RELOCATED)
CONC. PAD (TBR)
REFUSE DUMPSTER AREA (TBR)
BRICK LOADING DOCKS (TBR)
1 STORY FRAME COMMERCIAL BUILDING (TBR)
2 STORY FRAME COMMERCIAL BUILDING (TBR)
3 STORY FRAME COMMERCIAL BUILDING (TBR)
LIGHT POLE (TYP) (TBR)
PAVED DRIVE AND PARKING (TBR)
COVERED OPEN BRICK PORCH W/STAIRS (TBR)
T.B.R. SMH 2A: BURIED GRND=106.65
T.B.R. SMH 2AB: BURIED GRND=101.66
CURB ISLAND (TYP) (TBR)
COVERED 3 STORY FIRE ESCAPE (TBR)
AC-UNIT (TBR)
ELEC. METER IN SHED (TBR)
CONCRETE RETAINING WALL (TBR)
BRICK WALLS FOR SIGN (TBR)
EXISTING LIGHT POLE TBR
I STORY FRAME ADDITION (TBR)
COVERED STAIRWAY (TBR)
COVERED OPEN PORCH (TBR)
STEEL BOLLARD (TYP) (TBR)
CHAIN LINK FENCE (TBR)
T.B.R. 12" CLAY
T.B.R. 17" CLAY
T.B.R. 16" CLAY
T.B.R. 12" CY & 12" CLAY
T.B.R. 14" CLAY
T.B.R. 8" CLAY
T.B.R. TFA 4' AT 7th O'CLOCK
T.B.R. TFC 4' AT 2 O'CLOCK
T.B.R. TFA 4' AT 12 O'CLOCK
T.B.R. TFA 4"AT 12 O'CLOCK
4 INTRUDING TAPS
SMH 1: RIM=121.91 INV. IN= 117.41 INV. OUT=116.11
SMH 11: RIM=117.17 WATER FILLED
SMH 12: RIM=111.92 INV. IN 105.82 INV. OUT 103.12
SMH 13: RIM=107.42 INV. IN=101.22 NLY INV. IN=102.82 NELY INV.IN=104.32 SELY (4") INV. IN 102.82 SLY INV. OUT=101.22 SWLY
SMH 20: RIM=119.02 INV. OUT=113.92 SLY
SMH 19: RIM=95.93 INV. IN=91.93 NLY INV. OUT=91.93 SLY
SMH 18: RIM=91.79 INV. IN=86.79 NLY INV. IN=86.79 SLY
SMH 3: RIM=89.82 INV. IN=80.82 NLY INV. OUT=80.82 SLY
SMH 6: RIM=108.91 INV. IN=99.21 ELY INV. OUT=98.71 WLY
SMH 5: RIM=113.25 INV. IN=100.05 ELY INV. OUT=100.05 WLY
SMH 7: RIM=114.07 INV. IN=100.27 ELY INV. OUT=100.27 WLY
SMH 8: RIM=118.03 INV. IN=101.53 NLY INV. IN=101.73 ELY INV. OUT=101.43 WLY
SMH 9: RIM=119.34 INV. IN=102.44 INV. OUT=102.44
SMH 22: RIM=122.66 INV. OUT=104.16
SMH 23: RIM=117.68 INV. IN=111.18 ELY INV.IN=109.88 SLY
SMH 24: RIM=120.79 INV. OUT=113.89
SMH 14: RIM=111.76 INV. IN=104.26 ELY INV. OUT= 105.96 WLY INV. OUT=104.26 SLY
DMH 1: RIM=90.89 INV. IN=UNK. NWLY INV. IN=83.99 NLY INV. OUT=83.99 SLY
DMH 4: RIM=106.87 INV. IN=99.47 ELY INV. IN=100.87 SLY INV. OUT=99.47 WLY
DMH 5: RIM=100.05 INV. OUT=100.05 WLY
DMH 7: RIM=112.22 INV. IN 103.87 INV. OUT 103.87
CB 1: TG=121.73
CB 2: TG=106.00
CB 3: TG=105.85 INV. OUT =99.35
CB 4: TG=97.03 INV. IN=93.32 INV. OUT=93.23
CB 5: TG=92.73 INV. IN=88.58 INV. OUT=88.33
CB 6: TG=91.41 INV. IN=87.01 NLY INV. OUT=87.01WLY
CB 7: TG=90.92 INV. IN=86.32 INV. OUT=86.32
CB 8: TG=90.57 INV. IN= 85.97 INV. OUT=85.97
CB 9: TG=93.02 INV. IN=85.12 ELY INV. IN=87.77 SLY INV. OUT=85.12 WLY
CB 10: TG=93.72 INV. IN=88.32 INV. OUT=88.32
CB 11: TG=105.42 INV. OUT=100.82
CB 12: TG=115.87 INV. OUT=113.67
CB 14: TG=117.48 INV. IN=106.88 ELY INV. IN=111.08 SLY INV. OUT=104.98 WLY
CB 15: TG=117.12 INV. IN=100.42 NLY INV. IN=104.12 ELY INV. IN=111.92 SLY INV. OUT=100.42 WLY
CB 16: TG=113.75 INV. IN=108.85 INV. OUT= 109.65
CB 17: TG=114.63 INV. IN=107.53 NLY INV. IN=104.63 ELY INV. IN=106.53 SLY INV. OUT=104.63 WLY
CB 18: TG=115.53 INV. IN=108.47 INV. OUT=108.27
CB 19: TG=115.58 INV. IN=110.88 NLY INV. IN=113.01 WLY INV. OUT=109.73SLY
CB 20: TG=114.15 INV. IN=104.15 NLY INV. IN=104.15 ELY INV. OUT=104.15 WLY
CB 21: TG=113.61 INV. IN=108.91 INV. OUT=108.91
CB 22: TG=113.84 INV. OUT=109.84
CB 25: TG=120.84 INV. OUT 112.54
CB 26: TG=116.16 INV. IN 108.06 SLY INV. OUT 108.06 WLY
CB 27: TG=120.58 INV. OUT 114.28
CB 28: TG=117.71 INV. IN 110.96 ELY INV. IN 110.91 SLY INV. OUT 110.96 NLY
CB 29: TG=119.49 INV. OUT 114.59 NLY
DI 2: TG=116.75 INV. OUT=112.34
DI 3: TG=118.78 INV. OUT=115.36
DI 4: TG=99.83 INV. OUT=90.63
U-POLE #3
U-POLE #4
U-POLE #5
U-POLE #6
U-POLE #7
U-POLE #8
U-POLE #9
U-POLE #10
U-POLE #11
U-POLE #12
U-POLE #13
U-POLE #14
U-POLE #15
U-POLE #16
U-POLE #17
U-POLE #18
U-POLE #19
U-POLE #20
U-POLE #21
U-POLE #22
U-POLE

# DEMOLITION NOTES:

| TREE NUMBER | TREE SIZE IN INCHES AT DBH | COMMON NAME |
|---|---|---|
| 1 | 9" | BRADFORD PEAR |
| 2 | 23" | RED OAK |
| 3 | 14" | WHITE PINE |
| 4 | 19" | RED OAK |
| 5 | 13"/9" | WHITE PINE |
| 6 | 19.5" | RED OAK |
| 7 | 8" | BRADFORD PEAR |
| 8 | 7.5" | WHITE PINE |
| 9 | 10"/8" | WHITE PINE |
| 10 | 15.5" | RED OAK |
| 11 | 7" | BRADFORD PEAR |
| 12 | 18" | NORWAY MAPLE |
| 13 | 15" | NORWAY MAPLE |
| 14 | 26" | BLACK LOCUST |
| 15 | 24"/18" | BLACK LOCUST |
| 16 | 6" | BLACK CHERRY |
| 17 | 20" | BLCK LOCUST |
| 18 | 6" | BLACK LOCUST |
| 19 | 6" | BLACK WALNUT |
| 20 | 20" | NORWAY MAPLE |
| 21 | 16" | NORWAY MAPLE |
| 22 | 6"/8" | NORWAY MAPLE |
| 23 | 15" | NORWAY MAPLE |
| 24 | 8" | BLACK LOCUST |
| 25 | 23" | NORWAY MAPLE |
| 26 | 6" | NORWAY MAPLE |

| TREE NUMBER | TREE SIZE IN INCHES AT DBH | COMMON NAME |
|---|---|---|
| 27 | 7" | NORWAY MAPLE |
| 28 | 7" | NORWAY MAPLE |
| 29 | 6"/7" | NORWAY MAPLE |
| 30 | 23" | BIGTOOTH ASPEN |
| 31 | 23" | BIGTOOTH ASPEN |
| 32 | 11" | NORWAY MAPLE |
| 33 | 12" | BOX ELDER |
| 34 | 12" | NORWAY MAPLE |
| 35 | 8" | MULBERRY |
| 36 | 6" | NORWAY MAPLE |
| 37 | 6" | NORWAY MAPLE |
| 38 | 6" | NORWAY MAPLE |
| 39 | 12" | RED OAK |
| 40 | 6" | BOX ELDER |
| 41 | 6"/8" | NORWAY MAPLE |
| 42 | 6" | NORWAY MAPLE |
| 43 | 12" | RED OAK |
| 44 | 6"/6" | NORWAY MAPLE |
| 45 | 6"/6"/7" | NORWAY MAPLE |
| 46 | 14" | RED OAK |
| 47 | 6" | NORWAY MAPLE |
| 48 | 6" | NORWAY MAPLE |
| 49 | 12" | BLACK CHERRY |
| 50 | 11"/17" | BLACK LOCUST |
| 51 | 8" | BLACK LOCUST |
| 52 | 8" | NORWAY MAPLE |

| TREE NUMBER | TREE SIZE IN INCHES AT DBH | COMMON NAME |
|---|---|---|
| 53 | 8" | BLACK LOCUST |
| 54 | 9" | NORWAY MAPLE |
| 55 | 16" | BLACK WALNUT |
| 56 | 15"/11"/11" | BLACK LOCUST |
| 57 | 6" | NORWAY MAPLE |
| 58 | 13" | BLACK LOCUST |
| 59 | 16" | CATALPLA |
| 60 | 14"/14"/14" | SYCAMORE |
| 61 | 6" | CATALPLA |
| 62 | 15" | RED OAK |
| 63 | 15" | WHITE PINE |
| 64 | 16" | LITTLELEAD LINDEN |
| 65 | 14" | WHITE PINE |
| 66 | 11" | WHITE PINE |
| 67 | 17" | LITTLELEAF LINDEN |
| 68 | 11" | WHITE PINE |
| 69 | 10" | WHITE PINE |
| 70 | 17" | LITTLELEAF LINDEN |
| 71 | 11" | WHITE PINE |
| 72 | 15" | LITTLELEAF LINDEN |
| 73 | 15" | WHITE PINE |
| 74 | 16" | LITTLELEAF LINDEN |
| 75 | 10" | WHITE PINE |
| 76 | 16" | LITTLELEAF LIDNEN |
| 77 | 18" | LITTLELEAF LINDEN |
| 78 | 24"/20" | NORWAY SPRUCE |

| TREE NUMBER | TREE SIZE IN INCHES AT DBH | COMMON NAME |
|---|---|---|
| 79 | 18" | BRADFORD PEAR |
| 80 | 30" | NORWAY MAPLE |
| 81 | 13" | CATALPA |
| 82 | 6" | NORWAY MAPLE |
| 83 | 6"/8" | NORWAY MAPLE |
| 84 | 24" | NORWAY MAPLE |
| 85 | 12" | NORWAY MAPLE |
| 86 | 10" | NORWAY MAPLE |
| 87 | 10" | BRADFORD LOCUST |
| 88 | 17" | NORWAY MAPLE |
| 89 | 6" | NORWAY MAPLE |
| 90 | 30" | NORWAY MAPLE |
| 91 | 6" | NORWAY MAPLE |
| 92 | 24" | NORWAY MAPLE |
| 93 | 12"/14" | NORWAY MAPLE |
| 94 | 10" | NORWAY MAPLE |
| 95 | 31" | NORWAY MAPLE |

## PLAN NOTE

1. IDENTIFICATION OF EXISTING TREE SPECIES AND LOCATION CONDUCTED BY COLLIERS ENGINEERING & DESIGN, JUNE 2024.
2. CONTRACTOR TO STAKE-OUT L.O.D. ALONG THE NORTHERN SIDE OF THE PROJECT SITE AND EXISTING TREES IN CLOSE PROXIMITY TO THE L.O.D. SHALL BE REVIEWED FOR POTENTIAL PRESERVATION.




UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-DEMO.dwg|C-03 TREE REMOVAL By: KYLE SHALLOW

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION



| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:41-04'00'


Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.


SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

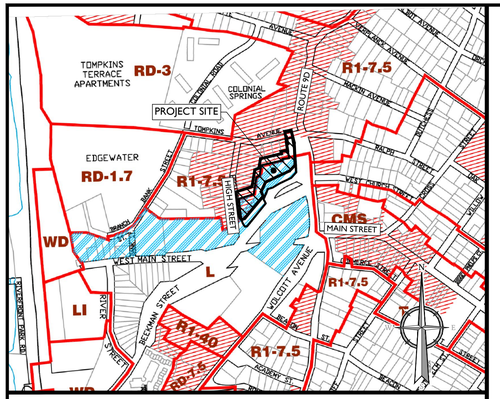
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE


Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING


| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |
| PROJECT NUMBER: 23010468A | DRAWING NAME: C-DEMO | | |

SHEET TITLE:
TREE REMOVAL PLAN

SHEET NUMBER:
03 of 19




VICINITY MAP
SCALE: 1" = 500'
SOURCE: CITY OF BEACON ZONING MAP

## ZONING DISTRICT:

L: (LINKAGE DISTRICT)
USE PERMITTED BY RIGHT: RETAIL
USE PERMITTED BY RIGHT: OFFICE
USE PERMITTED BY RIGHT: MULTIFAMILY DWELLING
-IF THE BUILDING FACES THE NORTH SIDE OF BEEKMAN STREET BETWEEN ROUTE 9D AND WEST MAIN STREET
-SUBJECT TO A REQUIREMENT THAT ANY DWELLING UNIT SHALL ONLY BE LOCATED ON THE UPPER STORIES OR AT LEAST 50 FEET BEHIND THE FACADE IN THE REAR PORTION OF THE GROUND FLOOR

HDLO: (HISTORIC DISTRICT AND LANDMARK OVERLAY ZONE)

### TABLE OF BULK REQUIREMENTS

L - LINKAGE DISTRICT

| MINIMUM | REQUIRED | PROVIDED | REMARKS |
|---|---|---|---|
| LANDSCAPED AREA | 15% | 35.5% | OK |
| LOT AREA | N/A | N/A | OK |
| LOT AREA PER UNIT | N/A | N/A | OK |
| LOT WIDTH | N/A | N/A | OK |
| LOT DEPTH | 75 FT. | 143 FT. | OK |
| FRONT YARD SETBACK | 0 FT. | 1 FT. | OK |
| SIDE YARD SETBACK | 0 FT. | N/A | OK |
| REAR YARD SETBACK | 25 FT. | 46.7 FT. | OK |
| DISTANCE BETWEEN BUILDINGS SAME LOT | N/A | N/A | OK |
| MAXIMUM | | | |
| BUILDING HEIGHT | 4 STORIES AND 48 FT. | 4 STORIES AND ≤48 FT. | OK |
| BUILDING COVERAGE | N/A | N/A | OK |
| UNITS PER BUILDING | N/A | N/A | OK |
| FRONT YARD SETBACK | 20 FT. | 19.6 FT. | OK |
| SIDE YARD SETBACK | 30 FT. | N/A | OK |

## ZONING DISTRICT:

R1-7.5: (ONE FAMILY RESIDENTIAL DISTRICT (7,500 SF/DWELLING))
NO USE PROPOSED IN R1-7.5 DISTRICT

### TABLE OF BULK REQUIREMENTS

R1-7.5 - ONE FAMILY RESIDENTIAL DISTRICT

| MINIMUM | REQUIRED | PROVIDED | REMARKS |
|---|---|---|---|
| LANDSCAPED AREA | 15% | NO STRUCTURE PROPOSED IN R1-7.5 DISTRICT | OK |
| LOT AREA | 7,500 SF | | OK |
| LOT AREA PER UNIT | 7,500 SF | | OK |
| LOT WIDTH | 75 FT. | | OK |
| LOT DEPTH | 100 FT. | | OK |
| FRONT YARD SETBACK | 15 FT. | | OK |
| SIDE YARD SETBACK | 10 FT. | | OK |
| REAR YARD SETBACK | 25 FT. | | OK |
| DISTANCE BETWEEN BUILDINGS SAME LOT | N/A | | OK |
| WELL-DESIGNED AND LANDSCAPED RECREATION OR USABLE OPEN SPACE AREA IN REAR YARD | 100 SF PER DWELLING UNIT | | OK |
| MAXIMUM | | | |
| BUILDING HEIGHT | 2.5 STORIES AND 35 FT. | | OK |
| BUILDING COVERAGE | 30% | | OK |
| UNITS PER BUILDING | N/A | | OK |
| FRONT YARD SETBACK | 35 FT. | | OK |
| SIDE YARD SETBACK | N/A | | OK |

## PARKING REQUIREMENTS:

MAXIMUM PERMITTED:

RESIDENTIAL:
1 SPACE PER UNIT
64 DWELLING UNITS = 64 SPACES

RETAIL:
3 SPACES PER 1,000 SF OF GFA
14,892 SF OF RETAIL SPACE = 45 SPACES

TOTAL MAXIMUM PARKING PERMITTED = 109 SPACES

PROVIDED

TOTAL PARKING PROVIDED = 91 SPACES
(BASED ON SHARED PARKING ANALYSIS)

## LOADING REQUIREMENTS:

REQUIRED

RETAIL:
1 SPACE FOR THE FIRST 7,500 SF OF GFA AND 1 SPACE FOR EACH ADDITIONAL 10,000 SF OF GFA OR MAJOR PORTION THEREOF, EXCEPT THAT NO BERTHS SHALL BE REQUIRED FOR BUILDINGS OF LESS THAN 5,000 SQUARE FEET OF GFA

BUILDING 1: 10,566 SF OF RETAIL SPACE = 1 LOADING SPACE
BUILDING 2: 4,326 SF OF RETAIL SPACE = 0 LOADING SPACES

PROVIDED

TOTAL LOADING SPACES PROVIDED:
EAST BLDG: = 1 LOADING SPACE
WEST BLDG: = 1 LOADING SPACE

## OWNERS/APPLICANTS:

BEEKMAN ARTS CENTER LLC (TAX ID: 5955-19-706012)
268 MAIN STREET
BEACON, NY 12508

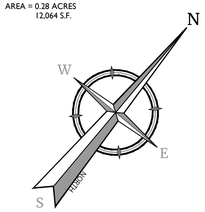
BAYRIDGE STUDIOS LLC (TAX ID: 5954-26-781983 & 5954-26-689990)
268 MAIN STREET
BEACON, NY 12508

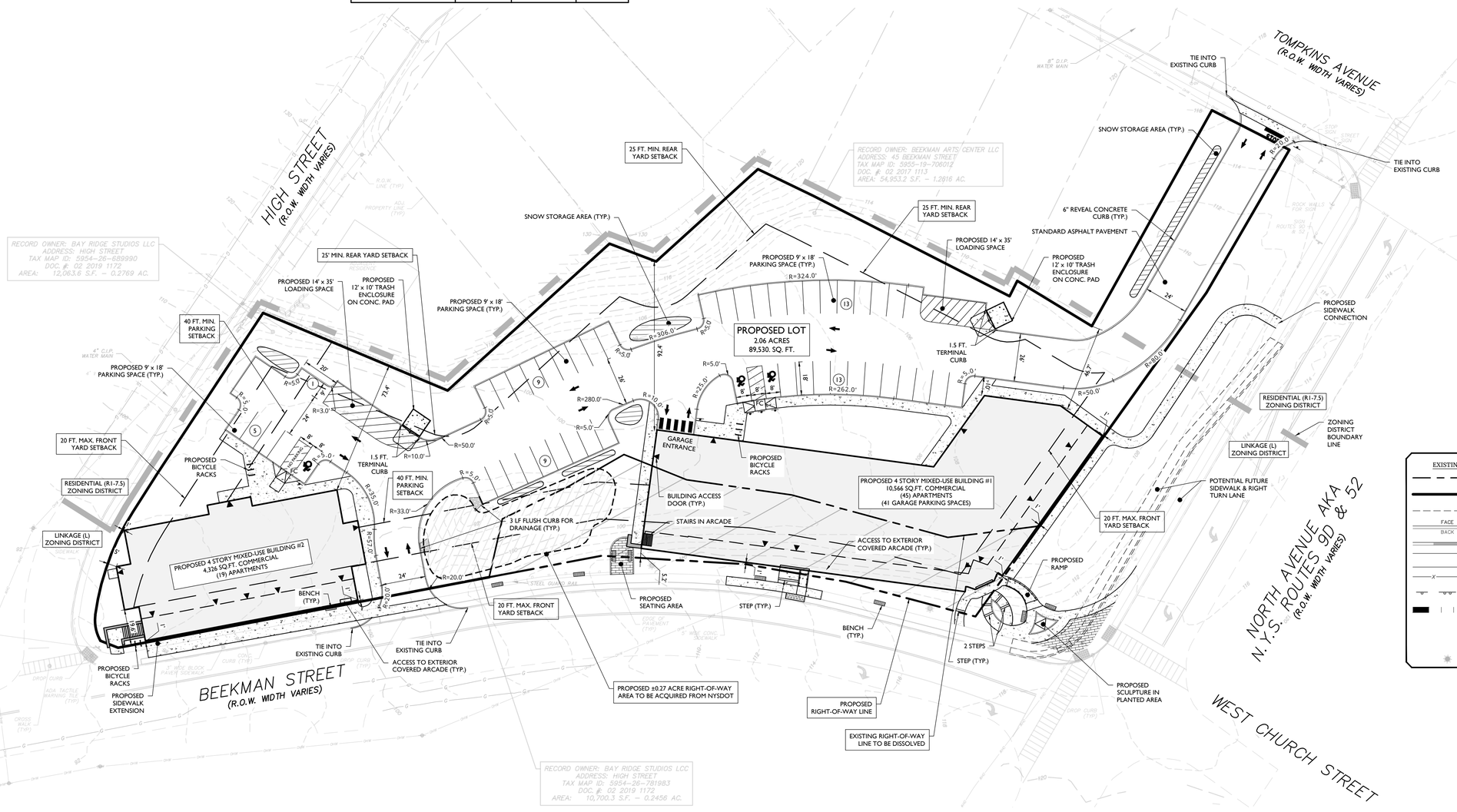
## TAX LOTS:

5955-19-706012
AREA = 1.26 ACRES
54,953 S.F.

5954-26-781983
AREA = 0.25 ACRES
10,700 S.F.

5954-26-689990
AREA = 0.28 ACRES
12,064 S.F.




### LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | RIGHT OF WAY LINE | |
| | PROPERTY LINE | |
| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | ROADWAY SIGNS | |
| | ZONING BOUNDARY LINE | |
| | STALL COUNT | (10) |
| | ADA ACCESSIBLE STALL | |
| | LIGHT POLE | |

30 0 30 60
SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

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2023\23010468A\Engineering\Site Plan\C-LAYT.dwg\C-04-DIMENSION PLAN By: KYLE.SHALLOW

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|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:41-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

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|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-LAYT

SHEET TITLE: DIMENSION PLAN

SHEET NUMBER: 04 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

## GRADING NOTES:

1. PROPOSED GRADE ELEVATIONS SHOWN AT BUILDING LINE ARE GROUND ELEVATIONS.
2. PROPOSED SPOT ELEVATIONS IN PAVEMENT AREAS ARE TOP OF FINISHED PAVEMENT.
3. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATION.
4. LANDSCAPED AND LAWN AREAS THAT ARE COMPACTED DURING CONSTRUCTION SHALL BE RESTORED PER THE NYS DEC DEEP-RIPPING AND DECOMPACTION MANUAL. (SEE SWPPP APPENDIX 12)

## ADA INSTRUCTIONS TO CONTRACTOR:

1. CONTRACTOR SHALL EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA ACCESSIBLE COMPONENTS FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE LATEST ADA STANDARDS FOR ACCESSIBLE DESIGN. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EGRESS, SHALL COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

   ( NOTE: THIS LIST IS NOT INTENDED TO CAPTURE EVERY APPLICABLE FEDERAL, STATE AND LOCAL RULE AND REGULATION. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE LAW, WHETHER OR NOT STATED SPECIFICALLY HEREIN):

   A. PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.

   B. CURB RAMPS- SLOPES SHALL NOT EXCEED 1:12 (8.3%).

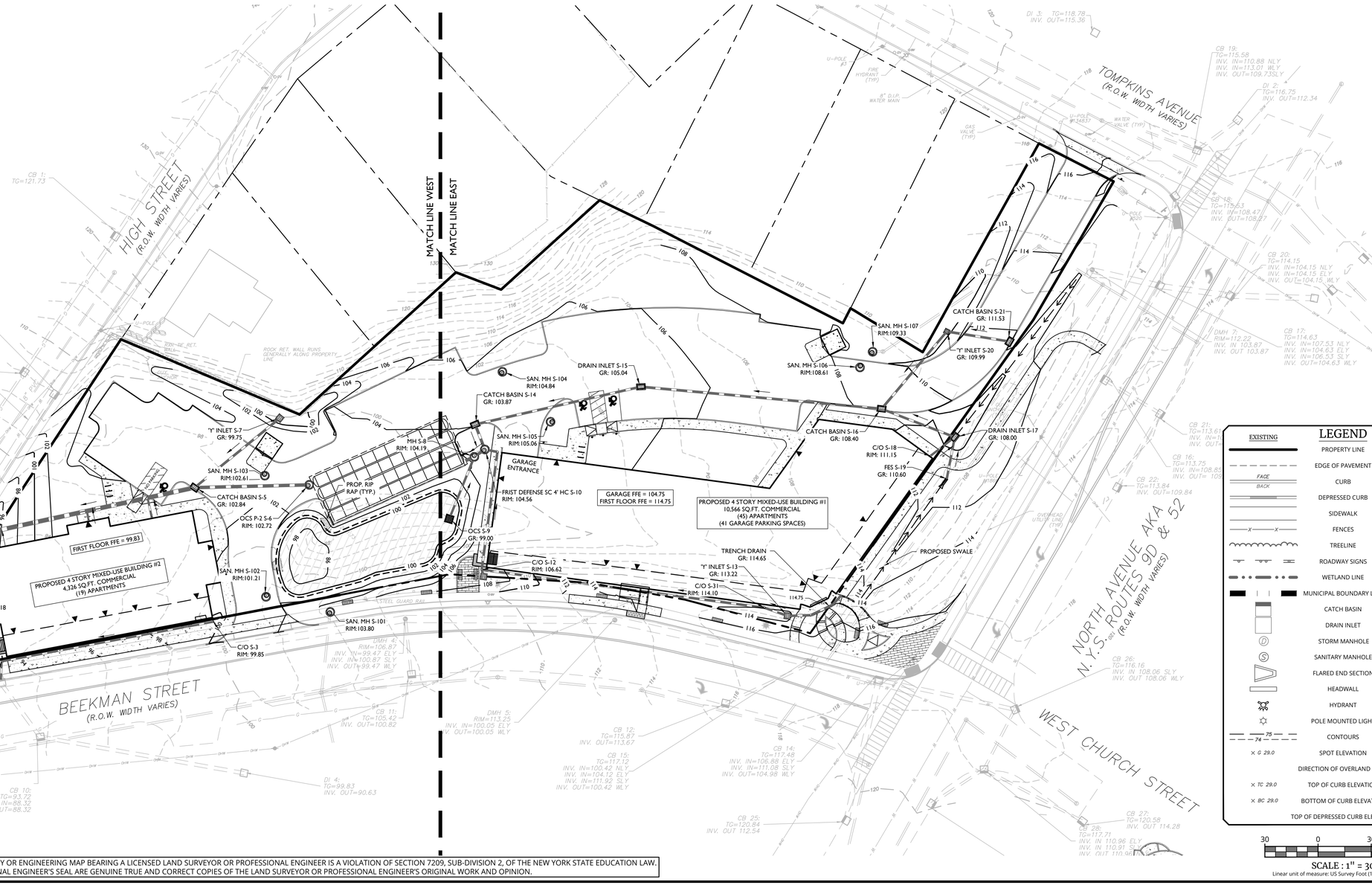
   C. LANDINGS -SHALL BE PROVIDED AT EACH END OF RAMPS, SHALL PROVIDE POSITIVE DRAINAGE, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.

   D. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - SHALL PROVIDE A 36 INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL. (CAR OVERHANGS CANNOT REDUCE THIS MINIMUM WIDTH), THE SLOPE SHALL BE NO GREATER THAN 1 :20 (5.0%) IN THE DIRECTION OF TRAVEL, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE.

   E. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), AN ADA RAMP WITH A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM DISTANCE OF 30 FEET, SHALL BE PROVIDED. THE RAMP SHALL HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.

   F. DOORWAYS - SHALL HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA SHALL BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHER WISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS (SEE APPLICABLE CODE SECTIONS).

2. IT IS RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE OFFICIAL PRIOR TO COMMENCING WORK.




## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE | |
| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | TREELINE | |
| | ROADWAY SIGNS | |
| | WETLAND LINE | |
| | MUNICIPAL BOUNDARY LINE | |
| | CATCH BASIN | |
| | DRAIN INLET | |
| D | STORM MANHOLE | D |
| S | SANITARY MANHOLE | S |
| | FLARED END SECTION | |
| | HEADWALL | |
| | HYDRANT | |
| | POLE MOUNTED LIGHT | |
| 75 / 74 | CONTOURS | 75 / 74 |
| × G 29.0 | SPOT ELEVATION | × G 29.0 |
| | DIRECTION OF OVERLAND FLOW | |
| × TC 29.0 | TOP OF CURB ELEVATION | × TC 29.0 |
| × BC 29.0 | BOTTOM OF CURB ELEVATION | × BC 29.0 |
| | TOP OF DEPRESSED CURB ELEVATION | × TDC 29.0 |

30 0 30 60

SCALE : 1" = 30'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

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2023\23010468A\Engineering\Site Plans\C-GRAD.dwg|C-DS-GRADING Overall By: KYLE SHALLOW

| REV | DATE | DRAWN BY | DESCRIPTION |
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LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

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TAX LOTS:
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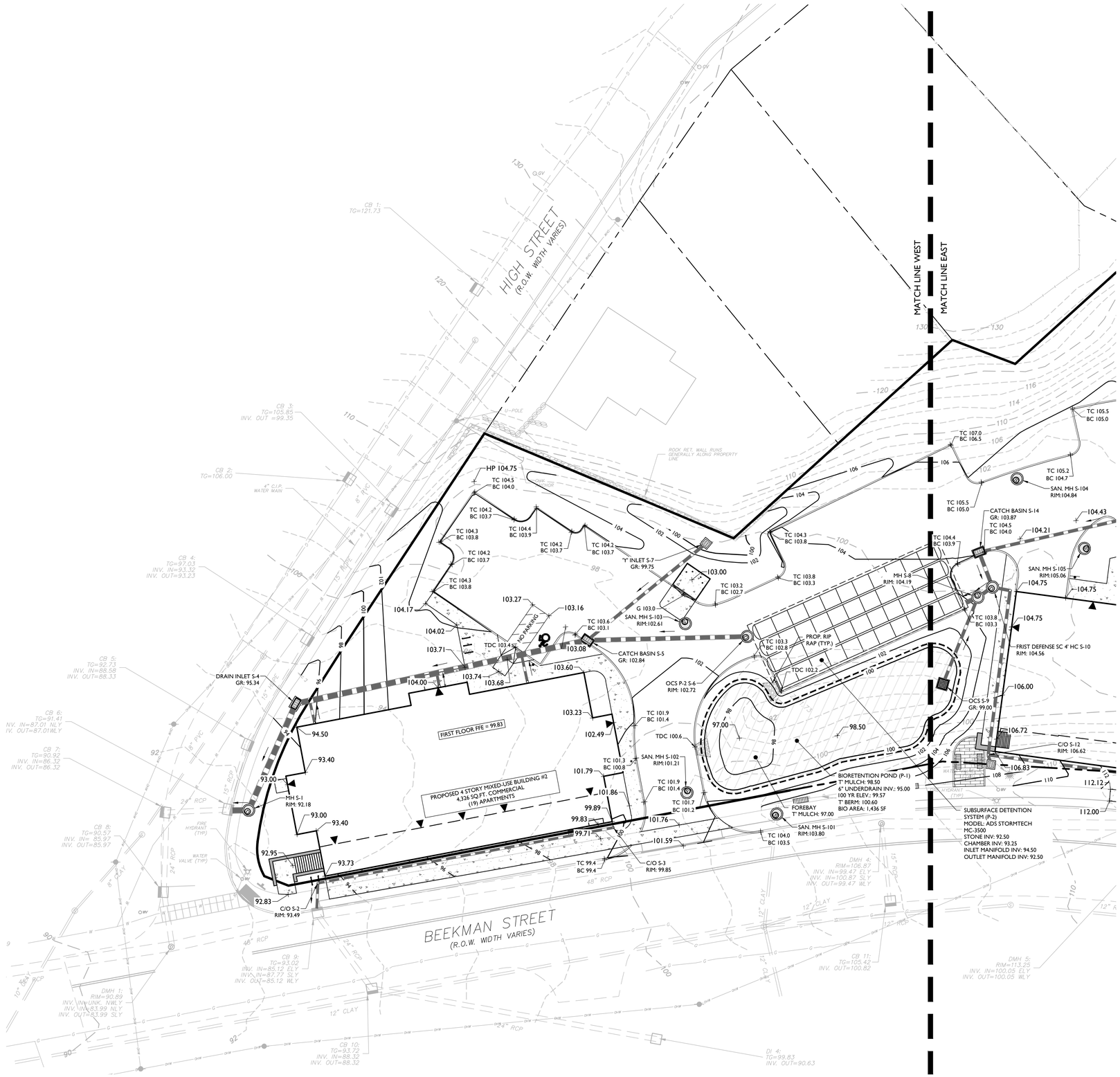
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|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-GRAD

SHEET TITLE: GRADING PLAN (OVERALL)

SHEET NUMBER: 05 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION


HIGH STREET
(R.O.W. WIDTH VARIES)
BEEKMAN STREET
(R.O.W. WIDTH VARIES)
MATCH LINE WEST
MATCH LINE EAST
PROPOSED 4 STORY MIXED-USE BUILDING #2
4,326 SQ.FT. COMMERCIAL
(19) APARTMENTS
FIRST FLOOR FFE = 99.83
ROCK RET. WALL RUNS GENERALLY ALONG PROPERTY LINE
BIORETENTION POND (P-1)
T' MULCH: 98.50
6" UNDERDRAIN INV.: 95.00
100 YR ELEV.: 99.57
T' BERM: 100.60
BIO AREA: 1,436 SF
FOREBAY
T' MULCH: 97.00
SUBSURFACE DETENTION SYSTEM (P-2)
MODEL: ADS STORMTECH MC-3500
STONE INV: 92.50
CHAMBER INV: 93.25
INLET MANIFOLD INV: 94.50
OUTLET MANIFOLD INV: 92.50
CB 1: TG=121.73
CB 2: TG=106.00
CB 3: TG=105.85 INV. OUT =99.35
CB 4: TG=97.03 INV. IN=93.39 INV. OUT=93.23
CB 5: TG=92.73 INV. IN=88.58 INV. OUT=88.33
CB 6: TG=91.41 INV. IN=87.01 NLY INV. OUT=87.01WLY
CB 7: TG=90.92 INV. IN=86.32 INV. OUT=86.32
CB 8: TG=90.57 INV. IN= 85.97 INV. OUT=85.97
CB 9: TG=93.02 INV. IN=85.12 ELY INV. IN=87.77 SLY INV. OUT=85.12 WLY
CB 10: TG=93.72 INV. IN=88.32 INV. OUT=88.32
CB 11: TG=105.42 INV. OUT=100.82
DMH 1: RIM=90.69 INV. IN UNK. NYL Y INV. IN=83.99 NLY INV. OUT=83.99 SLY
DMH 4: RIM=106.87 INV. IN=99.47 ELY INV. IN=100.87 SLY INV. OUT=99.47 WLY
DMH 5: RIM=113.25 INV. IN=100.05 ELY INV. OUT=100.05 WLY
DI 4: TG=99.83 INV. OUT=90.63
HP 104.75
TC 104.5 BC 104.0
TC 104.2 BC 103.7
TC 104.3 BC 103.8
TC 104.4 BC 103.9
'Y' INLET S-7 GR: 99.75
103.00
TC 103.2 BC 102.7
G 103.0
SAN. MH S-103 RIM:102.61
TC 103.6 BC 103.1
TDC 103.4
NO PARKING
CATCH BASIN S-5 GR: 102.84
103.08
103.60
103.74
103.68
104.00
DRAIN INLET S-4 GR: 95.34
94.50
93.40
93.00
MH S-1 RIM: 92.18
92.95
93.73
92.83
C/O S-2 RIM: 93.49
103.27
103.16
104.17
104.02
103.71
OCS P-2 S-6 RIM: 102.72
TC 101.9 BC 101.4
103.23
102.49
TDC 100.6
SAN. MH S-102 RIM:101.21
TC 101.3 BC 100.8
101.79
101.86
99.89
99.83
99.71
TC 101.9 BC 101.4
TC 101.7 BC 101.2
101.76
101.59
TC 99.4 BC 99.4
C/O S-3 RIM: 99.85
TC 104.3 BC 103.8
TC 104.4 BC 103.9
TC 104.2 BC 103.7
TC 104.2 BC 103.7
TC 104.3 BC 103.8
TC 103.8 BC 103.3
MH S-8 RIM: 104.19
TC 103.2 BC 102.7
TC 103.3 BC 102.8
PROP. RIP RAP (TYP.)
TDC 102.2
SAN. MH S-101 RIM:103.80
TC 104.0 BC 103.5
CATCH BASIN S-14 GR: 103.87
TC 104.5 BC 104.0
104.43
104.21
SAN. MH S-105 RIM:105.06
104.75
104.75
TC 103.8 BC 103.3
104.75
FRIST DEFENSE SC 4' HC S-10 RIM: 104.56
106.00
OCS S-9 GR: 99.00
106.72
C/O S-12 RIM: 106.62
106.83
112.12
112.00
TC 107.0 BC 106.5
TC 105.5 BC 105.0
TC 105.2 BC 104.7
SAN. MH S-104 RIM:104.84
TC 105.5 BC 105.0
24" C.I.P. WATER MAIN
8" PVC
15" RCP
24" RCP
48" RCP
12" CLAY
10" DIP
FIRE HYDRANT (TYP)
WATER VALVE (TYP)
U/G ELEC
U/G TEL
U/G GAS
U/G CATV
U/G WATER
U/G SEWER
U/G DRAIN
U/G ELEC
U/G TEL
U/G GAS
U/G CATV
U/G WATER
U/G SEWER
U/G DRAIN
U/G ELEC
U/G TEL
U/G GAS
U/G CATV
U/G WATER
U/G SEWER
U/G DRAIN
U-POLE
O/HW
O/HW
O/HW




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| EXISTING | | PROPOSED |
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| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | TREELINE | |
| | ROADWAY SIGNS | |
| | WETLAND LINE | |
| | MUNICIPAL BOUNDARY LINE | |
| | CATCH BASIN | |
| | DRAIN INLET | |
| (D) | STORM MANHOLE | (D) |
| (S) | SANITARY MANHOLE | (S) |
| | FLARED END SECTION | |
| | HEADWALL | |
| | HYDRANT | |
| | POLE MOUNTED LIGHT | |
| 75 / 74 | CONTOURS | 75 / 74 |
| × G 29.0 | SPOT ELEVATION | × G 29.0 |
| | DIRECTION OF OVERLAND FLOW | |
| × TC 29.0 | TOP OF CURB ELEVATION | × TC 29.0 |
| × BC 29.0 | BOTTOM OF CURB ELEVATION | × BC 29.0 |
| | TOP OF DEPRESSED CURB ELEVATION | × TDC 29.0 |

20 0 20 40

SCALE : 1" = 20'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

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PROJECT NUMBER: 23010468A
DRAWING NAME: C-GRAD

SHEET TITLE: GRADING PLAN (EAST)

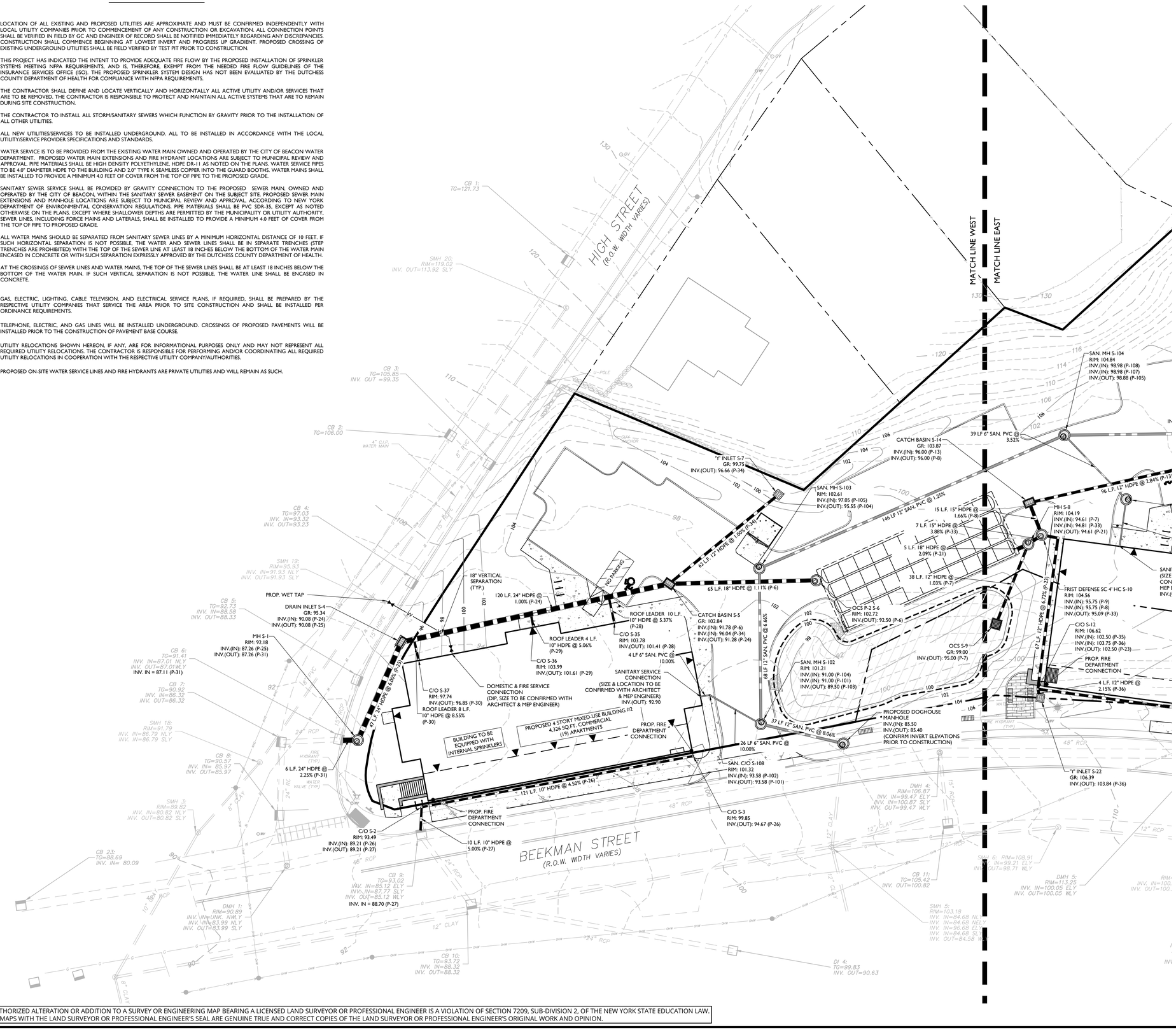
SHEET NUMBER: 07 of 19

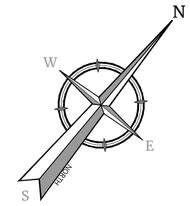
2023\23010468A\Engineering\Site Plans\C-GRAD.dwg|C-07-GRADING EAST
By: KYLE SHALLOW

513

# UTILITY NOTES

1. LOCATION OF ALL EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL CONNECTION POINTS SHALL BE VERIFIED IN FIELD BY GC AND ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY REGARDING ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT LOWEST INVERT AND PROGRESS UP GRADIENT. PROPOSED CROSSING OF EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO CONSTRUCTION.
2. THIS PROJECT HAS INDICATED THE INTENT TO PROVIDE ADEQUATE FIRE FLOW BY THE PROPOSED INSTALLATION OF SPRINKLER SYSTEMS MEETING NFPA REQUIREMENTS, AND IS, THEREFORE, EXEMPT FROM THE NEEDED FIRE FLOW GUIDELINES OF THE INSURANCE SERVICES OFFICE (ISO). THE PROPOSED SPRINKLER SYSTEM DESIGN HAS NOT BEEN EVALUATED BY THE DUTCHESS COUNTY DEPARTMENT OF HEALTH FOR COMPLIANCE WITH NFPA REQUIREMENTS.
3. THE CONTRACTOR SHALL DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICES THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE TO REMAIN DURING SITE CONSTRUCTION.
4. THE CONTRACTOR TO INSTALL ALL STORM/SANITARY SEWERS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
5. ALL NEW UTILITIES/SERVICES TO BE INSTALLED UNDERGROUND. ALL TO BE INSTALLED IN ACCORDANCE WITH THE LOCAL UTILITY/SERVICE PROVIDER SPECIFICATIONS AND STANDARDS.
6. WATER SERVICE IS TO BE PROVIDED FROM THE EXISTING WATER MAIN OWNED AND OPERATED BY THE CITY OF BEACON WATER DEPARTMENT. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL. PIPE MATERIALS SHALL BE HIGH DENSITY POLYETHYLENE, HDPE DR-11 AS NOTED ON THE PLANS. WATER SERVICE PIPES TO BE 4.0" DIAMETER HDPE TO THE BUILDING AND 2.0" TYPE K SEAMLESS COPPER INTO THE GUARD BOOTHS. WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM 4.0 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
7. SANITARY SEWER SERVICE SHALL BE PROVIDED BY GRAVITY CONNECTION TO THE PROPOSED SEWER MAIN, OWNED AND OPERATED BY THE CITY OF BEACON, WITHIN THE SANITARY SEWER EASEMENT ON THE SUBJECT SITE. PROPOSED SEWER MAIN EXTENSIONS AND MANHOLE LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL, ACCORDING TO NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION REGULATIONS, PIPE MATERIALS SHALL BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 4.0 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED GRADE.
8. ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY SEWER LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE DUTCHESS COUNTY DEPARTMENT OF HEALTH.
9. AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.
10. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE REQUIREMENTS.
11. TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
12. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.
13. PROPOSED ON-SITE WATER SERVICE LINES AND FIRE HYDRANTS ARE PRIVATE UTILITIES AND WILL REMAIN AS SUCH.




## LEGEND

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|---|---|---|
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| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | TREELINE | |
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| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-UTIL

SHEET TITLE: UTILITIES PLAN (WEST)

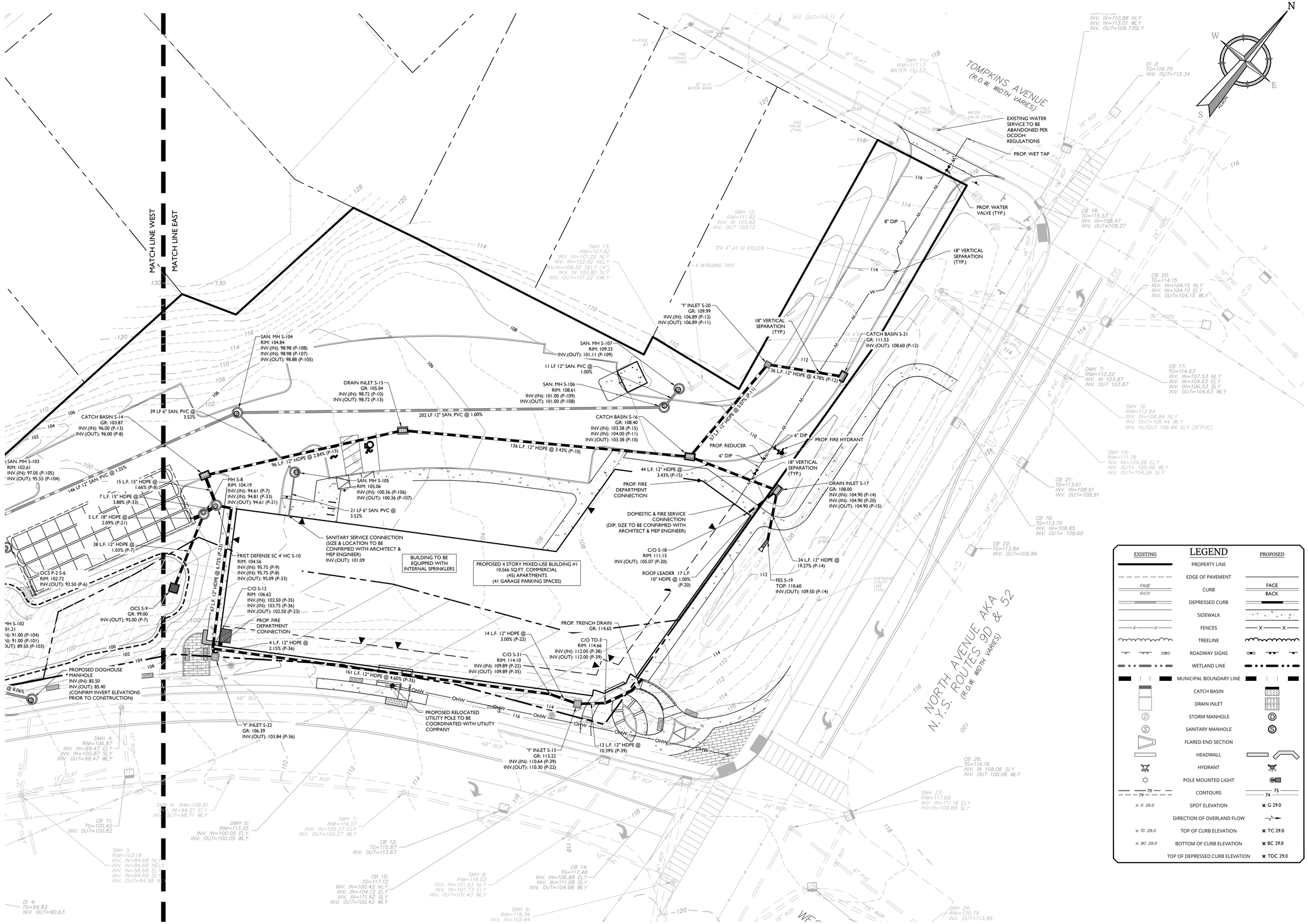
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2023\23010468A\Engineering\Site Plans\C-UTIL.dwg|C-08 UTILITY By: KYLE SHALLOW




## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE | |
| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | TREELINE | |
| | ROADWAY SIGNS | |
| | WETLAND LINE | |
| | MUNICIPAL BOUNDARY LINE | |
| | CATCH BASIN | |
| | DRAIN INLET | |
| (D) | STORM MANHOLE | (D) |
| (S) | SANITARY MANHOLE | (S) |
| | FLARED END SECTION | |
| | HEADWALL | |
| | HYDRANT | |
| | POLE MOUNTED LIGHT | |
| 75 / 74 | CONTOURS | 75 / 74 |
| × G 29.0 | SPOT ELEVATION | × G 29.0 |
| | DIRECTION OF OVERLAND FLOW | |
| × TC 29.0 | TOP OF CURB ELEVATION | × TC 29.0 |
| × BC 29.0 | BOTTOM OF CURB ELEVATION | × BC 29.0 |
| | TOP OF DEPRESSED CURB ELEVATION | × TDC 29.0 |

20 0 20 40

SCALE : 1" = 20'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-UTIL.dwg\C-09-UTILITY By: KYLE SHALLOW

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
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Date: 2025.01.02 10:25:41-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

# BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

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| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |
| PROJECT NUMBER: 23010468A | DRAWING NAME: C-UTIL | | |

SHEET TITLE:
UTILITIES PLAN (EAST)

SHEET NUMBER:
09 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

# GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FOURTEEN (14) DAYS FOR DISTURBANCES LESS THAN FIVE (5) ACRES AND SEVEN (7) DAYS FOR DISTURBANCES GREATER THAN FIVE (5) ACRES, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
3. PERMANENT VEGETATION TO BE SEEDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCHING IS REQUIRED ON ALL SEEDING. WHEN HYDROSEEDING, MULCH SHALL NOT BE INCLUDED IN THE TANK WITH THE SEED.
4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE 2016 NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL OR AS AMENDED.
5. A SUBBASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUBBASE SHALL BE INSTALLED WITHIN FIVE (5) DAYS OF THE PRELIMINARY GRADING.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION CONTINUES (I.E. SLOPES GREATER THAN 3:1).
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A STONE PAD, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
9. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE (12) INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF TWENTY-FOUR (24) INCHES OF SOIL HAVING A PH OF 5 OR MORE.
10. AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.
11. CONDUIT OUTLET PROTECTION MUST BE REVIEWED & SUPPLEMENTED AT ALL OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
12. UNFILTERED DEWATERING IS NOT PERMITTED. TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH STATE STANDARDS.
13. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.
14. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY WILL BE REMOVED IMMEDIATELY.
15. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION AND SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
16. STOCKPILE AND STAGING LOCATIONS DETERMINED IN THE FIELD, SHALL BE PLACED WITHIN THE LIMITS OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN.
17. CONCRETE WASHOUT, DUMPSTER, & STAGING AREA LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED AT THE PRE-CONSTRUCITON MEETING. THEY SHALL BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE AND STAGING AREAS AND SHALL BE USED PRIOR TO EXITING THE PROJECT SITE. THE LOCATION SHALL BE IN A PRACTICAL, CLEARLY DELINEATED, AREA AND BE MAINTAINED THROUGHOUT CONSTRUCTION.
18. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
19. ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED BY THE PROPERTY OWNER, AND SHALL BECOME THEIR RESPONSIBILITY.
20. PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES.
21. DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR CONTROL SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLAN SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE MUNICIPAL ENGINEER.
22. ALL TEMPORARY, STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES CAN BE REMOVED, WHEN ALL CONSTRUCTION ACTIVITY IDENTIFIED IN THE SWPPP HAS BEEN COMPLETED, ALL AREAS OF DISTURBANCE HAVE ACHIEVED FINAL STABILIZATION** AND ALL POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE SWPPP AND ARE OPERATIONAL.
23. BOTTOM AND BERM ELEVATIONS OF TEMPORARY SEDIMENT BASINS TO BE REVIEWED WITH THE CONTRACTOR BASED ON THEIR PROPOSED CONSTRUCTION SEQUENCE FOR THE PROJECT.

# CONSTRUCTION SEQUENCE

- INSTALL CONSTRUCTION ENTRANCES.
- STAKE LIMITS OF DISTURBANCE AND ORANGE CONSTRUCTION FENCE.
- INSTALL PERIMETER SILT FENCING ON DOWNHILL AREAS AS SHOWN ON PLAN.
- INSTALL SEDIMENT PONDS. INSTALL TEMPORARY SWALES TO DIRECT ALL OPEN SOIL AREA DISTURBANCE TO SEDIMENT PONDS, AS NECESSARY. LOCATIONS AND SIZE OF THE EROSIONS AND SEDIMENT CONTROL PRACTICES ARE NOTED ON THE PLAN. THESE MAY VARY DEPENDING ON THE CONTRACTOR'S SCHEDULE AND APPROACH BUT 3,600 CF OF STORAGE MUST BE PROVIDED AT A MINIMUM PER ACRE OF UPSTREAM DISTURBANCE. SEDIMENT TRAPS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND DETAILS. SEDIMENT TRAPS AND BASINS SHALL BE SIZED IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL MANUAL.
- SEDIMENT POND RESTORATION: WHEN TEMPORARY STRUCTURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, THE EMBANKMENT AND RESULTING SEDIMENT DEPOSITS ARE TO BE LEVELED OR OTHERWISE DISPOSED OF. SEDIMENT CAN BE DISPOSED OF BY EXPORTING IT OFF SITE FOR DISPOSAL OR BE USED AS FILL IN LAWN AREAS. SEDIMENT PONDS IN FUTURE OPEN SPACE OR LAWN AREAS MAY BE PUMPED DRY, GRADED, AND BACKFILLED. SEDIMENT PONDS IN PAVED OR STRUCTURAL AREAS MUST HAVE THE BASIN MATERIAL AND TRAPPED SEDIMENTS REMOVED, SAFELY DISPOSED OF, AND BACKFILLED WITH STRUCTURAL FILL. SEDIMENT PONDS IN LOCATIONS OF FUTURE STORMWATER PONDS MUST HAVE THE TRAPPED SEDIMENT REMOVED LEAVING THE BASIN AREA OPEN FOR THE DEVELOPMENT OF THE FINAL STORMWATER POND.
- ROUGH GRADE PROPOSED DRIVEWAY/ROAD.
- DISTURBED SOILS SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICAL. MATERIALS STORED IN STOCKPILES SHALL BE CORDONED OFF WITH SILT FENCE PER THE APPROPRIATE SPECIFICATIONS AND DETAILS. THE OPERATOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
- CONSTRUCT ROADS, DRIVES, BUILDINGS, PARKING AREAS AND INSTALL DRAINAGE SYSTEMS.
- TOPSOIL/HAYSEED LAWN AREAS.
- THE PROJECT SITE MUST MEET FINAL STABILIZATION CRITERIA PRIOR TO REMOVING ALL EROSION AND SEDIMENT CONTROL DEVICES AND CLOSING OUT THE PROJECT. LITTER AND CONSTRUCTION DEBRIS SHALL BE REMOVED AS PRACTICAL THROUGHOUT THE LIFE OF THE PROJECT.
- UPON FINAL STABILIZATION BEING MET, THE CONTRACTOR SHALL CLEAR DRAINAGE PIPES AND STRUCTURES OF ANY SEDIMENT WHICH MAY HAVE ACCUMULATED. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED, AS MAY BE NECESSARY, REQUIRED AND/OR REQUESTED BY AUTHORITIES, TO PREVENT THE INCIDENTAL DISCHARGE OF SILT LADEN RUNOFF FROM ENTERING A WATER COURSE OR A DRAINAGE SYSTEM. THE GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES STATES THAT IT IS UNLAWFUL FOR ANY PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS.
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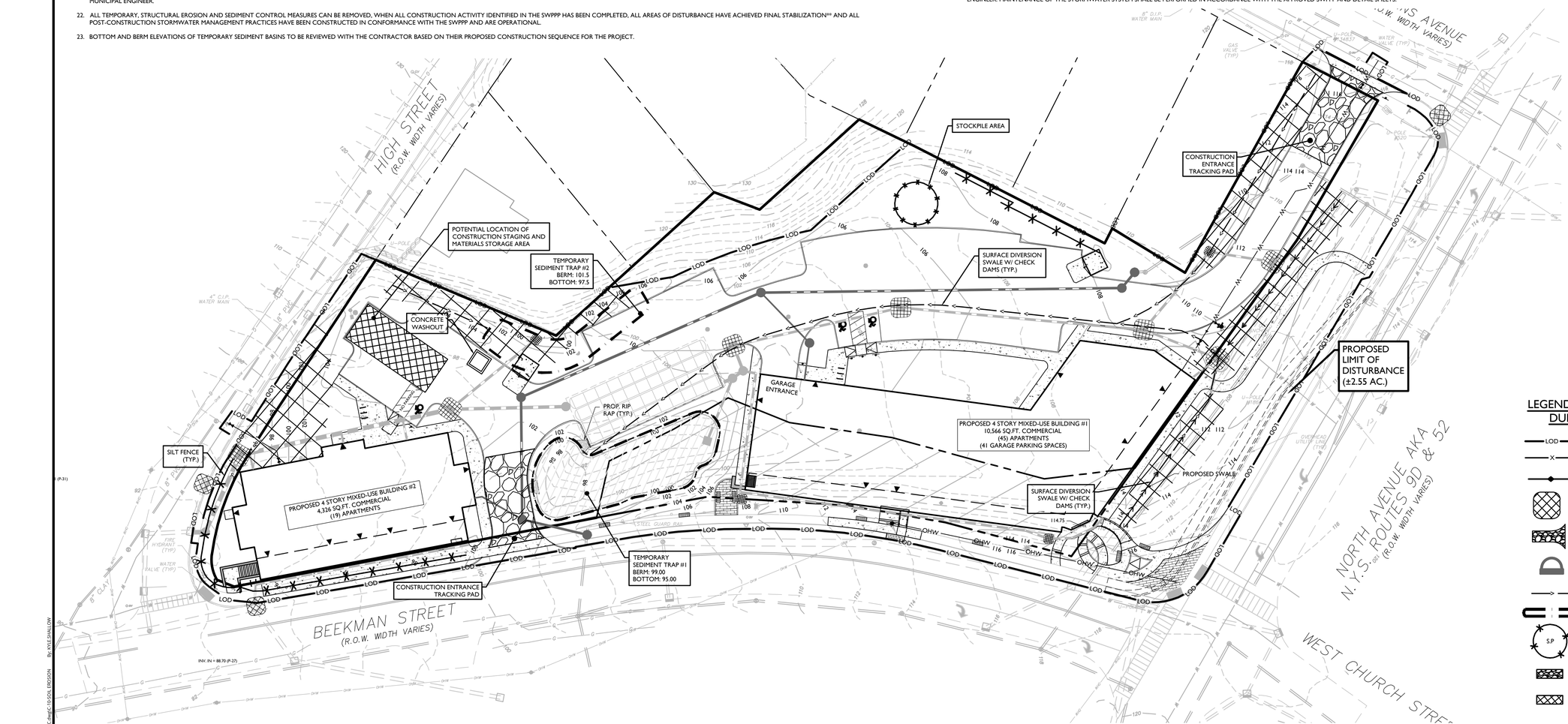
**FINAL STABILIZATION - MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES, SUCH AS PERMANENT LANDSCAPE MULCHES, ROCK RIP-RAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.

MAINTENANCE PLAN DURING CONSTRUCTION:

INSPECTION AND MAINTENANCE SHALL BE PERFORMED IN CONFORMANCE WITH GP-0-20-001 OR AS AMENDED. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED AND INSTALLED FOR THE PROJECT. THE SEDIMENT TRAPS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 25% OF ITS' CAPACITY. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES APPROXIMATELY 6" DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE LANDSCAPE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

MAINTENANCE AGREEMENT NOTE:

THE OWNER/APPLICANT SHALL ENTER INTO AN ENFORCEABLE MAINTENANCE AGREEMENT WITH THE MUNICIPALITY (IF AN MS4 COMMUNITY). RELATED TO MAINTENANCE OF STORMWATER FACILITIES. THE OWNER/APPLICANT IS RESPONSIBLE TO PERFORM ALL REQUIRED MAINTENANCE BOTH DURING CONSTRUCTION AND LONG-TERM. THE NATURE OF THE AGREEMENT IS TO ALLOW THE MUNICIPALITY TO PERFORM MAINTENANCE AT THEIR OPTION SHOULD THE OWNER/APPLICANT FAIL TO ADEQUATELY MAINTAIN THE SYSTEM AS DETERMINED BY THE MUNICIPAL ENGINEER. MAINTENANCE OF THE STORMWATER SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED SWPPP AND DETAIL SHEETS.




## LEGEND FOR EROSION CONTROL DURING CONSTRUCTION

- LOD — CONSTRUCTION LIMIT LINE
- X — SILT FENCE
- ORANGE CONSTRUCTION FENCE
- STORM INLET SEDIMENT TRAP
- STABILIZED CONSTRUCTION ENTRANCE
- SEDIMENT TRAP OUTLET
- TEMPORARY SWALE
- TEMPORARY SEDIMENT BASIN
- S.P — MATERIAL STOCKPILE
- CHECK DAM
- SLOPE MATTING

30 0 30 60

SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

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| REV | DATE | DRAWN BY | DESCRIPTION |
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| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
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SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
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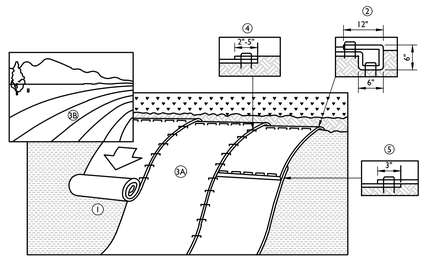
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| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
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| AS SHOWN | 01/30/2024 | KAS | CPM |
| PROJECT NUMBER: 23010468A | DRAWING NAME: C-SESC | | |

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

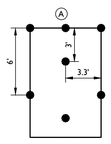
SHEET NUMBER:
10 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

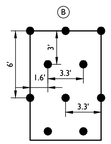



SLOPE INSTALLATION

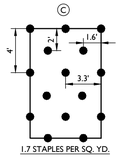
STAPLES PATTERN GUIDE
6.67' WIDE ROLLS




0.7 STAPLES PER SQ. YD.




1.15 STAPLES PER SQ. YD.



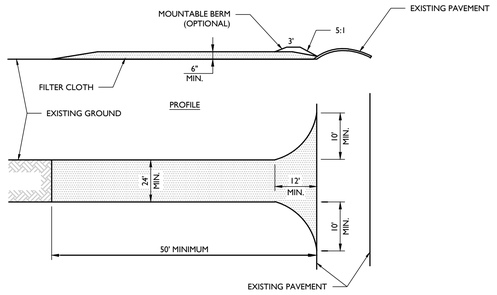

1.7 STAPLES PER SQ. YD.

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
   * WHEN USING MATTING WITH SEED, DO NOT SEED THE AREA. FOLLOW MANUFACTURER'S RECOMMENDATIONS.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP x 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECPS BACK OVER SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY STEP BY STEP ACROSS THE SLOPE TAMPERING IT DOWN ALONG THE WAY. RECP'S SHALL UNROLL WITH APPROPRIATE SIDE TIGHTLY AGAINST THE SOIL SURFACE. RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKESSHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAKED WITH APPROXIMATELY 2" TO 5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.
6. MATTING SHALL BE 100% BIODEGRADABLE
   * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

## EROSION MATTING DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-2200 | 07/01/19



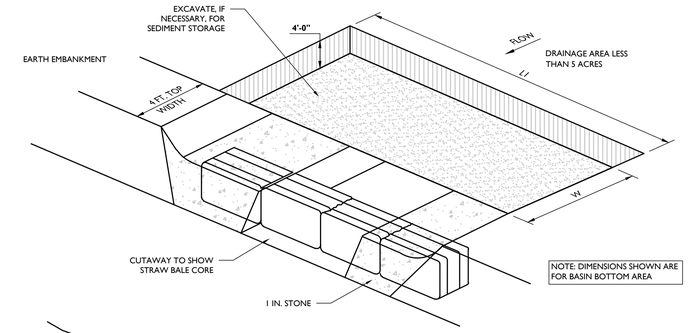

PLAN VIEW

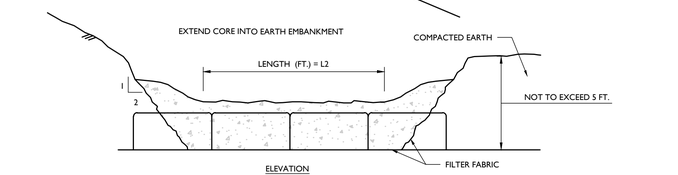
NOTES:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. LENGTH: NOT LESS THAN 50 FEET. THICKNESS: NOT LESS THAN (6) INCHES.
2. WIDTH - 24'
3. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
4. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTING BERM WITH 5:1 SLOPES WILL BE PERMITTED.
5. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
6. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.

## STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-1000 | 07/01/19




ELEVATION

TO BE INSTALLED PRIOR TO GRADING OR FILLING IN THE DRAINAGE AREA THEY ARE TO PROTECT. TRAPS THAT ARE TO FUNCTION DURING BUILDING CONSTRUCTION MUST NOT BE LOCATED WITHIN 20 FEET OF A PROPOSED BUILDING FOUNDATION. WHILE TRAPS SHOULD BE SITED TO MAXIMIZE STORAGE BENEFIT, THEY SHOULD NOT BE LOCATED IN WETLANDS OR WETLAND BUFFER AREAS, OR IN EXISTING WATERCOURSES.

SEE EROSION AND SEDIMENT CONTROL PLAN FOR LOCATIONS.

INSTALLATION NOTES:

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED AS WELL.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER SIZED STONES, ROCKS, ORGANIC MATERIAL AND OTHER QUESTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
6. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
7. ALL CUT AND FILL SLOPES SHALL BE 1 : 2 OR FLATTER.
8. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.

SIZING CALCULATIONS

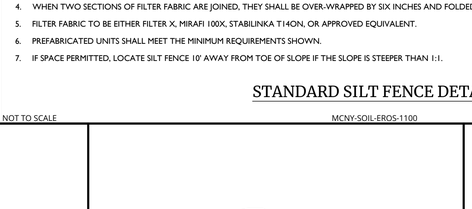
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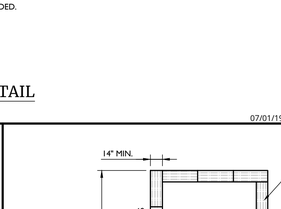
1. 3,600 CUBIC FEET OF STORAGE REQUIRED PER ACRE OF DISTURBANCE.

*THIS IS THE MINIMUM AMOUNT OF SEDIMENT TRAPS, ADDITIONAL MAY BE REQUIRED BASED UPON OTHER ON-SITE CONDITIONS AND CONTRACTOR SCHEDULE AND PHASING ACTIVITIES.

## STONE OUTLET SEDIMENT TRAP DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-1601 | 07/01/19



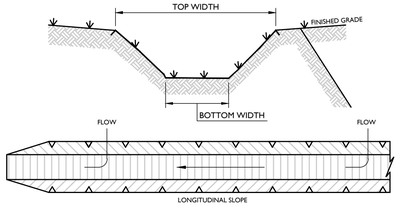




NOTES:

1. GEOTEXTILE TO BE FASTENED SECURELY TO FENCE POST BY USING WIRE TIES OR HOG RINGS. USE 3 FASTENERS PER POST.
2. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
3. ALL SILT FENCE TO BE INSPECTED AND REMEDIAL MAINTENANCE PERFORMED BY THE CONTRACTOR AS REQUIRED. MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
4. WHEN TWO SECTIONS OF FILTER FABRIC ARE JOINED, THEY SHALL BE OVER-WRAPPED BY SIX INCHES AND FOLDED.
5. FILTER FABRIC TO BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
6. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
7. IF SPACE PERMITTED, LOCATE SILT FENCE 10' AWAY FROM TOE OF SLOPE IF THE SLOPE IS STEEPER THAN 1:1.

## STANDARD SILT FENCE DETAIL

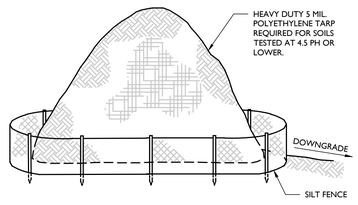
NOT TO SCALE | MCNY-SOIL-EROS-1100 | 07/01/19




PLAN

| VEGETATED SWALE | | | | | |
|---|---|---|---|---|---|
| SWALE | BOTTOM WIDTH | SIDE SLOPE | LONGITUDINAL SLOPE | DEPTH | LENGTH |
| 1R | 2.0 FT | 50% | 2.00% | | 506' |

## VEGETATIVE SWALE DETAIL

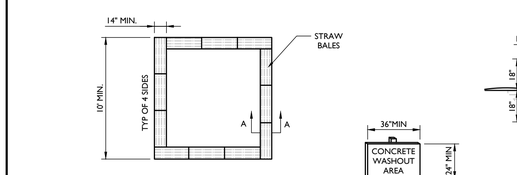



NOTES:

1. ALL STOCKPILES SHALL NOT TO BE LOCATED WITHIN 50 FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY.

## TOPSOIL STOCKPILE DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-2500 | 07/01/19




DETAIL NOTES:

1. FACE SIGN TOWARDS NEAREST STREET OR ACCESS POINT.
2. CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 50 FT. MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.

NOTES:

1. CONCRETE WASHOUTS ARE REQUIRED ON ALL CONSTRUCTION SITES INVOLVING CONCRETE AND STUCCO USE.
2. THE CONTRACTOR SHALL REQUIRE ALL CONCRETE DRIVERS TO UTILIZE THE CONCRETE WASHOUTS ONSITE.
3. WASHOUT FACILITIES SHALL BE LOCATED AT LEAST 50 FEET AWAY FROM STORM SEWER DRAIN INLETS, GUTTERS, OPEN DITCHES, AND WATER COURSES.
4. APPROPRIATE STONE SHOULD COVER PATHS TO CONCRETE WASHOUT.
5. THE NUMBER OF CONCRETE WASHOUTS DEPENDS ON THE EXPECTED DEMAND FOR STORAGE CAPACITY. LARGE SITES WITH EXTENSIVE CONCRETE WORK SHALL BE PLACED AT MULTIPLE LOCATIONS FOR USE BY CONCRETE TRUCK DRIVERS.
6. CONCRETE WASHOUT AREAS SHALL BE IDENTIFIED BY POSTING SIGNS ONSITE.
7. CONCRETE WASHOUTS ARE TO BE INSPECTED DAILY BY THE CONTRACTOR FOR LEAKS OR TEARS IN PLASTIC LINER.
8. REMOVE AND DISPOSE OF ALL MATERIAL WHEN THE WASHOUT HAS BEEN FILLED TO 75% CAPACITY.
9. PRIOR TO ANY RAINFALL, ALL CONCRETE WASHOUTS ARE TO BE CLEANED OUT OR COVERED.
10. ONCE THE MATERIAL HAS BEEN CLEANED OUT OF THE CONCRETE WASHOUT FACILITY, THE FACILITY MUST BE INSPECTED FOR REPAIR, RECONSTRUCTION OR REPLACEMENT. ALL PLASTIC LINING SHALL BE REMOVED AND REPLACED.
11. PRE-FABRICATED OR ONSITE FABRICATED CONCRETE WASHOUTS MAY BE USED.
12. OPTIONS FOR ONSITE CONCRETE WASHOUTS:
    A. DIG A PIT AND LINE WITH 10 MIL PLASTIC SHEETING.
    B. CREATE AN ABOVE-GROUND STRUCTURE FROM STRAW BALES OR SANDBAGS WITH 10 MIL PLASTIC LINING.

## CONCRETE WASHOUT DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-1700 | 07/01/19

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2023\23010468A\Engineering\Site Plans\C-SESC.dwg|C-11-SOIL EROSION DETAILS By:KYLE SHALLOW

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Justin Eric Dates
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LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN
FOR
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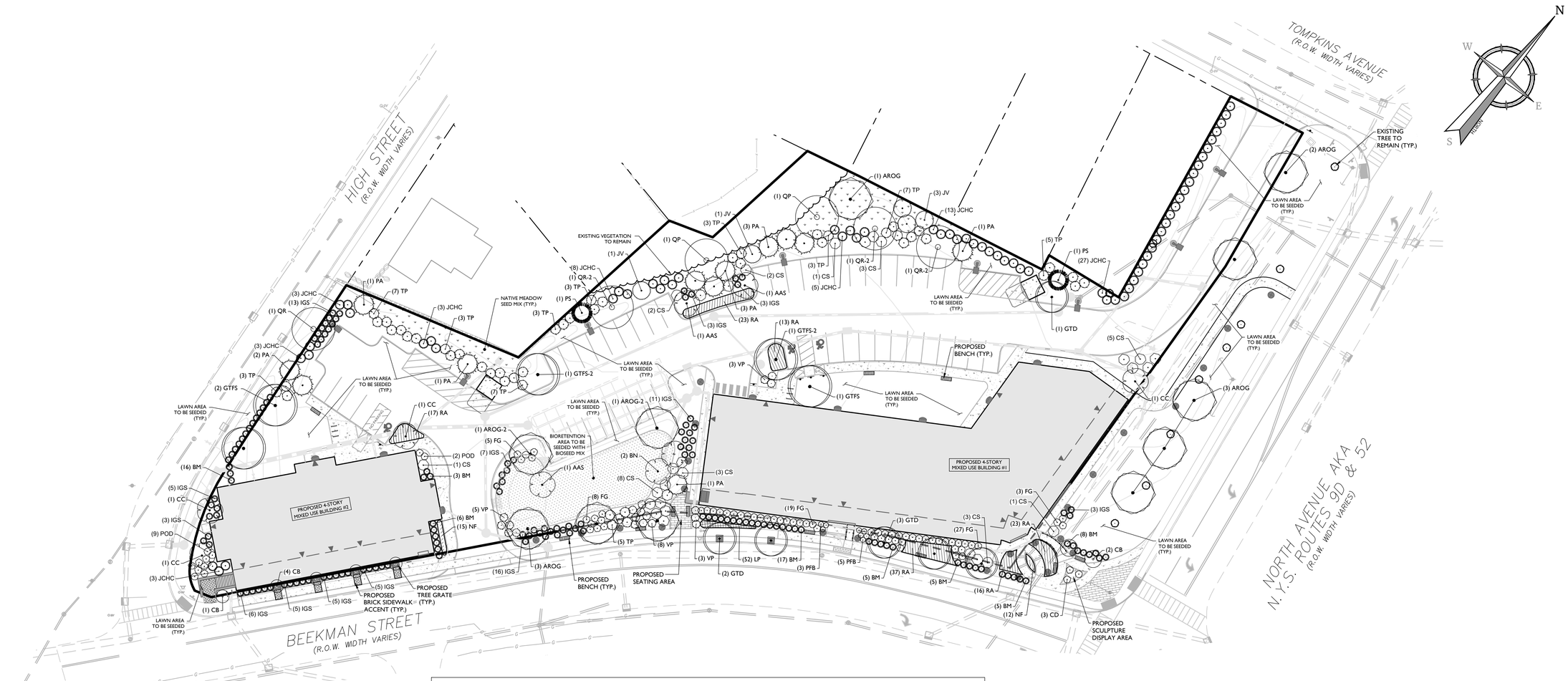
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SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL DETAILS

SHEET NUMBER:
11 of 19

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## SITE PLANTING SCHEDULE

| DECIDUOUS TREES | QTY | BOTANICAL NAME | COMMON NAME | ROOT | SIZE | REMARKS |
|---|---|---|---|---|---|---|
| AROG | 9 | Acer rubrum 'October Glory' | October Glory Red Maple | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| AROG-2 | 2 | Acer rubrum 'October Glory' | October Glory Red Maple | B & B | 3"-3-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| GTD | 6 | Gleditsia triacanthos 'Draves' | Street Keeper Honeylocust | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| GTFS | 3 | Gleditsia triacanthos 'Skyline' | Skyline Honey Honeylocust | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| GTFS-2 | 2 | Gleditsia triacanthos 'Skyline' | Skyline Honey Honeylocust | B & B | 3"-3-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| QP | 2 | Quercus palustris | Pin Oak | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| QR | 1 | Quercus rubra | Red Oak | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| QR-2 | 3 | Quercus rubra | Red Oak | B & B | 3"-3-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| **EVERGREEN TREES** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **ROOT** | **SIZE** | **REMARKS** |
| JV | 5 | Juniperus virginiana | Eastern Red Cedar | B & B | 6-8` Ht. | DENSE / TYP. SPECIES HABIT |
| PA | 12 | Picea abies | Norway Spruce | B & B | 6-8` Ht. | DENSE / TYP. SPECIES HABIT |
| PS | 2 | Pinus strobus | Eastern White Pine | B & B | 6-8` Ht. | DENSE / TYP. SPECIES HABIT |
| **ORNAMENTAL TREES** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **ROOT** | **SIZE** | **REMARKS** |
| AAS | 3 | Amelanchier alnifolia | Serviceberry | B & B | 6-7` Ht. | MULTISTEM / TYP. SPECIES HABIT |
| BN | 2 | Betula nigra | River Birch | B & B | 6-7' Ht. | MULTISTEM / TYP. SPECIES HABIT |
| CB | 7 | Carpinus betulus 'Frans Fontaine' | Frans Fontaine Hornbeam | B & B | 1-3/4"-2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| CC | 4 | Cercis canadens | Eastern Redbud | B & B | 6-7` Ht. | STRAIGHT LEADER/SYM. BRANCHING |
| **SHRUBS** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **ROOT** | **SIZE** | **REMARKS** |
| CD | 3 | Cotoneaster dammeri 'Coral Beauty' | Coral Beauty Cotoneaster | CONT | 18" - 24" SPREAD | TYPICAL SPECIES HABIT |
| CS | 29 | Cornus sericea | Red Twig Dogwood | CONT | 24" - 30" | TYPICAL SPECIES HABIT |
| BM | 53 | Buxus microphylla var. japonica 'Winter Gem' | Winter Gem Boxwood | CONT | 18" - 24" | TYPICAL SPECIES HABIT |
| FG | 62 | Fothergilla gardenii | Dwarf Fothergilla | CONT | 18" - 24" | TYPICAL SPECIES HABIT |
| IGS | 85 | Ilex glabra `Shamrock` | Inkberry | CONT | 18" - 24" | TYPICAL SPECIES HABIT |
| JCHC | 60 | Juniperus chinensis 'Hetzii Columnaris' | Hetzi Column Juniper | CONT | 6-8` Ht. | TYPICAL SPECIES HABIT |
| PFB | 11 | Potentilla fruticosa | Bush Cinquefoil | CONT | 18" - 24" | TYPICAL SPECIES HABIT |
| POD | 11 | Physocarpus opulifolius 'Diabolo' | Diabolo Ninebark | CONT | 24" - 30" | TYPICAL SPECIES HABIT |
| RA | 129 | Rhus aromatica 'Gro-Low' | Gro-Low Fragrant Sumac | CONT | 12" - 18" SPREAD | TYPICAL SPECIES HABIT, 3.5' O.C. |
| TP | 49 | Thuja x plicata 'Green Giant' | Green Giant Arborvitae | CONT | 5-6' Ht. | TYPICAL SPECIES HABIT |
| VP | 19 | Viburnum prunifolium | Blackhaw Viburnum | CONT | 24" - 30" | TYPICAL SPECIES HABIT |
| **GROUND COVERS** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **CONT** | **SPACING** | |
| LP | 52 | Liriope platyphylla | Liriope Grass | SPS | 18" o.c. | |
| NF | 27 | Nepeta x faassenii | Catmint | 1 gal. | 24" o.c. | |

## PLAN NOTE

1. THIS PLAN IS TO BE USED FOR LANDSCAPE PURPOSES ONLY. REFER TO DETAIL SHEETS FOR GENERAL NOTES AND LANDSCAPE DETAILS.

## PARKING AREA TREES

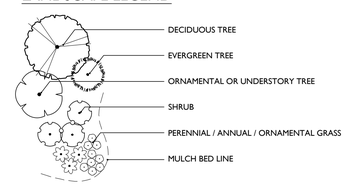
REQUIRED: ONE (1) TREE (MIN. 3" CALIPER) PER EIGHT (8) PARKING SPACES
47 PARKING SPACES / 8 = 6 TREES

PROVIDED: 7 TREES (COMPLIES)

## LANDSCAPE NOTES

1. LOCATIONS OF ALL PLANT MATERIAL AND PLANTING BED OUTLINES IS APPROXIMATE AND MAY VARY DUE TO THE LOCATIONS OF SITE IMPROVEMENTS AND/OR BUILDING.
2. FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED OUTLINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT.
3. ALL AREAS WITHIN THE PLANTING BED LIMITS SHALL BE MULCHED WITH 3" OF SHREDDED HARDWOOD BARK MULCH.
4. PROPOSED LAWN AREAS AROUND BUILDINGS SHALL BE STABILIZED WITH SEED. SEED MIXTURE #1 TO BE USED ON NORTHERN & WESTERN LAWN AREAS AND SEED MIXTURE #2 TO BE USED ON SOUTHERN & EASTERN LAWN AREAS.
5. ANY PROPOSED IRRIGATION DESIGN AND/OR SYSTEM WILL BE DETERMINED IN THE FIELD BY THE IRRIGATION CONTRACTOR.
6. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK.
7. NO SUBSTITUTIONS OF PLANT MATERIALS ARE TO BE MADE WITHOUT THE WRITTEN CONSENT OF THE OWNER AND PROJECT LANDSCAPE ARCHITECT.
8. ALL VEGETATION SHOWN ON THIS PLAN WILL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE.

## LANDSCAPE LEGEND




NOTE:
1. LANDSCAPE SYMBOLS ON THE PLAN VARY AND MAY DEVIATE FROM THE LANDSCAPE LEGEND SYMBOLS SHOWN ABOVE.

LAWN SEED MIX

NATIVE MEADOW MIX

BIORETENTION SEED MIX

30 0 30 60

SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

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COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

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LANDSCAPE PLAN

SHEET NUMBER:
12 of 19

2023\23010468A\Engineering\Site Plans\C-LAND.dwg\C-12 LANDSCAPE By: KYLE SHALLOW




## LUMINAIRE SCHEDULE

| KEY | QTY. | DESCRIPTION | ARRANGEMENT | MTG. HT. | LUMENS/LAMP | COLOR TEMPERATURE | CRI | LLF | CATALOG # |
|---|---|---|---|---|---|---|---|---|---|
| A | 5 | LITHONIA LIGHTING D-SERIES SIZE 0 LED AREA LUMINAIRE | SINGLE | 20' | 4,044 | 3000K | 80 | 0.9 | DSX0 LED-P2-30K-80CRI-BLC4-MVOLT-SPA-DBLXD-PER5 |
| B | 2 | LITHONIA LIGHTING D-SERIES SIZE 0 LED AREA LUMINAIRE | SINGLE | 20' | 3,951 | 3000K | 80 | 0.9 | DSX0 LED-P2-30K-80CRI-LCCO-MVOLT-SPA-DBLXD-PER5 |
| C | 1 | LITHONIA LIGHTING D-SERIES SIZE 0 LED AREA LUMINAIRE | SINGLE | 20' | 3,951 | 3000K | 80 | 0.9 | DSX0 LED-P2-30K-80CRI-RCCO-MVOLT-SPA-DBLXD-PER5 |
| D | 8 | LITHONIA LIGHTING D-SERIES SIZE 1 LED WALL LUMINAIRE | SINGLE (WALL PACK) | 12',15' | 1,357 | 3000K | 80 | 0.9 | DSXW1 LED-10C-350-30K-T4M-MVOLT-PE-DBLXD |
| E | 24 | LITHONIA LIGHTING RADEAN BOLLARD LED SITE LUMINAIRE | SINGLE (BOLLARD) | 3.5' | 532 | 3000K | 80 | 0.9 | RADB LED-P2-30K-ASY-MVOLT-BTT-BCF-DBLXD |

## CALCULATION SUMMARY

| DESCRIPTION | CALC. TYPE | UNITS | AVG. | MAX. | MIN. | AVG. / MIN. |
|---|---|---|---|---|---|---|
| PARKING, DRIVE & SIDEWALK | ILLUMINANCE | FC | 0.9 | 2.8 | 0.3 | 3.0:1 |

## LIGHTING NOTES:

1. THIS PLAN IS TO BE USED FOR LIGHTING PURPOSES ONLY.
2. POLES AND FIXTURES AS SUPPLIED BY:
   FIXTURES - LITHONIA LIGHTING
   POLE - HOLOPHANE
   BOLLARD FIXTURES - HYDREL
3. LAMPS ARE TO BE LED's. A LIGHT LOSS FACTOR (LLF) WAS USED AS SHOWN IN THE LUMINARIES SCHEDULE.
4. FIXTURES AND POLES ARE TO BE BLACK.
5. POLE MOUNTED FIXTURES SHALL BE PLACED A MINIMUM OF TWO (2) FEET BEHIND CURBS, EDGE OF PAVEMENT OR RETAINING WALLS IN CAR PARKING AREAS.
6. PROPOSED LIGHT FIXTURE LOCATIONS ARE CRITICAL TO PROVIDE THE LIGHTING LEVELS DEPICTED ON THIS PLAN. THE LIGHTING CONTRACTOR SHALL FIELD VERIFY FIXTURE LOCATIONS PRIOR TO INSTALLATION. IF ADJUSTMENT TO ANY LIGHT FIXTURE LOCATION IS REQUIRED DUE TO FINAL CONSTRUCTION OF UTILITIES AND SITE IMPROVEMENTS, THE LIGHTING CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO INSTALLATION.
7. LIGHTING SHOWN ON PLAN DEPICTS AVERAGE MAINTAINED FOOTCANDLE LEVELS AT GRADE.
8. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
9. ELECTRICAL PLANS FOR WIRING LAYOUT BY OTHERS.
10. POLE BASE INSTALLATION SHALL INCLUDE A SUPPLEMENTARY GROUND ROD AND WIRE LEAD TO BASE FOR POWER CONNECTION. DETAILS PER PROJECT ELECTRICAL ENGINEER.
11. ALL LIGHTING FIXTURES WILL BE DARK SKY COMPLIANT.

## LIGHTING LEGEND:

- SINGLE FIXTURE POLE LIGHT
- WALLPACK
- BOLLARD LIGHT
- *0.0 LIGHT LEVEL AT GRADE (IN FOOTCANDLES)

30 0 30 60

SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

20232301468A\Engineering\Site Plans\C-LGHT.dwg|C-13 LIGHTING By: KYLE SHALLOW

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| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:42-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

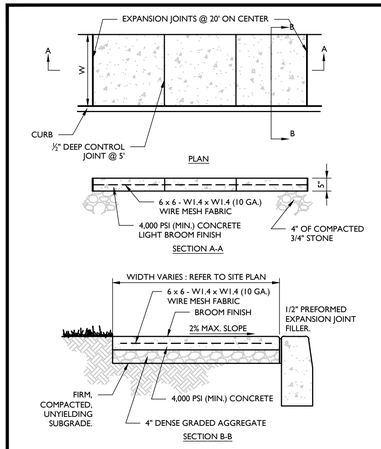
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| AS SHOWN | 01/30/2024 | XXXXXX | XXXXXX |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-LGHT

SHEET TITLE: LIGHTING PLAN

SHEET NUMBER: 13 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

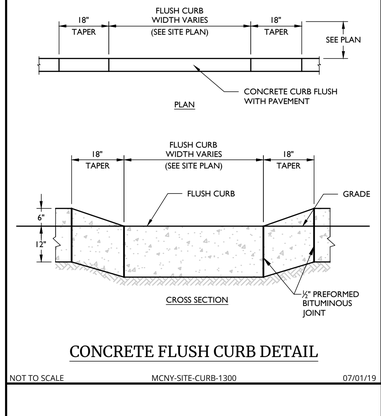



NOTES:

1. A PREFORMED, BITUMINOUS EXPANSION JOINT 1/2" THICK, 4" WIDE AND EXTENDING THE FULL WIDTH OF THE SIDEWALK (UNBROKEN) SHALL BE INSTALLED.
2. ½" DEEP CONTROL JOINTS INSTALLED AT AN INTERVAL OF EVERY 5'.
3. JOINT FILLER SHALL CONFORM TO AASHTO M-33. SURFACE OF CONCRETE SHALL BE BROOM FINISH. ROUND EDGES USING AN EDGING TOOL WITH A 1/4" RADIUS.
4. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PER THE LATEST ADA REQUIREMENTS.

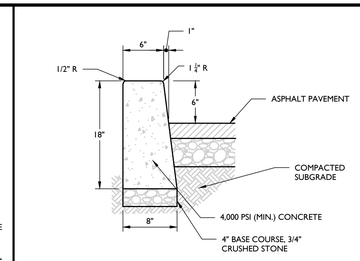
## REINFORCED CONCRETE SIDEWALK (NEXT TO CURB) DETAIL

NOT TO SCALE | MCNY-SITE-PVMT-1800 | 07/01/19




## CONCRETE FLUSH CURB DETAIL

NOT TO SCALE | MCNY-SITE-CURB-1300 | 07/01/19

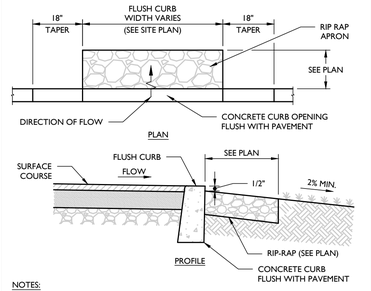



NOTES:

1. PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 20' MAX. INTERVALS ALONG THE CURB. PROVIDE CONTROL JOINTS @ 10 FEET MAX. BETWEEN EXPANSION JOINTS.

## CONCRETE CURB (ASPHALT PAVEMENT) DETAIL

NOT TO SCALE | MCNY-SITE-CURB-1000 | 07/01/19

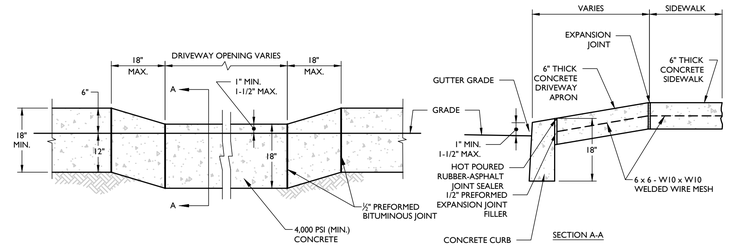



NOTES:

1. FLUSH CURB FOR OVERLAND FLOW TO BE USED AT DESIGNATED LOCATIONS ONLY AS SHOWN ON SITE PLANS.
2. CONTRACTOR SHALL ENSURE THAT THERE IS POSITIVE DRAINAGE FROM THE PAVEMENT TO THE GRASSED AREA.

## FLUSH CURB FOR DRAINAGE DETAIL

NOT TO SCALE | MCNY-SITE-CURB-1400 | 07/01/19

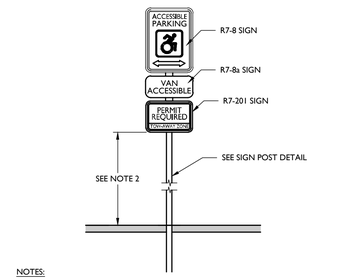



NOTES:

1. DEPRESSED VERTICAL CURB AT DRIVEWAY AND RAMP AREAS SHALL BE FULL DEPTH OF 18".

## DEPRESSED CONCRETE CURB AT DRIVEWAY DETAIL

NOT TO SCALE | MCNY-SITE-CURB-1700 | 07/01/19

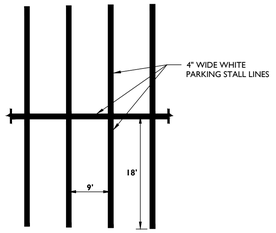



NOTES:

1. INSTALL SIGN WHERE NOTED ON PLAN.
2. THE BOTTOM OF THE LOWEST SIGN SHALL BE MOUNTED 60" ABOVE THE PARKING LOT OR SIDEWALK SURFACE WHEN THE SIGN IS PARALLEL TO THE SIDEWALK AND 72" ABOVE THE PARKING LOT OR SIDEWALK WHEN THE SIGN IS PERPENDICULAR TO THE SIDEWALK.

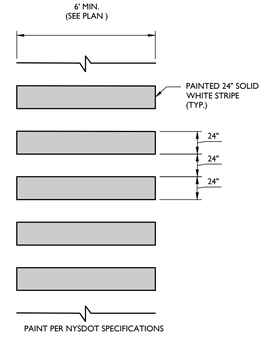
## ACCESSIBLE PARKING SIGN DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-2200 | 07/01/19



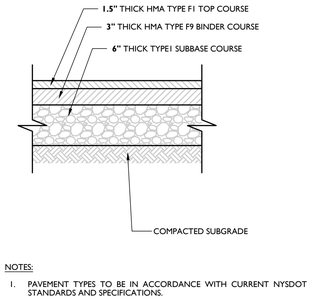

## TYPICAL PARKING STALL STRIPING DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-1000 | 07/01/19




## PEDESTRIAN CROSSWALK DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-1401 | 07/01/19

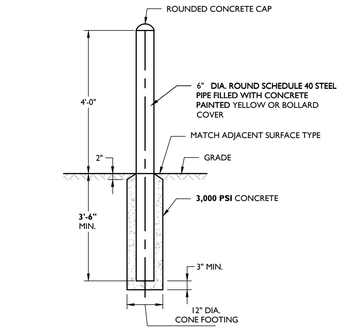



NOTES:

1. PAVEMENT TYPES TO BE IN ACCORDANCE WITH CURRENT NYSDOT STANDARDS AND SPECIFICATIONS.

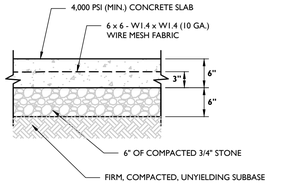
## ON-SITE STANDARD ASPHALT PAVEMENT DETAIL

NOT TO SCALE | MCNY-SITE-PVMT-1000 | 07/01/19



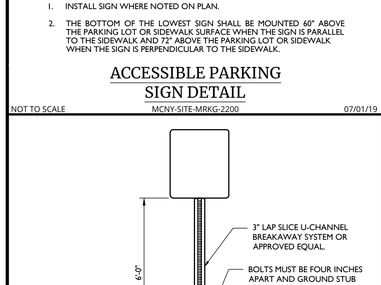

## BOLLARD DETAIL

NOT TO SCALE | MCCM-SITE-FNCE-2300 | 07/01/19




## TRASH ENCLOSURE CONCRETE PAD DETAIL

NOT TO SCALE | MCNY-SITE-PVMT-2100 | 07/01/19

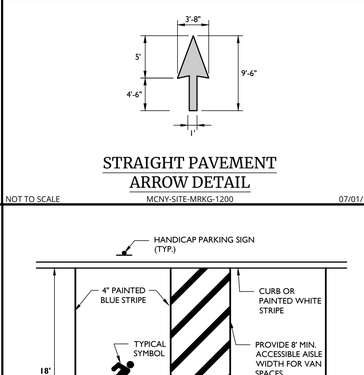



NOTE:

1. ALL SIGNS SHALL CONFORM TO THE CURRENT MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS AND CURRENT MUNICIPAL SPECIFICATIONS FOR COLOR, DESIGN AND EXACT WORDING.

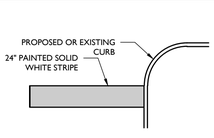
## BREAKAWAY SIGN POST DETAIL

NOT TO SCALE | MCCM-SITE-SIGN-6102 | 07/01/19



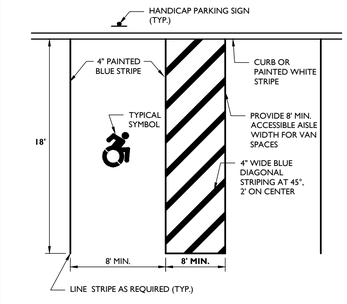

## STRAIGHT PAVEMENT ARROW DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-1200 | 07/01/19



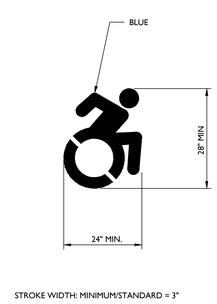

## TYPICAL STOP BAR DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-1100 | 07/01/19




## ACCESSIBLE PARKING LINE STRIPE STALL DETAIL

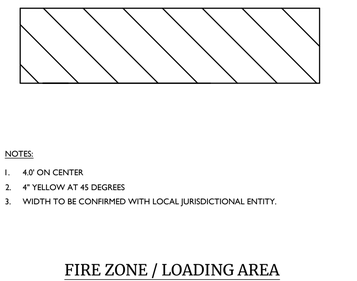
NOT TO SCALE | MCNY-SITE-MRKG-1801 | 07/01/19




STROKE WIDTH: MINIMUM/STANDARD = 3"

## ACCESSIBLE SYMBOL DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-2000 | 07/01/19

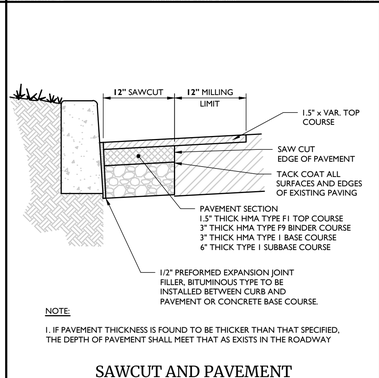


NOTES:

1. 4.0' ON CENTER
2. 4" YELLOW AT 45 DEGREES
3. WIDTH TO BE CONFIRMED WITH LOCAL JURISDICTIONAL ENTITY.

## FIRE ZONE / LOADING AREA STRIPING DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-2100 | 07/01/19

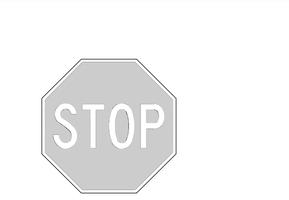



NOTE:

1. IF PAVEMENT THICKNESS IS FOUND TO BE THICKER THAN THAT SPECIFIED, THE DEPTH OF PAVEMENT SHALL MEET THAT AS EXISTS IN THE ROADWAY

## SAWCUT AND PAVEMENT RESTORATION DETAIL

NOT TO SCALE | MCNY-SITE-PVMT-2800 | 07/01/19




30" x 30"

COLORS:
LEGEND = WHITE (RETROREFLECTIVE)
BACKGROUND = RED (RETROREFLECTIVE)

## R1-1 SIGN DETAIL

NOT TO SCALE | MCCM-SIGN-REGU-R1-1 | 12/01/20




24" x 30"

COLORS:
LEGEND = RED (RETROREFLECTIVE)
BACKGROUND = WHITE (RETROREFLECTIVE)

## R8-3a SIGN DETAIL

NOT TO SCALE | MCCM-SIGN-REGU-R8-3A | 01/01/23

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |


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SITE PLAN
FOR
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TAX LOTS:
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| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 23010468A | C-DTLS |

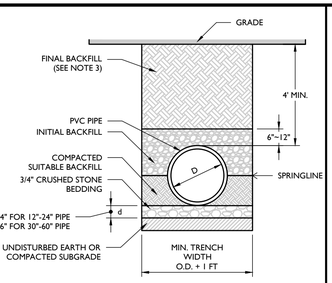
SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: 14 of 19


UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.



2023\23010468A\Engineering\Site Plans\C-DTLS.dwg|C-14-DETAILS By: KYLE SHALLOW

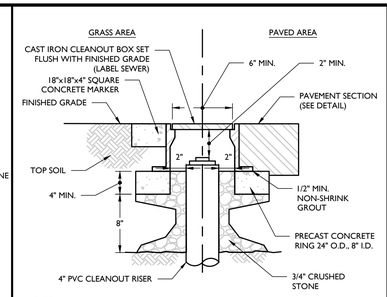



NOTES:

1. ALL PVC GRAVITY PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.
2. GRAVITY SANITARY PIPE SHALL BE PVC SDR 35 PER ASTM D3034 OR AS REQUIRED BY THE GOVERNING AUTHORITY.
3. INITIAL & FINAL BACKFILL MATERIAL SHALL BE SITE SOILS FREE OF LARGE STONES. CLEAN FILL, OR ITEM 4.

## PVC SANITARY PIPE BEDDING (GRAVITY) DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-2803 | 07/01/19

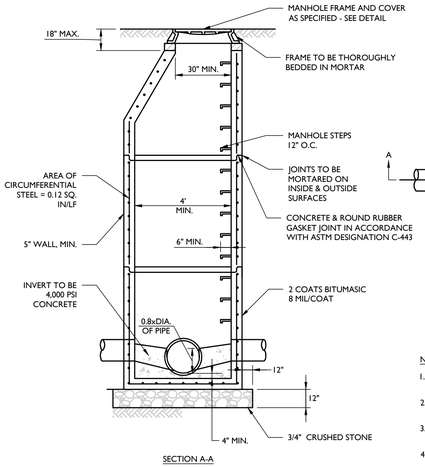



NOTES

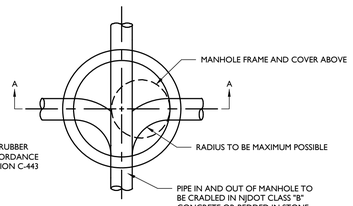
1. ALL PVC CLEANOUTS TO HAVE CAST IRON FRAME AND COVER PROTECTION BOX. DESIGN FOR H20 LOADING.

## CLEANOUT PROTECTION BOX DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-1600 | 07/01/19




SECTION A-A



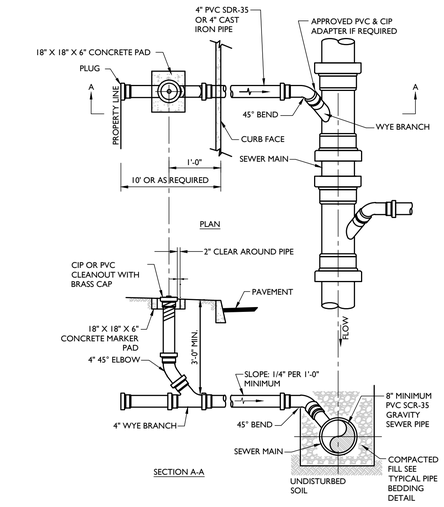

PLAN

NOTES:

1. PRECAST MANHOLE SECTIONS TO BE IN ACCORDANCE WITH ASTM C-478, 4,000 PSI CONCRETE.
2. FLEXIBLE RUBBER BOOT SHALL BE USED FOR CONNECTION OF PVC PIPE TO MANHOLE. LINK SEAL OR APPROVED EQUAL.
3. PRECAST CHANNELS SHALL NOT BE USED FOR BENDS GREATER THAN 45°. POURED CONCRETE LONG RADIUS CHANNELS SHALL BE CONSTRUCTED.
4. MANHOLE TO BE CAPABLE OF H20 LOADING.

## SANITARY PRECAST MANHOLE DETAIL

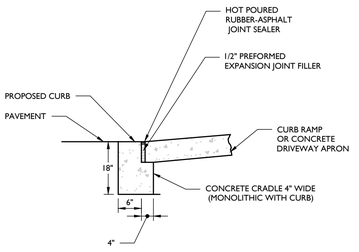
NOT TO SCALE | MCNY-UTIL-SSWR-1000 | 07/01/19




SECTION A-A

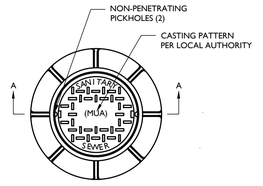
## SANITARY SEWER LATERAL & CLEANOUT DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-1601 | 07/01/19

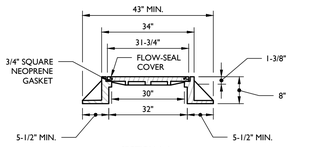



## ADA FLUSH CURB AND CRADLE DETAIL

NOT TO SCALE | MCNY-SITE-HADA-2300 | 07/01/19




PLAN



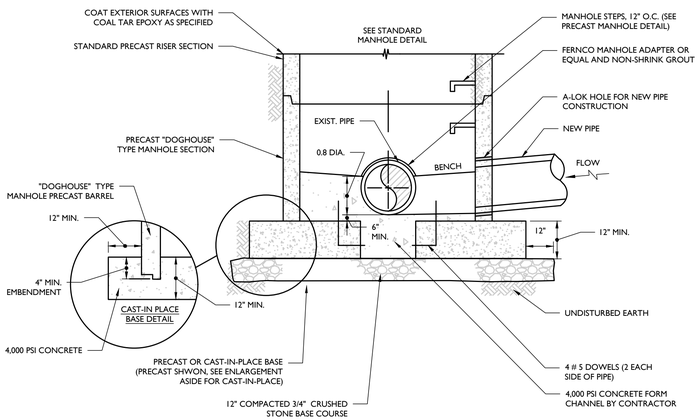

SECTION A-A

NOTES:

1. MANHOLE FRAME AND COVER SHALL BE CAMPBELL FOUNDRY PATTERN # **1012B** WITH FLOW-SEAL COVER OR APPROVED EQUAL OR AS OTHERWISE REQUIRED BY JURISDICTIONAL AUTHORITY.
2. MANHOLE FRAME AND COVER TO BE HEAVY DUTY, CONFORMING TO ASTM SPECIFICATION A-48 CLASS 30-B WITH SHOP COAT OF ASPHALTIC PITCH.
3. IN EASEMENTS AND REMOTE AREAS, COVER LOCKING DEVICES OF BRONZE AND KEY SHALL BE PROVIDED.
4. WATERTIGHT MANHOLE FRAME AND COVER SHALL BE PATTERN # **6548** AS MANUFACTURED BY CAMPBELL FOUNDRY COMPANY OR APPROVED EQUAL.

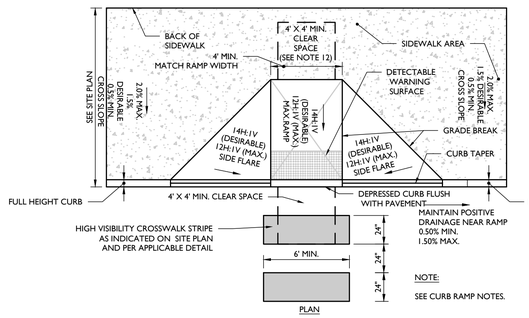
## SANITARY MANHOLE FRAME AND COVER DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-1001 | 07/01/19




## DOGHOUSE MANHOLE DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-1100 | 07/01/19




PLAN

NOTE:

SEE CURB RAMP NOTES.

## CURB RAMP TYPE 1 DETAIL

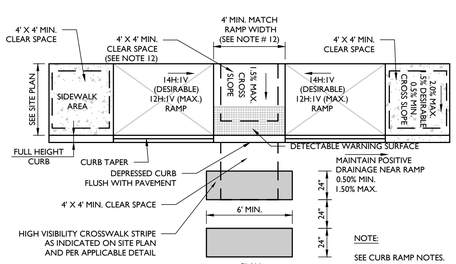
NOT TO SCALE | MCNY-SITE-HADA-1000 | 07/01/19

NOTES:

1. CONTRACTOR SHALL PREPARE SHOP DRAWINGS OF EACH CURB RAMP FOR SUBMISSION AND APPROVAL OF THE UNDERSIGNED PROFESSIONAL AND THE MUNICIPAL, COUNTY, STATE OR OTHER AGENCY'S ENGINEER HAVING JURISDICTION.
2. LANDING AREA, APPROACH SIDEWALK TRANSITIONS AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
3. CURB AT RAMP OPENING (FLUSH CURB) TO BE FLUSH WITH ROADWAY PAVEMENT.
4. CROSSWALKS AND PAVEMENT MARKINGS TO BE INSTALLED AS DENOTED ON SITE PLAN.
5. MAXIMUM RAMP SLOPE MAY BE 12H:1V UPON APPROVAL OF ENGINEER. RAMP SLOPES SHOWN ARE THE PREFERRED SLOPE. SIDE FLARE SLOPES MAY BE 10H:1V UPON APPROVAL OF THE ENGINEER.
6. MINIMUM RAMP CROSS-SLOPE SHALL BE 0.50%. THE MAXIMUM RAMP CROSS-SLOPE MAY BE 2.00% UPON APPROVAL OF THE ENGINEER. CROSS-SLOPES SHOWN IN THE DETAILS ARE THE PREFERRED SLOPES TO MAINTAIN A LEVEL OF CONSTRUCTION TOLERANCE.
7. ACCESSIBLE RAMPS SHALL BE INSTALLED PURSUANT WITH THE CURRENT UNITED STATES ACCESS BOARD ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES AND THE ADA STANDARDS FOR ACCESSIBLE DESIGN AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE AND OTHER APPLICABLE LOCAL AND STATE STANDARDS IN EFFECT AT THE DATE OF CONSTRUCTION.
8. DEVIATIONS FROM THE CURB RAMP DETAILS REQUIRE WRITTEN APPROVAL OF THE UNDERSIGNED PROFESSIONAL AND THE MUNICIPAL, COUNTY, STATE OR OTHER AGENCY'S ENGINEER HAVING JURISDICTION.
9. THE RAMP SURFACE SHALL HAVE A NON-SLIP, HAND BROOMED FINISH.
10. CONCRETE EXPANSION JOINTS SHALL HAVE A FIRM SURFACE WITH 1/4" BEVELED CONCRETE EDGES. THE JOINT SURFACE SHALL NOT BE MORE THAN 1/4" BELOW THE ADJOINING CONCRETE SURFACE.
11. CURB RAMP MUST BE WHOLLY CONTAINED WITHIN THE CROSSWALK CROSSING.
12. THE CLEAR SPACE SHALL BE INCREASED TO 5 FEET WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK.
13. THE MAXIMUM SEPARATION BETWEEN THE BACK OF CURB AND DETECTABLE WARNING SURFACE SHALL NOT EXCEED 5 FEET. THE MAXIMUM SEPARATION AREA MAY BE WITHIN THE 4' X 4' CLEAR SPACE.
14. SEE SEPARATE DETAILS FOR "DETECTABLE WARNING SURFACE" AND "CURB RAMP SECTIONS".
15. WHERE SIDE FLARES ARE NOT REQUIRED, PROVIDE AN 18" CURB TAPER TO THE FLUSH CURB.
16. ALL CURB RAMP FLUSH CURB SHALL BE MADE WITH CONCRETE CURB CRADLE, REGARDLESS OF THE CURB MATERIAL USED THROUGHOUT THE SITE.

## CURB RAMP NOTES

MCNY-SITE-HADA-2500 | 07/01/19



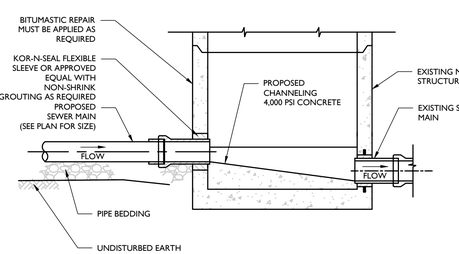

PLAN

NOTE:

SEE CURB RAMP NOTES.

## CURB RAMP TYPE 7 DETAIL

NOT TO SCALE | MCNY-SITE-HADA-1600 | 07/01/19




NOTES:

1. CONSTRUCTION OF THE NEW SEWER MAIN SHALL NOT IMPEDE THE OPERATION OF THE EXISTING SEWER.
2. WHERE NEW PIPE IS TO BE CONNECTED INTO AN EXISTING MANHOLE, THE CONTRACTOR SHALL CORE DRILL ALL HOLES INTO MANHOLE AND SHALL PERFORM ALL CUTTING AND PATCHING NECESSARY FOR CHANNEL AND BENCH RECONSTRUCTION TO CHANNEL FLOW INTO EXISTING SEWER.
3. PIPE SHALL BE SEALED USING KOR-N-SEAL MANHOLE ADAPTERS OR APPROVED EQUAL, AND NON-SHRINK GROUT.
4. EXISTING BENCH SHALL BE CHIPPED AND CUT AWAY TO ALLOW FOR NEW CHANNEL TO BE CONSTRUCTED AND TO PROVIDE GOOD, SOUND SURFACE FOR BONDING WITH NEW CONCRETE CHANNEL AND BENCH. REMOVE ALL LOOSE MATERIALS AND CLEAN INSIDE OF THE STRUCTURE.
5. THE CONCRETE USED TO CONSTRUCT BENCHES AND CHANNELS SHALL BE 4,000 PSI CONCRETE APPLY EPOXY BONDING AGENT PRIOR TO POURING CONCRETE.
6. ANY DAMAGE TO THE EXISTING MANHOLE CAUSED BY THE CONSTRUCTION OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR.

## CONNECTION TO EXISTING MANHOLE DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-2000 | 07/01/19

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

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Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 23010468A | C-DTLS |

SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER:

15 of 19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION



20232301A68A\Engineering\Site Plans\C-DTLS.dwg|C-15 DETAILS By: KYLE SHALLOW

# WATER NOTES:

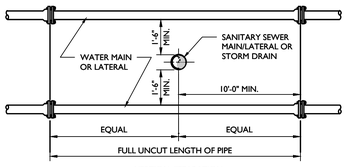
1. ALL METHODS, MATERIALS, FITTINGS, DEVICES, DIMENSIONAL REQUIREMENTS AND PROCEDURES NECESSARY TO COMPLETE THE WORK SHOWN HEREON SHALL MEET THE APPROPRIATE CURRENT AWWA SPECIFICATIONS IN EFFECT AS WELL AS ALL REQUIREMENTS DEEMED APPLICABLE BY THE MUNICIPALITY OR ANY OTHER GOVERNMENTAL BODY HAVING JURISDICTION OVER SAID WORK.
2. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON (DIP).
3. ALL PIPE FITTINGS SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE AWWA SPECIFICATION C153/A21.53-00.
4. ALL GATE VALVES SHALL BE "MUELLER", RESILIANT-SEATED GATE VALVES WITH MECHANICAL JOINT CONNECTIONS. OPENING SHALL BE LEFT (CCW) AND OPERATION SHALL BE BY 2" SQUARE WRENCH NUT. MINIMUM WORKING PRESSURE SHALL BE 250 PSI. GATE VALVES ARE TO BE IN ACCORDANCE WITH LATEST REVISION OF AWWA SPECIFICATION C509.
5. ALL VALVE BOXES SHALL BE EXTENSION TYPE BY MUELLER SET ON BRICKS AND POSITIONED PERPENDICULAR TO THE PIPE AND ON COMPACTED BACKFILL.
6. ALL CHANGES IN PIPE LINE DIRECTION, BOTH HORIZONTAL AND VERTICAL SHALL BE TIE-RODDED AND THRUST BLOCKED WITH CONCRETE AGAINST UNDISTURBED EARTH AS DIRECTED BY THE ENGINEER.
7. FLUSH OUT ALL WATER MAINS AND APPURTENANCES AS DIRECTED BY THE MUNICIPALITY UNTIL THE WATER RUNS CLEAN AND FREE OF RUST AND DIRT. PRESSURIZE ALL LINES AND APPURTENANCES FOR FORTY-EIGHT (48) HOURS, OR AS DIRECTED BY THE MUNICIPALITY, TO REVEAL ANY LEAKS OR BROKEN PIPE. THIS SHALL ALL BE DONE EITHER AS A TOTAL PROJECT OR BETWEEN VALVED SECTIONS AS DIRECTED BY THE TOWN. IF PRESSURE TESTING REVEALS ANY LEAKS OR DIFFICULTIES THE CONTRACTOR SHALL PROMPTLY UNCOVER THE LEAK OR BROKEN PIPE AND IMMEDIATELY REPAIR AND RETEST SAME. THIS SHALL BE REPEATED AS MANY TIMES AS MAY BE REQUIRED TO DEMONSTRATE A TIGHT LINE TO THE SATISFACTION OF THE TOWN. THE NEW WATER MAIN AND APPURTENANANCES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C-600. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY.
8. THE MUNICIPAL ENGINEER MUST BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO PRESSURE TESTING.
9. ALL WATER LINES AND APPURTENANCES SHALL BE DISINFECTED TO THE SATISFACTION OF THE MUNICIPALITY, AND IN ACCORDANCE WITH THE STANDARDS OF THE OCDOH. THIS SHALL ALSO BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C651. A MINIMUM OF TWO (2) BACTERIAL TESTS TAKEN TWENTY-FOUR (24) HOURS APART ARE REQUIRED. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY.
   AS PER AWWA C651, LATEST REVISION, WATER MAIN DISINFECTION PROCEDURE SHALL, GENERALLY, BE AS FOLLOWS, EXCLUDING THE TABLET METHOD:
   A. INSPECTING MATERIALS TO BE USED TO ENSURE THEIR INTEGRITY.
   B. PREVENTING CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE, CONSTRUCTION, OR REPAIR AND NOTING POTENTIAL CONTAMINATION AT THE CONSTRUCTION SITE.
   C. REMOVING, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAIN.
   D. CHLORINATING ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSHING THE CHLORINATED WATER FROM THE MAIN.
   E. PROTECTING THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW CAUSED BY HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.
   F. DOCUMENTING THAT AN ADEQUATE LEVEL OF CHLORINE CONTACTED EACH PIPE TO PROVIDE DISINFECTION.
   G. DETERMINING THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.
   H. FINAL CONNECTION OF THE APPROVED NEW WATER SERVICE TO THE ACTIVE DISTRIBUTION SYSTEM.

THE CONTINUOUS-FEED METHOD SHALL BE IMPLEMENTED FOR CHLORINATION, AS DESCRIBED IN AWWA C651, LATEST REVISION. AFTER CHLORINATION, THE CONTRACTOR SHALL FLUSH THE MAINS AS PER FINAL FLUSHING REQUIREMENTS OF AWWA C651, LATEST REVISION. WHEN CUTTING INTO OR REPAIRING AN EXISTING MAIN, DISINFECTION PROCEDURES SHALL BE OBSERVED AS DETAILED IN DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS OF AWWA C651, LATEST REVISION.

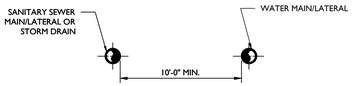
VERIFICATION SHALL BE ACCOMPLISHED VIA BACTERIOLOGICAL TESTS. AFTER FINAL FLUSHING AND BEFORE THE NEW WATER MAIN IS CONNECTED TO THE DISTRIBUTION SYSTEM, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN AT LEAST 24 HR APART, SHALL BE COLLECTED FROM THE NEW MAIN. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FT OF THE NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. SAMPLES SHALL BE TESTED FOR BACTERIOLOGICAL (CHEMICAL AND PHYSICAL) QUALITY IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, AND SHALL SHOW THE ABSENCE OF COLIFORM ORGANISMS AND THE PRESENCE OF A CHLORINE RESIDUAL. SAMPLES FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED IN STERILE BOTTLES TREATED WITH SODIUM THIOSULFATE, AS REQUIRED BY STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER. NO HOSE OR FIRE HYDRANT SHALL BE USED IN THE COLLECTION OF SAMPLES. THERE SHOULD BE NO WATER IN THE TRENCH UP TO THE CONNECTION FOR SAMPLING. THE SAMPLING PIPE MUST BE DEDICATED AND CLEAN AND DISINFECTED AND FLUSHED PRIOR TO SAMPLING. A CORPORATION COCK MAY BE INSTALLED IN THE MAIN WITH A COPPER-TUBE GOOSENECK ASSEMBLY. AFTER SAMPLES HAVE BEEN COLLECTED, THE GOOSENECK ASSEMBLY MAY BE REMOVED AND RETAINED FOR FUTURE USE. IF SAMPLES RESULTS FROM THE LAB INDICATE A MEASURED HPC GREATER THAN 500 COLONY-FORMING UNITS (CFU) PER ML, FLUSHING SHOULD BE RESUMED AND ANOTHER COLIFORM AND HPC SET OF SAMPLES SHOULD BE TAKEN UNTIL NO COLIFORMS ARE PRESENT AND THE HPC IS LESS THAN 500 CFU/ML. THE RECORD OF COMPLIANCE SHALL BE THE BACTERIOLOGICAL TEST RESULTS CERTIFYING THAT THE WATER SAMPLED FROM THE NEW WATER MAIN IS FREE OF COLIFORM BACTERIA CONTAMINATION AND IS EQUAL TO OR BETTER THAN THE BACTERIOLOGIC WATER QUALITY IN THE DISTRIBUTION SYSTEM.

ALL OTHER REQUIREMENTS OF AWWA C651, LATEST REVISION, SHALL BE OBSERVED.

10. WATER SERVICE SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER MAIN OR SERVICE.
11. ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY SEWER LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH.
12. AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.
13. WATER TIGHT PLUGS ARE TO BE INSTALLED IN THE ENDS OF PIPES WHEN WORK IS NOT IN PROGRESS.
14. LEAKAGE AND HYDROSTATIC PRESSURE TESTING SHALL BE PERFORMED AT 1.5 TIMES THE WORKING PRESSURE.
15. THE MAXIMUM DEFLECTION ALLOWED ALLOWED AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THAT ALLOWED BY AWWA OR IN ACCORDANCE WITH THE MUNICIPALITY. FOR AWWA ALLOWABLE JOINT DEFLECTIONS SEE LATEST REVISION OF AWWA SPECIFICATION C600.
16. CONSTRUCTION MUST CONFORM TO ALL ORDINANCES.
17. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING WATER AND OTHER UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
18. CONTRACTOR TO CALL UNDERGROUND MARK-OUT PRIOR TO COMMENCEMENT OF CONSTRUCTION AT 1-800-962-7962 FOR COMPLETE UTILITIES MARK-OUT.
19. CONTRACTOR TO CONTACT MUNICIPAL WATER DEPARTMENT AT LEAST 2 DAYS PRIOR TO CONSTRUCTION.
20. ALL IMPROVEMENTS SHALL BE INSPECTED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK AND CERTIFICATION SHALL BE PROVIDED TO THE MUNICIPALITY THAT THE SUBJECT IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS.
21. CONTRACTOR TO NOTIFY ENGINEER OF ANY DEVIATION FROM THE HORIZONTAL OR VERTICAL ALIGNMENTS WITH REGARDS TO EXISTING UTILITIES.
22. ANY BACKFLOW PREVENTION DEVICE(S) DETERMINED TO BE REQUIRED BY THE WATER SUPPLIER WILL BE DESIGNED BY OTHERS IN ACCORDANCE WITH OCDOH REQUIREMENTS AND THAT APPLICATION FOR ANY SUCH BACKFLOW PREVENTION DEVICE SHALL BE SUBMITTED TO THE OCDOH FOR REVIEW AND APPROVAL UNDER SEPARATE COVER.
23. A CERTIFIED AS-BUILT MAP OF THE WATER SYSTEM IMPROVEMENTS SHALL BE PROVIDED TO THE MUNICIPALITY'S WATER DEPARTMENT BY A LICENSED DESIGN PROFESSIONAL.




VERTICAL SEPARATION

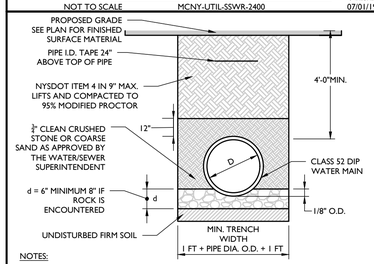



HORIZONTAL SEPARATION

NOTE :
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE ENGINEER.

## SANITARY/STORM SEWER-WATER MAIN SEPARATION DETAIL

MOD: 04/23/21
NOT TO SCALE MCNY-UTIL-SSWR-2400 07/01/19




NOTES:
1. ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600.
2. WATER MAIN PIPE SHALL BE CEMENT LINED DUCTILE IRON PIPE (DIP) PRESSURE CLASS 150, THICKNESS CLASS 52 WITH ASPHALTIC EPOXY TYPE COATING & TYTON JOINTS.
3. MAXIMUM ALLOWABLE DEFLECTION AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THE VALUES PUBLISHED IN AWWA C600, LATEST REVISION.
4. IF ROCK IS ENCOUNTERED, THE EXCAVATION SHALL BE CARRIED 8" BELOW THE BOTTOM OF THE PIPE.

## DIP WATER PIPE BEDDING DETAIL

MOD: 07/28/21
NOT TO SCALE MCNY-UTIL-WATR-1900 07/01/19

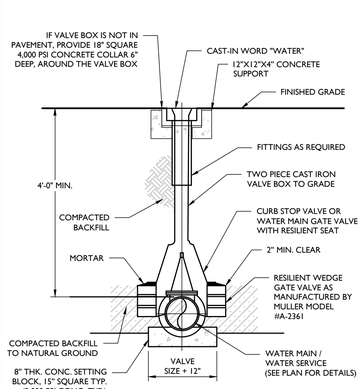
| PIPE SIZE IN INCHES | NUMBER AND SIZE OF RODS REQUIRED AND PIPE LENGTH IN FEET TO BE RESTRAINED | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 90° TEE OR DEAD END PLUG | | | 45° BEND | | | 22½° BEND | | |
| | No. | SIZE | L* | No. | SIZE | L* | No. | SIZE | L* |
| 4 | 2 | ¾" | 28' | 2 | ¾" | 6' | 2 | ¾" | 3' |
| 6 | 2 | ¾" | 40' | 2 | ¾" | 8' | 2 | ¾" | 4' |
| 8 | 4 or 2 | ¾" or ⅞" | 52' | 2 | ¾" | 10' | 2 | ¾" | 5' |
| 10 | 4 | ¾" | 63' | 2 | ¾" | 12' | 2 | ¾" | 6' |
| 12 | 4 | ⅞" | 74' | 2 | ¾" | 14' | 2 | ¾" | 7' |
| 14 | 4 | 1" | 86' | 2 | ¾" | 16' | 2 | ¾" | 8' |
| 16 | 4 | 1" | 96' | 2 | ¾" | 18' | 2 | ¾" | 9' |

L* = LENGTH OF PIPE TO BE RESTRAINED IS FOR EACH SIDE OF BEND

NOTES:
1. USE OF MECHANICAL JOINT RETAINER GLANDS SHALL PROVIDE A THRUST RESTRAINT SYSTEM EQUIVALENT TO THAT LISTED IN THE TABLE FOR CLAMPS AND RODS.
2. LENGTHS ARE BASED ON THE FOLLOWING CRITERIA: 150 PSI MAXIMUM PRESSURE AND 4'-6" OF COVER. TABLE IS FOR USE WITH HDPE OR PVC PIPE ONLY. IF TEST CONDITIONS ARE MORE SEVERE OR LARGER PIPES ARE PROPOSED, THEN SPECIAL COMPUTATIONS MUST BE PROVIDED BY LICENSED PROFESSIONAL ENGINEER.

## JOINT RESTRAINT SCHEDULE DETAIL

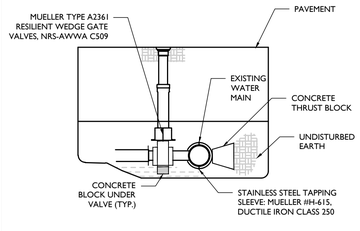
NOT TO SCALE HDPE PVP JOINT RESTRAINT 03/23/23




NOTES:
1. ALL VALVES TO INCLUDE MEGA-LUG RETAINER GLANDS AND BE RODDED BACK TO THE ADJACENT TEE IN THE WATER MAIN. INLINE VALVES NEED NOT BE RODDED. CONTRACTOR TO UTILIZE ¾" ON CENTER GALVANIZED STEEL RODS WITH MALLEABLE IRON NUTS AT 108" SPACING.
2. WATER MAIN VALVES FOR FOUR INCH THROUGH FOURT-EIGHT INCH SHALL BE RESILIENT WEDGE GATE VALVES AS MANUFACTURED BY MULLER, MODEL #A-2361. VALVES SHALL BE PROVIDED WITH AN EXTENSION SERVICE BOX TO GRADE.
3. MAIN LINE VALVES TO BE SPACED NO FURTHER THAN 500' APART IN COMMERCIAL DISTRICTS AND 800' IN OTHER DISTRICTS.

## WATER VALVE BOX DETAIL

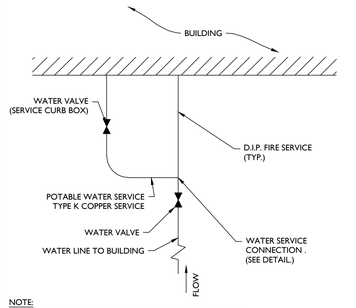
NOT TO SCALE MCNY-UTIL-WATR-1600 MOD: 09/09/22 07/01/19




NOTES:
1. MEGA LUGS TO BE USED ON ALL MECHANICAL JOINT FITTINGS.
2. MULLER STAINLESS STEEL, MECHANICAL JOINT TAPPING SLEEVE MODEL #H-615 AND VALVE, MODEL A2361 IS TO BE USED IN ALL CASES, ALL HARDWARE INCLUDING, BUT NOT LIMITED TO NUTS, BOLTS, ECT SHALL BE STAINLESS STEEL.
3. CONCRETE BLOCK SHALL BE UNDER VALVE.

## WET TAP DETAIL

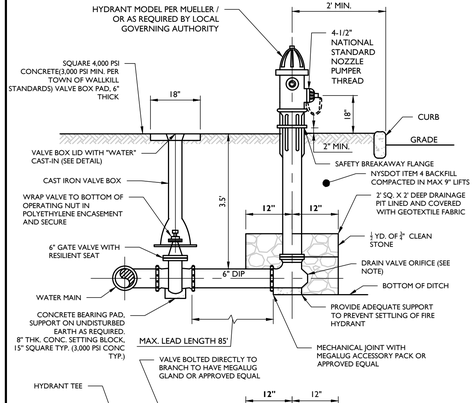
NOT TO SCALE WET TAP 07/01/19




NOTE:
1. WATER SERVICE SIZES TO BE CONFIRMED BY MEP ENGINEER.
2. VALVING MUST BE ARRANGED SO THAT POTABLE WATER IS TERMINATED IF FIRE PROTECTION LINE IS TURNED OFF.

## FIRE PROTECTION & SERVICE CONNECTION TO BUILDING DETAIL

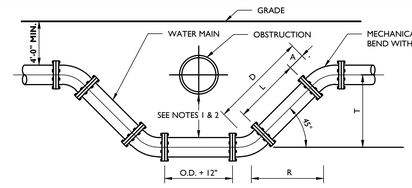
NOT TO SCALE




NOTES:
1. HYDRANT SHALL BE MUELLER SUPER CENTURION MODEL A-423 INCLUDING INTEGRAL MULLER "STORZ" CONNECTION ON THE NOZZLE. DESIGN WITH THE FOLLOWING SPECIFICATIONS.
   A. SAFETY COUPLED STANDPIPE.
   B. 6" MECHANICAL JOINT INLET CONNECTION
   C. TWO 2-1/2" NATIONAL STANDARD THREAD HOSE NOZZLES.
   ONE 4-1/2" NATIONAL STANDARD THREAD STEAMER NOZZLE, FACING THE ROAD.
   D. HYDRANT OPERATORS AND HYDRANT NOZZLE CAP NUTS SHALL BE IN ACCORDANCE WITH AWWA AND STANDARD C502.
   E. HYDRANT HOSE CAPS SHALL BE ATTACHED BY MEANS OF CHAINS.
   F. HYDRANT BARRELS SHALL BE PAINTED - RED, BONNETS - YELLOW, AND NOZZLE CAPS - BLACK TO INDICATE THE AVAILABLE FIRE FLOW OR AS IN ACCORDANCE WITH THE LOCAL REQUIREMENTS.
   G. HYDRANTS SHALL OPEN COUNTER CLOCKWISE.
2. STANDPIPE (BREAK-AWAY) COUPLING SHALL NOT EXCEED A MAXIMUM OF 2 INCHES FROM THE TOP OF THE CURB TO THE BOTTOM OF COUPLING.
3. THE DRAIN VALVE SHALL BE CLEAR OF ANY OBSTRUCTIONS, AND 3/4" CLEAN GRAVEL BE PLACED FROM THE BOTTOM OF THE HYDRANT TO A POINT 6" ABOVE THE HYDRANT LATERAL PIPE.
4. THRUST BLOCKS SHALL BE MADE OF 4,000 PSI CONCRETE, PROVIDED BEHIND THE HYDRANT SHOE.
5. BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE LOCAL JURISDICTION.
6. GATE VALVE SHALL BE T.W.W. 6" U.S. PIPE METROSEAL 250 R/S (RESILIENT SEALED) MECHANICAL JOINT END (RIGHT HAND).
7. WATER LATERAL SHALL BE 6" DUCTILE IRON CEMENT LINED CLASS 52 PIPE.
8. TIE ROD SHALL BE 3/4" DIAMETER TIE ROD WITH EYE BOLTS - TWO REQUIRED ( SIDE VIEW SHOWN). RESTRAIN ALL JOINTS ON HYDRANT TEE, VALVE, AND HYDRANT LEAD.
9. HYDRANT TEE SHALL BE U.S. PIPE CATALOG #LU592 TRIM.TYTE DUCTILE IRON, MECHANICAL JOINT OR AN T.W.W. APPROVED SUBSTITUTE.
10. HYDRANT SPACING MAY RANGE FROM 350' TO A MAX OF 600'
11. HYDRANTS SHALL BE DRY-BARREL HYDRANTS, TYPE MULLER SUPER CENTURION IN ACCORDANCE WITH AWWA C502. HYDRANTS SHALL HAVE A MAIN VALVE SIZE OPENING OF 5" NOMINAL, ONE FOUR-AND-ONE-HALF INCH NST PUMPER NOZZLE TWO TWO-AND-ONE-HALF-INCH NST HOSE NOZZLES. A ONE-AND-ONE-HALF-INCH PENTAGON OPERATING NUT AND A SIX-INCH MECHANICAL JOINT INLET SHOW CONNECTION WITH ACCESSORIES.
12. ALL TEES, VALVES AND FITTINGS TO INCLUDE RESTRAINT IN THE FORM OF MEGA-LUG RETAINER GLANDS AND RODS.
13. WHEN HIGH GROUND WATER IS ENCOUNTERED WITHIN 2 FEET OF THE HYDRANT BOWL, THE WEEP HOLE IS TO REMAIN PLUGGED AND APPROPRIATELY WORDED SIGNAGE SHALL BE PERMANENTLY SECURED TO THE HYDRANT SPECIFYING THAT THE HYDRANT IS TO BE PUMPED DRY AFTER USE TO PREVENT DAMAGE DUE TO FREEZING TEMPERATURES.

## FIRE HYDRANT (VALVE IN GRASS) DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1000 MOD: 01/09/23 07/01/19



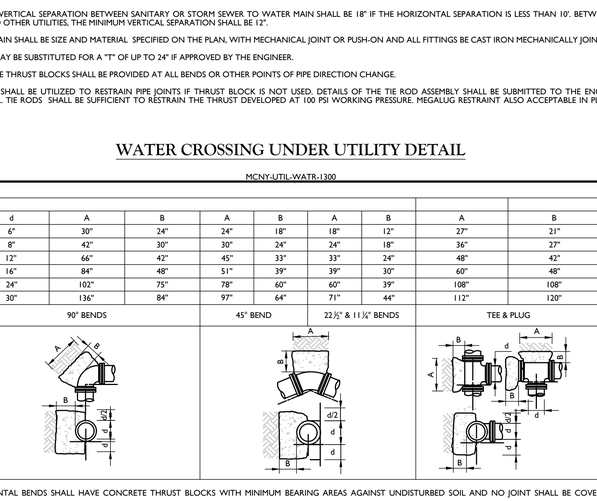

| MECHANICAL JOINTS | | | |
|---|---|---|---|
| ANGLE | D = | R = | L = |
| 45° | T x 1.414 | T x 1.000 | D-2A |
| 22.5° | T x 2.613 | T x 2.414 | D-2A |
| 11.25° | T x 5.126 | T x 5.027 | D-2A |

NOTES:
1. WATER MAIN MAY CROSS ABOVE OBSTRUCTION IF **4'-0"** MINIMUM COVER IS MAINTAINED ABOVE THE WATER MAIN AND FINISH GRADE.
2. MINIMUM VERTICAL SEPARATION BETWEEN SANITARY OR STORM SEWER TO WATER MAIN SHALL BE 18" IF THE HORIZONTAL SEPARATION IS LESS THAN 10'. BETWEEN WATER MAIN AND OTHER UTILITIES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12".
3. WATER MAIN SHALL BE SIZE AND MATERIAL SPECIFIED ON THE PLAN, WITH MECHANICAL JOINT OR PUSH-ON AND ALL FITTINGS BE CAST IRON MECHANICALLY JOINT.
4. OFFSETS MAY BE SUBSTITUTED FOR A "T" OF UP TO 24" IF APPROVED BY THE ENGINEER.
5. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS OR OTHER POINTS OF PIPE DIRECTION CHANGE.
6. TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS IF THRUST BLOCK IS NOT USED. DETAILS OF THE TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICIENT TO RESTRAIN THE THRUST DEVELOPED AT 100 PSI WORKING PRESSURE. MEGALUG RESTRAINT ALSO ACCEPTABLE IN PLACE OF TIE RODS.

## WATER CROSSING UNDER UTILITY DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1300 07/01/19

| d | A | B | A | B | A | B | A | B |
|---|---|---|---|---|---|---|---|---|
| 6" | 30" | 24" | 24" | 18" | 18" | 12" | 27" | 21" |
| 8" | 42" | 30" | 30" | 24" | 24" | 18" | 36" | 27" |
| 12" | 66" | 42" | 45" | 33" | 33" | 24" | 48" | 42" |
| 16" | 84" | 48" | 51" | 39" | 39" | 30" | 60" | 48" |
| 24" | 102" | 75" | 78" | 60" | 60" | 39" | 108" | 108" |
| 30" | 136" | 84" | 97" | 64" | 71" | 44" | 112" | 120" |
| 90° BENDS | | | 45° BEND | | 22½° & 11¼° BENDS | | TEE & PLUG | |




NOTES:
1. ALL HORIZONTAL BENDS SHALL HAVE CONCRETE THRUST BLOCKS WITH MINIMUM BEARING AREAS AGAINST UNDISTURBED SOIL AND NO JOINT SHALL BE COVERED WITH CONCRETE.
2. TWO FORMS OF RESTRAINTS ARE REQUIRED ON ALL BENDS, OFFSETS, DEAD ENDS AND/ OR TEMPORARY DEAD ENDS FOR FUTURE EXPANSION. HYDRANTS WILL REQUIRE HYDRANTS WILL REQUIRE ADDITIONAL RESTRAINTS IN ACCORDANCE WITH "TYPICAL FIRE HYDRANT ASSEMBLY" DETAIL.
3. RESTRAINTS APPROVED FOR USE ARE THRUST BLOCKS, MEGA LUG RETAINER, GLANDS, TIE RODS AND FIELD LOCK GASKETS.
4. BEARING AREAS ARE BASED UPON UNDISTURBED SOIL WITH A MINIMUM BEARING CAPACITY OF 0.5 TONS PER SQUARE FOOT. FOR A LESSER SOIL BEARING CAPACITY THESE AREAS SHALL BE INCREASED ACCORDINGLY.
5. THRUST BLOCKS SHALL BE POURED DIRECTLY AGAINST TRENCH WALLS AND SHALL BE 4,000 PSI CONCRETE (3,000 PSI MIN.).
6. DETAILS FOR SUPPORTS AND BRACING FOR VERTICAL BENDS FOR 12" DIAMETER OR LARGER SHALL BE APPROVED BY THE AUTHORITY PRIOR TO CONSTRUCTION.

## THRUST BLOCKS DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1400 07/01/19

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

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Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:42-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |
| PROJECT NUMBER: | DRAWING NAME: | | |
| 23010468A | C-DTLS | | |

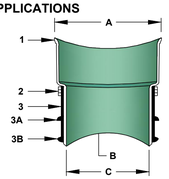
SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NUMBER:
16 of 19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-DTLS.dwg C-16-DETAILS By: KYLE SHALLOW

## CORRUGATED HDPE/PP BELL GRAVITY APPLICATIONS




**A.** BELL END ACCEPTS CORRUGATED HDPE/PP DUAL WALL PIPE--ADS/HANCOR INC. SPECIFICATIONS IN 4", 6", 8", 10", 12", 15", 18", 21", 24", AND 30" SIZES.

**B.** CURVATURE VARIES WITH MAINLINE DIAMETERS.

**C.** SPIGOT END PVC SDR 35, ASTM D3034 DIAMETERS: 4", 6", 8", 10", 12", 15", 18", 21", 24" AND 30"

| PART | PART NAME |
|---|---|
| 1 | HUB ADAPTOR |
| 2 | SECURING CLAMP* |
| 3 | RUBBER SLEEVE (AVAILABLE IN NITRILE AND EPDM BY SPECIAL ORDER) |
| 3A | UPPER SEGMENT** |
| 3B | LOWER SEGMENT*** |
| 4 | (NOT SHOWN) ADS/HANCOR INC. SUPPLIES VALLEY GASKET |

**MATERIALS**
PVC SDR 26 ASTM D3034
BAND SS #301
SCREW SS #305
HOUSING SS #301
ASTM F477

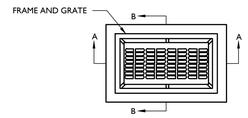
* OPTIONAL: #316 STAINLESS STEEL BAND, SCREW AND HOUSING
** DISTANCE BETWEEN 4A AND 4B WILL VARY BY PRODUCT TYPE
*** WILL NOT APPEAR ON RUBBER SLEEVES FOR CONCRETE OR CLAY PIPE

| INSERTA TEE SIZE | | HOLE DIAMETER | |
|---|---|---|---|
| 4" | (100 mm) | 4 ½" | (114 mm) |
| 6" | (150 mm) | 6 ½" | (165 mm) |
| 8" | (200 mm) | 8 ¾" | (222 mm) |
| 10" | (250 mm) | 10 7/8" | (276 mm) |
| 12" | (300 mm) | 12 7/8" | (327 mm) |
| 15" | (375 mm) | 15 13/16" | (402 mm) |
| 18" | (450 mm) | 19 3/16" | (503 mm) |
| 21" | (525 mm) | 22 5/16" | (573 mm) |
| 24" | (600 mm) | 25 5/16" | (643 mm) |
| 30" | (750 mm) | 32 1/32" | (826 mm) |

NOTE: RECOMMENDED METHOD OF CUTTING HOLE IS WITH HOLE SAW FOR PVC AND OTHER PLASTICS, AND DIAMOND BIT FOR CONCRETES, CLAY, FRP AND D.I. (SEE INSTALLATION INSTRUCTIONS. HOLE SAWS ARE AVAILABLE FOR PURCHASE OR RENT.)

## INSERTA TEE DETAIL

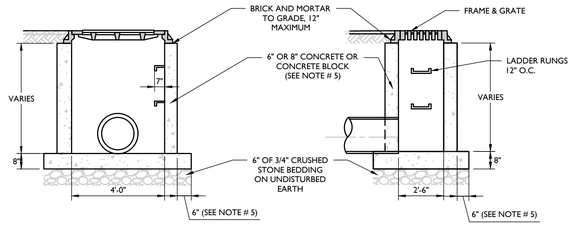
NOT TO SCALE — GNRL-DTLS-STND-GRID — MOD: 09/11/19, 7/01/19




PLAN

NOTES:

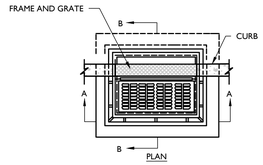
1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. MINIMUM DIFFERENCE IN INVERTS TO BE 0.1 FEET
2. THIS INLET SHALL BE CONSTRUCTED OF PRECAST CONCRETE OR SOLID CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF 1:2 CEMENT SAND MORTAR, THE INSIDE WALLS JOINTS SHALL BE STRUCK AND POINTED.
3. PROVIDE 7/8" DIA. X 7" X 12", 12" O.C. COPOLYMER POLYPROPYLENE PLASTIC STEPS WITH 1/2" DIA. GRADE 60 STEEL REINFORCEMENT BY M.A. INDUSTRIES, PS2-PF OR PS2-B WITH PRECAST PRESS FIT INSERTS, 12" O.C.
4. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY **# 3408** OR APPROVED EQUAL.
5. WHEN DEPTH IS GREATER THEN 12' THE WALLS SHOULD BE EITHER 8" THICK CONCRETE OR 8" SOLID CONCRETE BLOCK AND THE FOOTING SHALL BE EXTENDED TO 12" BEYOND THE OUTSIDE WALLS.
6. ALL CONCRETE TO BE 4,000 PSI.
7. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
8. INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH H-20 LOADING REQUIREMENTS.




SECTION A-A — SECTION B-B

## SINGLE DRAIN INLET DETAIL

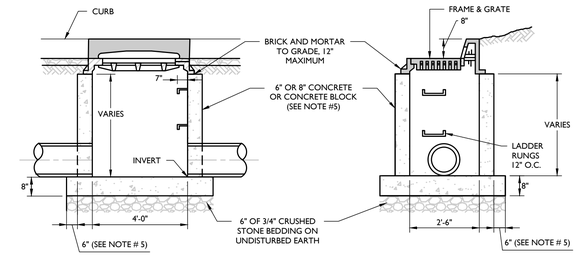
NOT TO SCALE — MCNY-UTIL-STRM-1000 — 07/01/19




PLAN

NOTES:

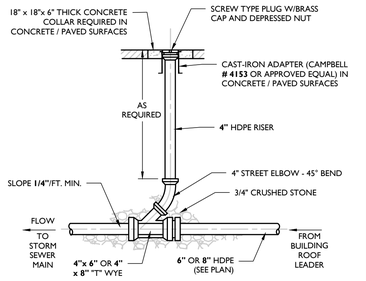
1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. MINIMUM DIFFERENCE IN INVERTS TO BE 0.1 FEET.
2. THIS INLET SHALL BE CONSTRUCTED OF PRECAST CONCRETE OR SOLID CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF 1:2 CEMENT SAND MORTAR. THE INSIDE WALL JOINTS SHALL BE STRUCK AND POINTED.
3. PROVIDE 7/8" DIA. X 7" X 12", 12" O.C. COPOLYMER POLYPROPYLENE PLASTIC STEPS WITH 1/2" DIA. GRADE 60 STEEL REINFORCEMENT BY M.A. INDUSTRIES, PS2-PF OR PS2-B WITH PRECAST PRESS FIT INSERTS, 12" O.C. OR APPROVED EQUIVALENT.
4. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY **# 2617**, OR APPROVED EQUAL.
5. WHEN DEPTH IS GREATER THAN 12' THE WALLS SHOULD BE 8" THICK CONCRETE OR SOLID CONCRETE BLOCK AND THE FOOTING SHALL BE EXTENDED TO 12" BEYOND THE OUTSIDE WALLS.
6. ALL CONCRETE TO BE 4,000 PSI.
7. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
8. INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH H-20 LOADING REQUIREMENTS.




SECTION A-A — SECTION B-B

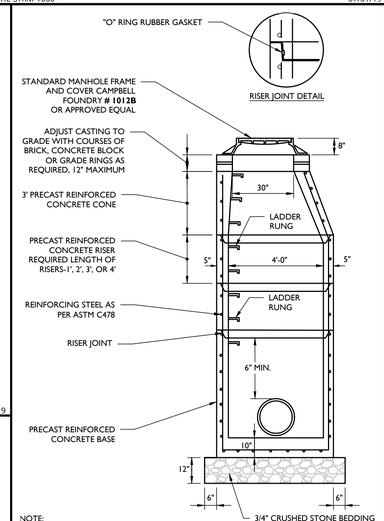
## SINGLE CATCH BASIN DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1100 — 07/01/19




## ROOF LEADER CLEANOUT DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1900 — 07/01/19

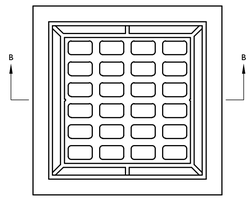


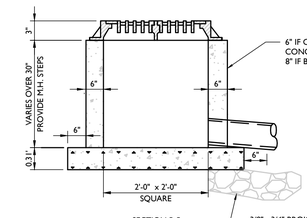

NOTE:

1. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
2. ALL CONCRETE TO BE 4,000 PSI.

## PRECAST CONCRETE STORM MANHOLE 4' DIA. DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1600 — 07/01/19




SECTION B-B

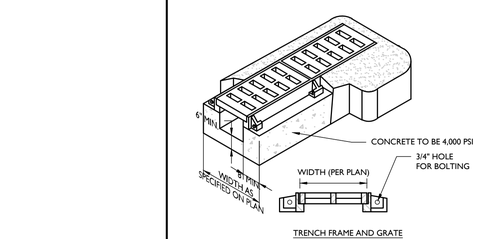
3/8" - 3/4" BROKEN STONE BASE IF DIRECTED BY THE ENGINEER

GENERAL CONSTRUCTION NOTES:

1. FOOTER TO BE CONCRETE.
2. INVERT TO BE 4000 PSI CONCRETE.
3. IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK CEMENT PLASTER.
4. FRAME AND GRATE TO BE **#3193** AS MANUFACTURED BY CAMPBELL FOUNDRY CO., OR APPROVED EQUAL.
5. PROVIDE 3/4" DIAMETER W.I. LADDER RUNGS, 12" O.C. (IF OVER 30" DEEP)
6. EXTERIOR OF ALL CONCRETE SHALL HAVE 2 COATS OF KOPPERS BITUMASTIC #5, OR EQUAL.
7. ALL WORK SHALL BE WATERTIGHT. NOT FOR USE IN PAVED AREAS.

## YARD INLET DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1400 — 07/01/19

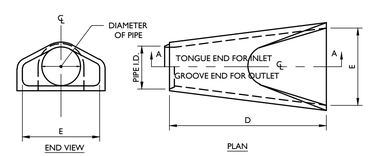



NOTES:

1. TRENCH DRAINS TO BE HEAVY DUTY CAST IRON TYPE AS MANUFACTURED BY CAMPBELL CORPORATION, PATTERN # 4504 (COVER) & # 4529 (GRATE) FOR H-20 LOADING OR APPROVED EQUAL .
2. WIDTH, DEPTH AND BOTTOM SLOPE OF TRENCH AS SPECIFIED ON THE PLANS.
3. MINIMUM BOTTOM SLOPE = 0.50%

## HEAVY DUTY TRENCH DRAIN DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1700 — 07/01/19



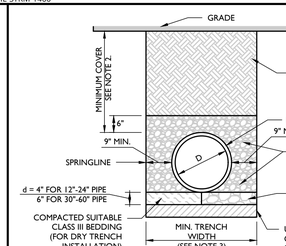

| PIPE INNER DIA. | WALL THICK | A | B | C | D | E | SLOPE |
|---|---|---|---|---|---|---|---|
| 12" | 2" | 4" | 24" | 48 7/8" | 72 7/8" | 30" | 3:1 |
| 15" | 2 1/4" | 6" | 27" | 46" | 73" | 30" | 3:1 |
| 18" | 2 1/2" | 9" | 27" | 46" | 73" | 36" | 3:1 |
| 24" | 3" | 9 1/2" | 43 1/2" | 30" | 73 1/2" | 48" | 3:1 |
| 30" | 3 1/2" | 12" | 54" | 19 3/4" | 73 3/4" | 60" | 3:1 |
| 36" | 4" | 15" | 63" | 34 3/4" | 97 3/4" | 72" | 3:1 |
| 42" | 4 1/2" | 21" | 63" | 35" | 98" | 78" | 3:1 |
| 48" | 5" | 24" | 72" | 26" | 98" | 84" | 3:1 |
| 54" | 5 1/2" | 27" | 65" | 35" | 100" | 90" | 2.4:1 |
| 60" | 6" | 30" | 60" | 39" | 99" | 96" | 2:1 |
| 66" | 6 1/2" | 32" | 78" | 21" | 99" | 102" | 2:1 |
| 72" | 7" | 34" | 78" | 21" | 99" | 108" | 2:1 |

NOTES:

1. REINFORCING IN THE "C" PORTION SHALL BE THE SAME AS SPECIFIED FOR CONCRETE PIPE ASTM C76 AND AASHTO M170 CLASS III FOR THE SIZE OF CONNECTING PIPE.
2. ALL CONCRETE SHALL BE 4,000 PSI.
3. VARIATIONS IN MANUFACTURING DIMENSIONS SHALL BE AS CALLED FOR IN ASTM C76 AND AASHTO M170.
4. PIPE END SECTION CONNECTION SHALL MATCH JOINTS OF STANDARD PIPE DETAILS.

## CONCRETE FLARED END SECTION DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-2200 — 07/01/19




NOTES:

1. ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.
2. MINIMUM COVER FOR HDPE PIPES IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR UP TO 60" DIAMETER PIPE. PIPE COVER IS MEASURED FROM TOP OF PIPE TO THE BOTTOM OF FLEXIBLE PAVEMENT, OR TO THE TOP OF RIGID PAVEMENT, OR TO THE GROUND SURFACE.
3. MINIMUM TRENCH WIDTH PER MANUFACTURER'S RECOMMENDATIONS.
4. SUITABLE AND FINAL BACKFILL MATERIAL SHALL BE SITE SOILS FREE OF LARGE STONES. CLEAN FILL, OR ITEM 4.

## HDPE STORM PIPE BEDDING DETAIL

NOT TO SCALE — 07/01/19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-DTLS.dwg,C-17 DETAILS, By:KYLE.SHALLOW

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |

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Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

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| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-DTLS

SHEET TITLE: CONSTRUCTION DETAILS

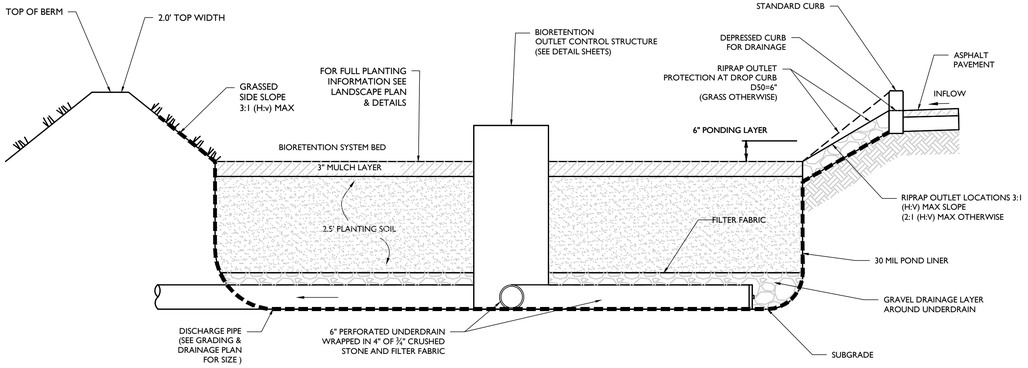
SHEET NUMBER: 17 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

| BIORETENTION ELEVATIONS | | | | | |
|---|---|---|---|---|---|
| SYSTEM | OUTLET NAME | OUTLET SIZE | BED ELEVATION | 100 YR PEAK ELEVATION | TOP OF BERM ELEVATION |
| P-1 | OCS S-8 | 4'X4' | 98.50 | 99.57 | 100.60 |

PLANTING SOIL NOTE:

THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 25% BY VOLUME. SOILS SHOULD FALL WITHIN THE SM, OR ML CLASSIFICATIONS OD THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5"/HR) IS REQUIRED (A CONSERVATIVE VALUE OF 0.5 FEET PER DAY IS USED FOR DESIGN). THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER, AND BRUSH OR SEED FROM NOXIOUS WEEDS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN LIFTS OF 12" TO 18", LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET). THE SPECIFIC CHARACTERISTICS ARE AS FOLLOWS:



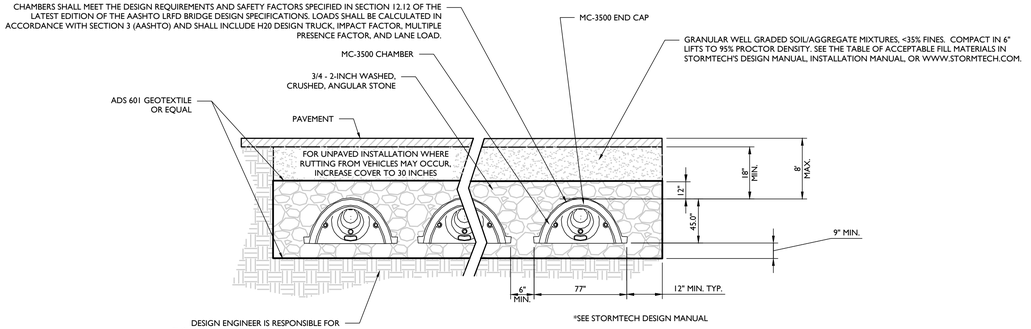

NOTES:

1. SEE PLAN FOR DROP CURB LOCATIONS AND BIORETENTION AREA CONFIGURATION.
2. PLANTING SOIL TO BE IN ACCORDANCE WITH NEW YORK STATE STANDARDS AND SPECIFICATIONS FOUND WITHIN THE PROJECT SWPPP.

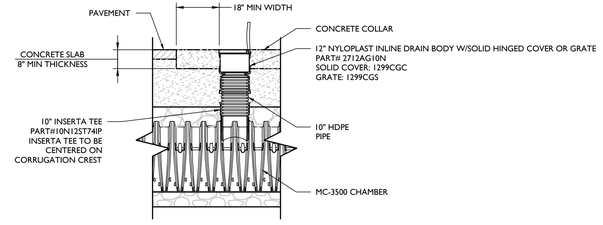
## BIORETENTION SYSTEM CROSS SECTION DETAIL

NOT TO SCALE MCNY-UTIL-STMW-24001 07/01/19

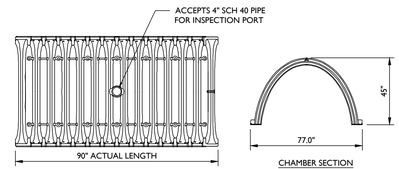
CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND SAFETY FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. LOADS SHALL BE CALCULATED IN ACCORDANCE WITH SECTION 3 (AASHTO) AND SHALL INCLUDE H20 DESIGN TRUCK, IMPACT FACTOR, MULTIPLE PRESENCE FACTOR, AND LANE LOAD.




SYSTEM SECTION



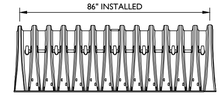

STORMTECH STORM CHAMBER INSPECTION PORT DETAIL







CHAMBER SECTION



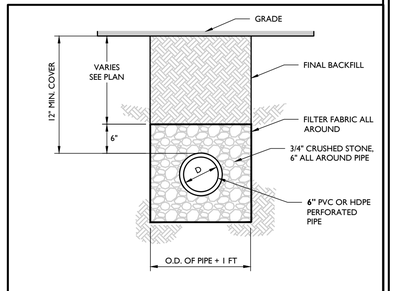

STORMTECH MC-3500 STORM CHAMBER DETAIL
N.T.S.

STORMTECH NOTES:

1. CHAMBERS SHALL BE STORMTECH MC-3500 OR APPROVED EQUAL.
2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW.
4. 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.
5. THE INSTALLATION OF CHAMBERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S LATEST INSTALLATION INSTRUCTIONS.
6. THE STONE USED FOR FILLING THE SUBSURFACE SYSTEM MUST BE CLEAN WASHED STONE FREE OF ALL SEDIMENT, FINES, AND DUST. THE CONTRACTOR MAY BE REQUIRED TO WASH THE STONE ON SITE UNTIL IT IS CLEAN TO THE TOUCH LEAVING NO RESIDUE BEHIND PRIOR TO PLACEMENT IN THE SYSTEM FOOTPRINT.
7. THE PROPOSED SUBSURFACE STORMWATER SYSTEM BOTTOM MUST BE PROTECTED FROM STORM RUNOFF AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE INFILTRATION CAPACITY OF THE VIRGIN SOIL IS NOT COMPROMISED.
8. VEHICLE TRAFFIC MUST AVOID THE CHAMBER FOOTPRINT DURING CONSTRUCTION.
9. CONTRACTOR MUST SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW & APPROVAL.
10. END STONE TO BE 6" MIN. BEYOND END OF CHAMBER CAPS WITH 12" MIN. SIDE STONE TO PROVIDE MIN.

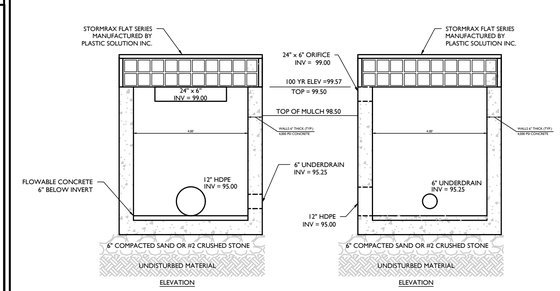
## STORMTECH SUBSURFACE DETAIL

NOT TO SCALE MCNY-UTIL-STMW-3500 MOD: 01/20/21 07/01/19

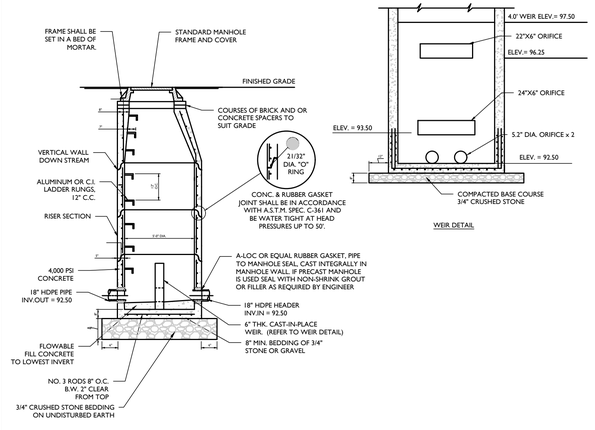



## UNDERDRAIN DETAIL

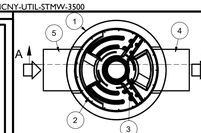
NOT TO SCALE MCNY-UTIL-STRM-2400 07/01/19




## BIORETENTION BASIN P-1 OUTLET CONTROL STRUCTURE (S-9) DETAIL




## OUTLET CONTROL STRUCTURE (S-6) DETAIL



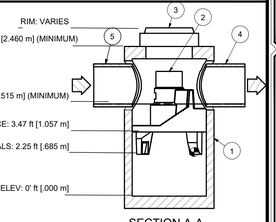

PLAN VIEW

HYDRO FRAME AND COVER (INCLUDED) GRADE RINGS BY OTHERS AS REQUIRED

PRODUCT SPECIFICATION:

1. Peak Hydraulic Flow: 18.0 cfs (510 l/s)
2. Min Sediment Storage Capacity: 0.7 cu. yd. (0.5 cu. m.)
3. Maximum Inlet/Outlet Pipe Diameters: 24 in. (600 mm)
4. The Treatment System Shall Use An Induced Vortex To Separate Pollutants From Stormwater Runoff.
5. For More Product Information Including Regulatory Acceptances, Please Visit https://hydro-int.com/en/products/first-defense

GENERAL NOTES:
1. General Arrangement drawings only. Contact Hydro International for site specific drawings.
2. The diameter of the inlet and outlet pipes may be no more than 24".
3. Multiple inlet pipes possible (refer to project plan).
4. Inlet/outlet pipe angle can vary to align with drainage network (refer to project plans).
5. Peak flow rate and minimum height limited by available cover and pipe diameter.
6. Larger sediment storage capacity may be provided with a deeper sump depth.




SECTION A-A

NOTE: ADDITIONAL HEIGHT MAY BE REQUIRED DEPENDING ON PIPE SIZE

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.
3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

| PARTS LIST | | | | |
|---|---|---|---|---|
| ITEM | QTY | SIZE (in) | SIZE (mm) | DESCRIPTION |
| 1 | 1 | 48 | 1200 | I.D. PRECAST MANHOLE |
| 2 | 1 | | | INTERNAL COMPONENTS (PRE-INSTALLED) |
| 3 | 1 | 30 | 750 | FRAME AND COVER (ROUND) |
| 4 | 1 | 24 (MAX) | 600 (MAX) | OUTLET PIPE (BY OTHERS) |
| 5 | 1 | 24 (MAX) | 600 (MAX) | INLET PIPE (BY OTHERS) |

## 4' DIAMETER FIRST DEFENSE STORMWATER SEPARATOR

MOD: 09/25/20 07/01/19

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2023\23010468A\Engineering\Site Plans\C-DTLS.dwg|C-18 DETAILS By: KYLE SHALLOW

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| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
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| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
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FOR

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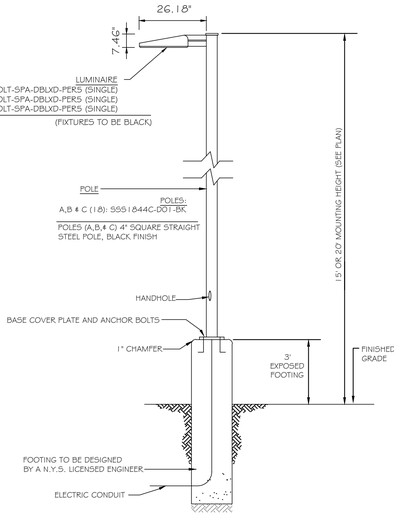
| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-DTLS

SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: 18 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

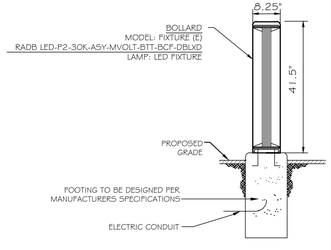



NOTES:

1. LUMINAIRES TO BE MANUFACTURED BY LITHONIA LIGHTING AND POLES BY HOLOPHANE (MANUFACTURER TO CONFIRM POLE SIZE) OR APPROVED EQUAL.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
3. FOOTING TO BE DESIGNED, SIGNED, AND SEALED BY A N.Y.S. LICENSED ENGINEER.
4. *VOLTAGE TO BE CONFIRMED BY ELECTRICIAN CONTRACTOR.
5. PROPOSED POLES HEIGHT TO BE MODIFIED IN FIELD TO MEET DESIGN. (AS REQUIRED)

## POLE MOUNTED FIXTURE DETAIL

NOT TO SCALE | GNRL-DTLS-LGHT | 09/21/23

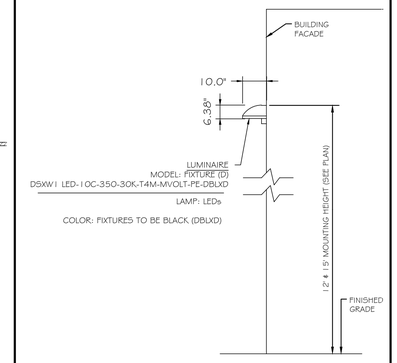



NOTES:

1. LUMINAIRES TO BE MANUFACTURED BY HYDREL OR APPROVED EQUAL.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
3. FOOTING TO BE DESIGNED PER MANUFACTURERS SPECIFICATIONS.
4. * - VOLTAGE TO BE PROVIDED BY ELECTRICIAN.

## BOLLARD LIGHT DETAIL

NOT TO SCALE | GNRL-LGHT-DETL | 01/25/2024




NOTES:

1. LUMINAIRES TO BE MANUFACTURED BY LITHONIA LIGHTING OR APPROVED EQUAL.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
3. *VOLTAGE TO BE CONFIRMED BY ELECTRICIAN CONTRACTOR.

## WALL MOUNTED FIXTURE DETAIL

NOT TO SCALE | GNRL-DTLS-LGHT | 09/21/23

1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES AND STRUCTURES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION.
3. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. THE OWNER AND/OR THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
4. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSION OF THE LANDSCAPE CONSULTANT. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED.
5. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL, AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT.
6. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT HAVE BRANCHES BELOW 10'-0".
7. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
8. ALL PLANT MATERIAL SHALL BE PROPERLY INSTALLED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. CUT AND REMOVE JUTE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL. WIRE BASKETS AND NOT JUTE BURLAP SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING THE PLANT PIT.
9. BRANCHES OF DECIDUOUS TREES SHALL BE PRUNED BACK BY NO MORE THAN ONE QUARTER (1/4) TO BALANCE THE TOP GROWTH WITH ROOTS AND TO PRESERVE THEIR CHARACTER AND SHAPE. THE CENTRAL LEADER OF TREE SHALL NOT BE PRUNED.
10. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PEAT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH CRUSHED STONE OR UNTIL FREE DRAINING.
11. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE AT NURSERY.
12. OPTIMUM PLANTING TIME: DECIDUOUS - APRIL 1 TO JUNE 1 & OCTOBER 15 TO NOVEMBER 30, CONIFEROUS - APRIL 1 TO JUNE 1 & SEPTEMBER 1 TO NOVEMBER 1. PLANTING OUTSIDE OF THE OPTIMUM DATES SHALL NOT BE CONDUCTED WITH OUT PRIOR APPROVAL FROM THE LANDSCAPE CONSULTANT.
13. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS. WATERING AMOUNTS SHOULD BE ADJUSTED AS RAIN EVENTS OCCUR. WATERING AFTER THE INITIAL 4 WEEKS SHALL BE ADJUSTED BASED ON SEASONAL CONDITIONS. WATERING SHALL NOT TAKE PLACE DURING THE HOTTEST POINT OF THE DAY.
14. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR TWO YEARS AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING THE STUMP, AND REPLACED BY A TREE OF SIMILAR SIZE AND SPECIES AT NO EXPENSE TO THE OWNER.
15. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 4" LAYER OF TOPSOIL IN ALL LAWN AREAS AND A MINIMUM OF 12" OF TOPSOIL IN ALL PLANTING AREAS. A FULL SOIL ANALYSIS SHALL BE CONDUCTED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED. SOIL PH SHOULD BE 5.5-6.5.
16. ALL DISTURBED LAWN AREAS SHALL BE STABILIZED WITH SEED AS INDICATED ON THE LANDSCAPE PLANS. TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH THE GENERAL SEEDING NOTES ON THIS SHEET. ALL DISTURBED LAWN AREAS SHALL BE TOPSOILED, LIMED, FERTILIZED AND FINE GRADED PRIOR TO LAWN INSTALLATION.
17. ALL PLANTING BEDS SHALL RECEIVE 3" OF SHREDDED HARDWOOD BARK MULCH.
18. ALL SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
19. ALL PLANTING DEBRIS (WIRE, TWINE, RUBBER HOSE, BACKFILL ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. PROPERTY IS TO BE LEFT IN A NEAT ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.

## GENERAL PLANTING NOTES

NOT TO SCALE | GNRL-PLNT-NOTE | 01/29/24

1. TEMPORARY SEEDING: REFER TO SOIL EROSION AND SEDIMENT CONTROL PLANS.
2. PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL; OPTIMUM SEEDING DATES ARE BETWEEN APRIL 1 AND MAY 31; AND AUGUST 16 AND OCTOBER 15. SEEDING OUTSIDE OF THE OPTIMUM DATES SHALL NOT BE CONDUCTED WITH OUT PRIOR APPROVAL. PERMANENT SEEDING TO BE APPLIED BY RAKING OR DRILLING INTO THE SOILS AT THE RATE GIVEN ABOVE.

TURF MIX

-TALL FESCUE, 'STINGRAY' (34%)
-TALL FESCUE, RAPTOR III (33%)
-HARD FESCUE, 'RIDU' (33%)

SEEDING RATE: 7-10 LBS./1,000 S.F. MIN

BIORETENTION AREA SEED MIXTURE
(NEW ENGLAND WETLAND PLANTS, INC. - NEW ENGLAND WETMIX, OR APPROVED EQUAL)

SPECIES LIST:

- FOX SEDGE, (CAREX VULPINIODEA)
- BLUNT BROOM SEDGE (CAREX SCOPARIA)
- LURID SEDGE (CAREX LURIDA)
- HOP SEDGE (CAREX LUPULINA)
- FOWL BLUEGRASS (POA PALUSTRIS)
- BEGGAR TICKS (BIDENS FRONDOSA)
- GREEN BULRUSH (SCIRPUS ATROVIRENS)
- SWAMP MILKWEED (ASCLEPIAS INCARNATA)
- FRINGED SEDGE (CAREX CRINITA)
- NEW YORK IRONWEED (VERONIA NOVEBORACENSIS)
- SOFT RUSH (JUNCUS EFFUSUS)
- STARVED/CALICO ASTER (ASTER LATERIFLORUS)
- BLUE FLAG (IRIS VERSICOLOR)
- AMERICAN MANNAGRASS (GLYCERIA GRANDIS)
- SQUARE STEMMED MONKEY FLOWER (MIMULUS RINGENS)
- SPOTTED JOE PYE WEED (EUPATORIUM MACULATUM)

SEEDING RATE: 18 LBS PER ACRE.

NATIVE UPLAND WILDLIFE FORAGE & COVER MEADOW MIX
(ERNST CONSERVATION SEEDS - ERNMX-123, OR APPROVED EQUAL)

SPECIES LIST:

| | |
|---|---|
| - BIG BLUESTEM, (ANDROPOGON GERARDII) | 34.4% |
| - SWITCHGRASS (PANICUM) | 27.0% |
| - VIRGINIA WILDRYE (ELYMUS VIRGINICUS) | 21.0% |
| - INDIANGRASS (SORGHASTRUM NUTANS) | 9.0% |
| - PARTRIDGE PEA (CHAMAECRISTA FASCICULATA) | 3.0% |
| - BLACKEYED SUSAN (RUDBECKIA HIRTA) | 3.0% |
| - OXEYE SUNFLOWER (HELIOPSIS HELIANTHOIDES) | 1.5% |
| - PLAINS COREOPSIS (COREOPSIS TINCTORIA) | 0.5% |
| - SHOWY TICKTREFOIL (DESMODIUM CANADENSE) | 0.4% |
| - COMMON MILKWEED (ASCLEPIAS SYRIACA) | 0.1% |
| - WILD BERGAMOT (MONARDA FISTULOSA) | 0.1% |

SEEDING RATE: 20 LBS PER ACRE

3. FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE IN COMPLIANCE WITH THE LATEST NYSDEC REGULATIONS. THIS INCLUDES, BUT LIMITED TO:
   1. NO FERTILIZER SHALL BE APPLIED BETWEEN DEC. 1 AND APRIL 1 IN ANY YEAR.
   2. SHALL NOT BE APPLIED WITHIN 20 FEET OF A WATER BODY.
   3. ONLY LAWN FERTILIZER WITH LESS THAN 0.67% BY WEIGHT PHOSPHATE CONTENT MAY BE APPLIED.
   (A SOIL TEST PRIOR TO FERTILIZER APPLICATION IS RECOMMENDED.)
4. IF SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 4.
5. MULCH TO CONSIST OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH A WOOD AND FIBER MULCH BINDER OR AN APPROVED EQUAL. MULCH WILL BE SPREAD AT RATES PER NYSDEC STANDARDS AND ANCHORED WITH A MULCH ANCHORING TOOL OR LIQUID MULCH BINDER, AND SHALL BE PROVIDED ON ALL SEEDLINGS. HYDROMULCH SHALL ONLY BE USED DURING OPTIMUM GROWING SEASONS.
6. AS NEEDED, WORK LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
7. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
8. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.

## GENERAL SEEDING NOTES

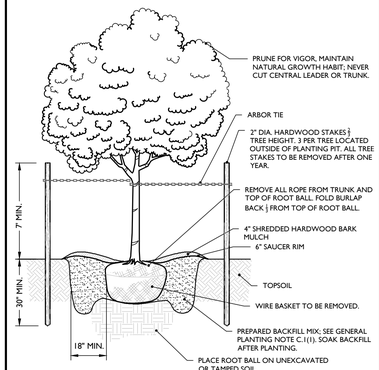
NOT TO SCALE | GNRL-SEED-NOTE | 01/29/24

## PLANT DETAIL NOTES

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT. MULCH SHALL NOT TOUCH THE TREE TRUNK.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
3. WIRE BASKETS AND NON-JUTE BURLAP MUST BE ENTIRELY REMOVED FROM THE ROOT BALL. JUTE BURLAP MUST BE REMOVED FROM THE TOP 1/3 OF THE ROOT BALL.
4. DEPTH OF PLANT PIT SHALL BE INCREASED BY 12" WHEREVER POOR SOIL CONDITIONS OCCUR, WITH THE ADDITION OF LOOSE AGGREGATE.
5. CONTRACTOR SHALL PARTIALLY FILL WITH WATER A REPRESENTATIVE NUMBER OF PITS IN EACH AREA OF THE PROJECT PRIOR TO PLANTING TO DETERMINE IF THERE IS ADEQUATE PERCOLATION. IF PIT DOESN'T PERCOLATE, MEASURES MUST BE TAKEN TO ASSURE PROPER DRAINAGE BEFORE PLANTING.
6. PLANTING MUST BE GUARANTEED FOR TWO FULL GROWING SEASONS FROM THE TIME OF FINAL ACCEPTANCE BY THE LANDSCAPE CONSULTANT. CONTRACTOR SHALL REMOVE ALL WRAPPING AT THE END OF GUARANTEE PERIOD OR SOONER PER PROJECT LANDSCAPE ARCHITECT.
7. BACKFILL MIXTURE TO BE SPECIFIED BASED UPON SOIL TEST AND CULTURAL REQUIREMENTS OF PLANT.
8. PRUNE DAMAGED AND CONFLICTING BRANCHES MAINTAINING NORMAL TREE SHAPE. NEVER CUT CENTRAL TRUNK OR LEADER.

## PLANT DETAIL NOTES

NOT TO SCALE | PLNT-NOTE | 01/29/24

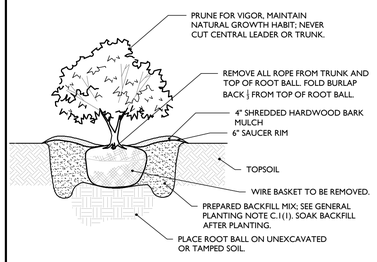



NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

## DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE | GNRL-DTLS-TREE | 09/21/23

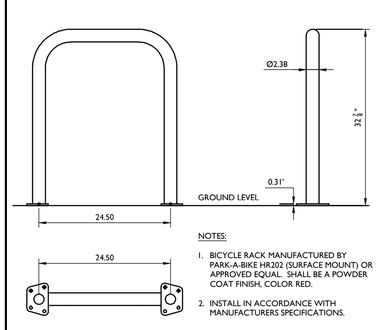



NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

## SHRUB PLANTING DETAIL

NOT TO SCALE | GNRL-DTLS-TREE | 09/21/23

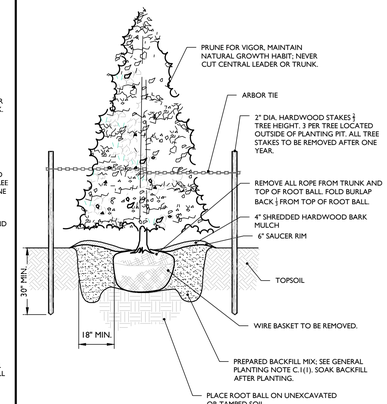



NOTES:

1. BICYCLE RACK MANUFACTURED BY PARK-A-BIKE HR202 (SURFACE MOUNT) OR APPROVED EQUAL. SHALL BE A POWDER COAT FINISH, COLOR RED.
2. INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

## INVERTED 'U' BICYCLE RACK DETAIL

NOT TO SCALE | MCCM-SITE-FNCE-2401 | 07/01/19

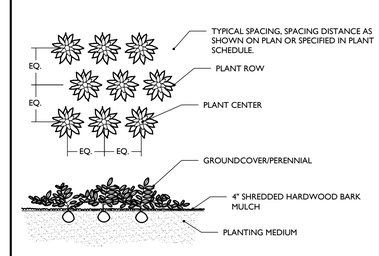



NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

## EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE | GNRL-DTLS-TREE | 09/21/23

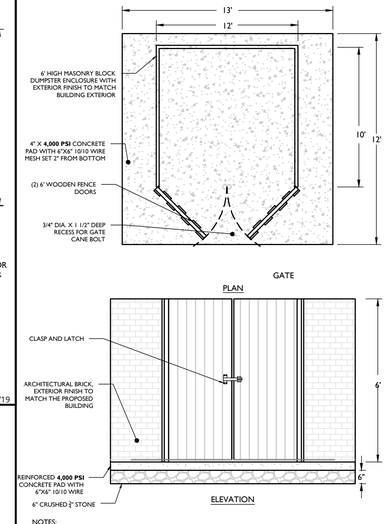



NOTES:

1. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

## GROUNDCOVER/PERENNIAL PLANTING DETAIL

NOT TO SCALE | GNRL-DTLS-TREE | 09/21/23




NOTES:

1. GATE TO REMAIN CLOSED WHEN NOT IN USE. HINGES TO INCLUDE SELF-CLOSING MECHANISM.

## MASONRY TRASH ENCLOSURE (10' X 12') DETAIL

NOT TO SCALE | GNRL-DTLS-STND-GRID | 01/30/24

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-DTLS.dwg|C-19-DETAILS By: KYLE SHALLOW

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Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:42-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

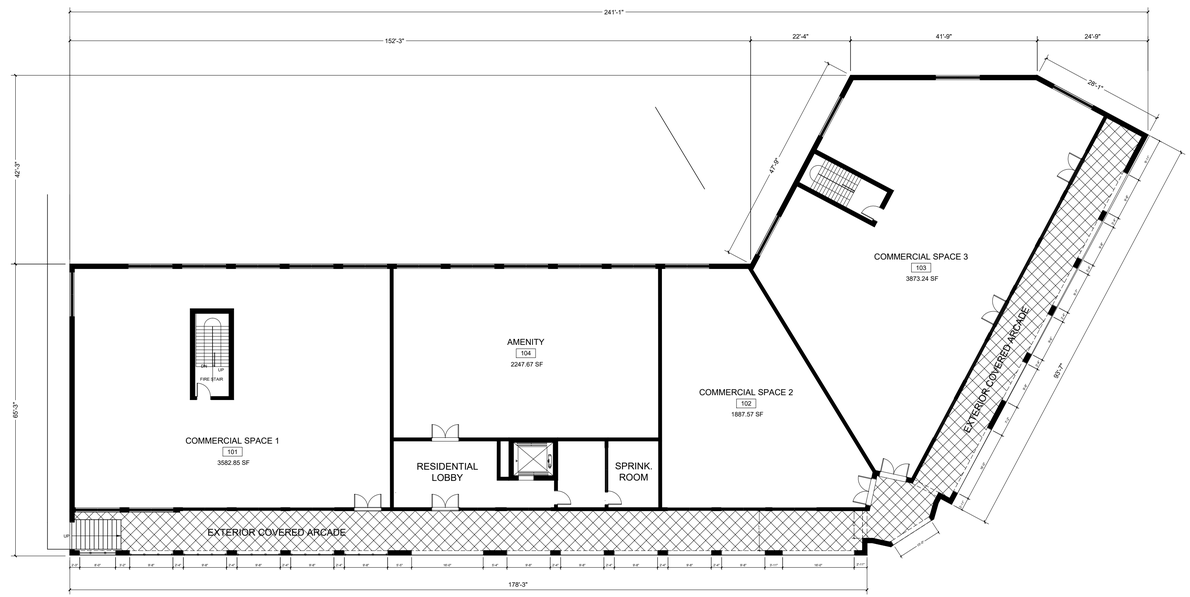
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| PROJECT NUMBER: | DRAWING NAME: | | |
| 23010468A | C-DTLS | | |

SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NUMBER:
19 of 19

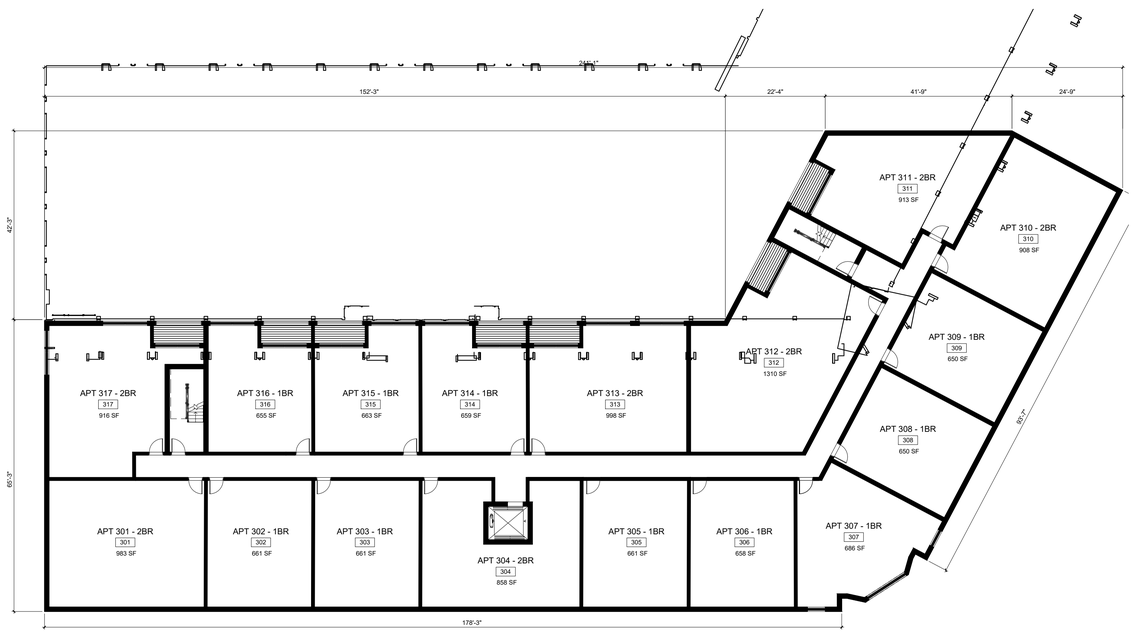
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

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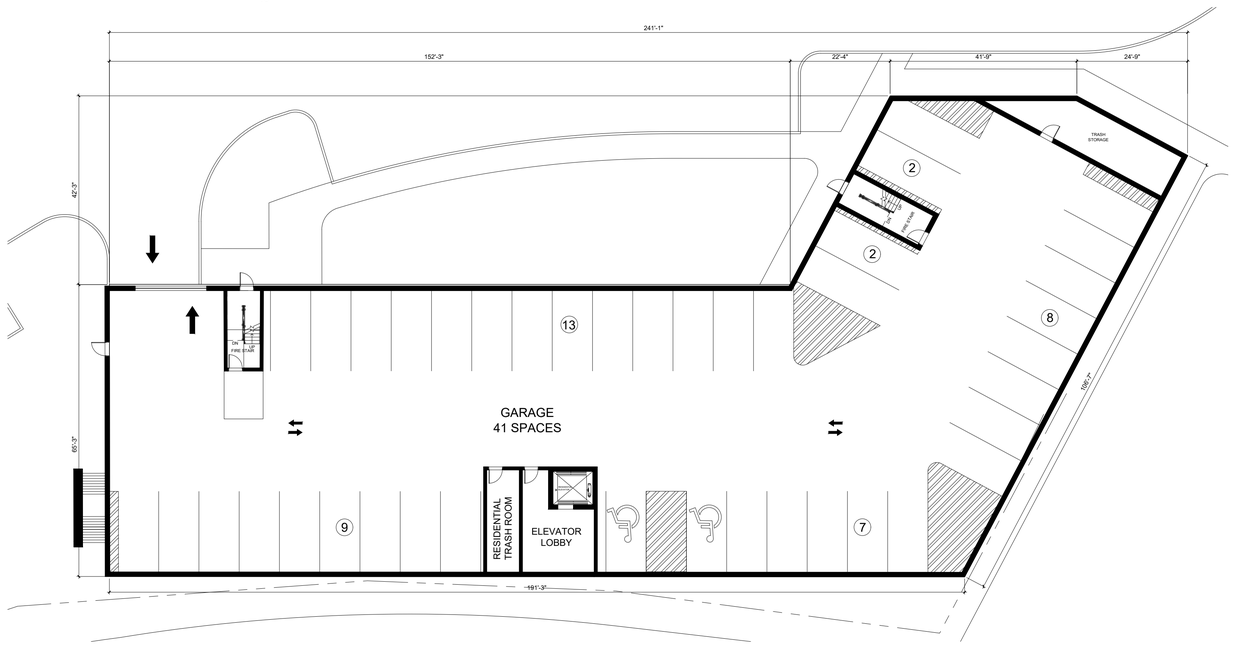

# 1st Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"




# 2nd Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"




# Garage Plan

Scale: $\frac{1}{16}$" = 1'-0"

# Site Plan Application

## Sheet A-101 - Building Plans - Beekman Street

*Owner / Applicant:*
**Beekman Arts Center LLC**
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

*Owner / Applicant:*
**Bayridge Studios LLC**
(Tax ID: 5954-26-781983 & 5954-26-689990)
268 Main Street
Beacon, NY 12508

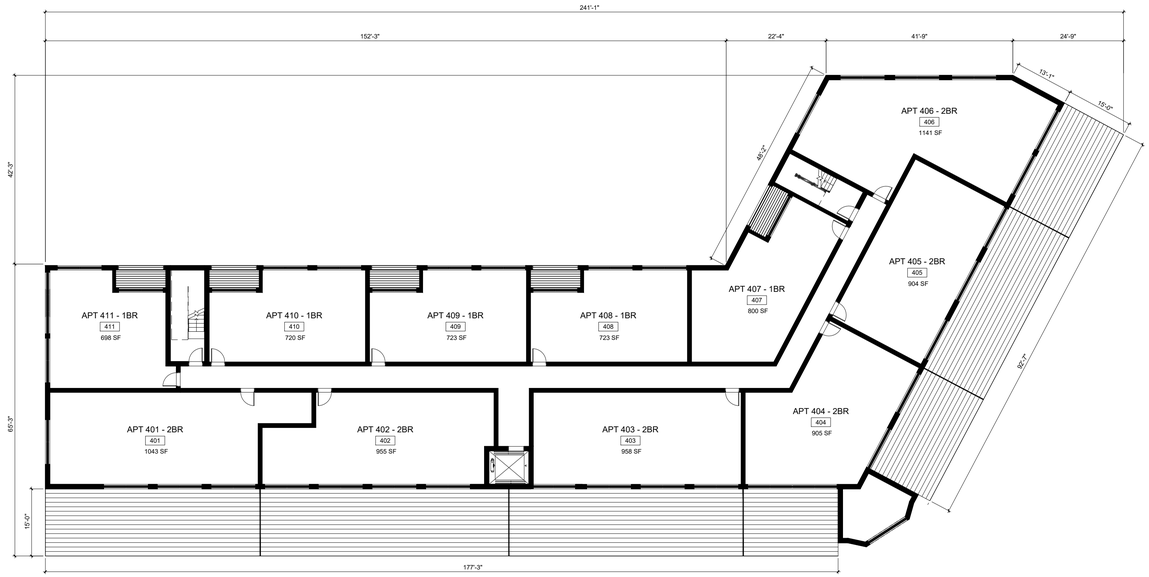
*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Site / Civil Engineer:*
**Colliers Engineering & Design**
555 Hudson Valley Avenue - Suite 101
New Windsor, NY 12553

*Surveyor:*
**Automated Construction Enhanced Solutions, Inc.**
1229 Route 300 - Suite 4
Newburgh, NY 12550

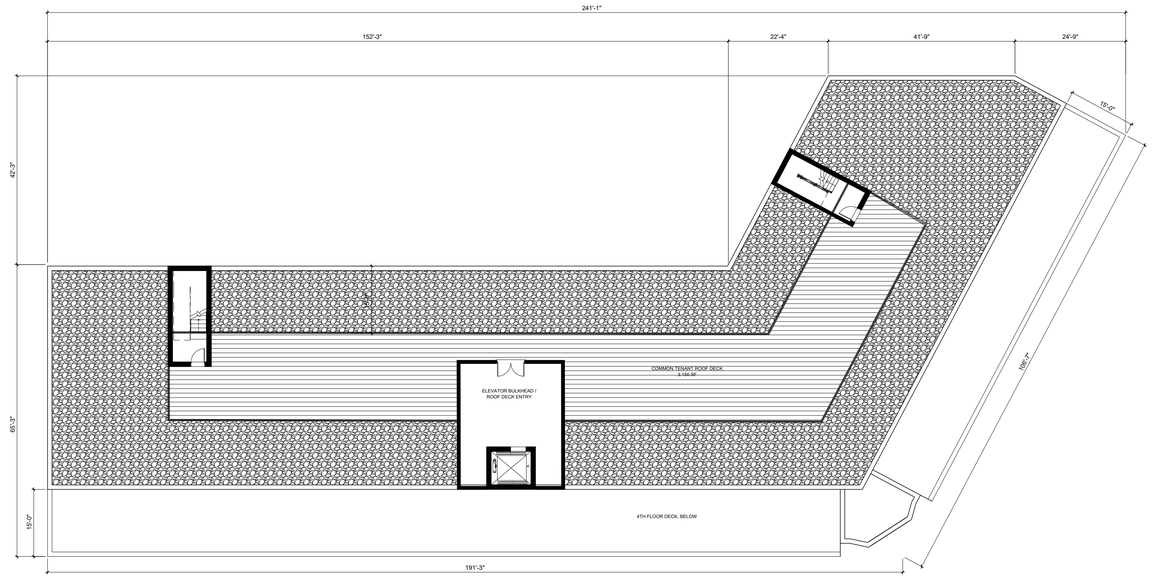
**45 Beekman Street**
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

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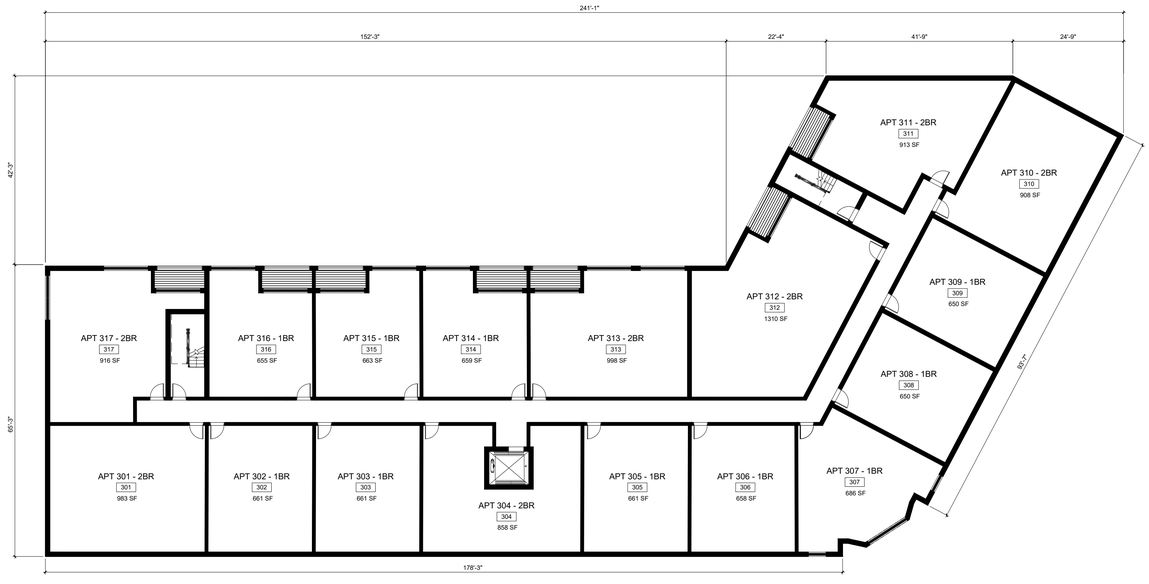

## 4th Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"




## Roof Plan

Scale: $\frac{1}{16}$" = 1'-0"




## 3rd Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"

# Site Plan Application

**Sheet A-102 - Building Plans - Beekman Street**

*Owner / Applicant:*
**Beekman Arts Center LLC**
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

*Owner / Applicant:*
**Bayridge Studios LLC**
(Tax ID: 5954-26-781983 & 5954-26-689990)
268 Main Street
Beacon, NY 12508

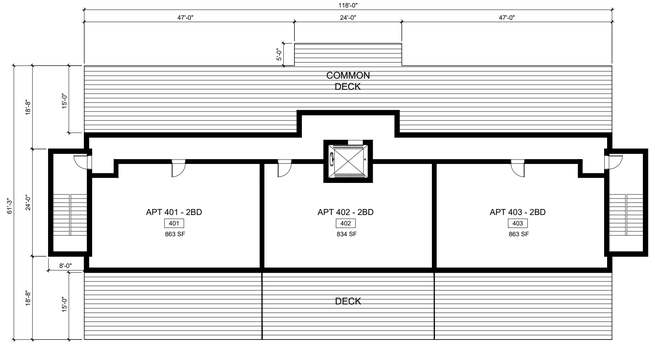
*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Site / Civil Engineer:*
**Colliers Engineering & Design**
555 Hudson Valley Avenue - Suite 101
New Windsor, NY 12553

*Surveyor:*
**Automated Construction Enhanced Solutions, Inc.**
1229 Route 300 - Suite 4
Newburgh, NY 12550

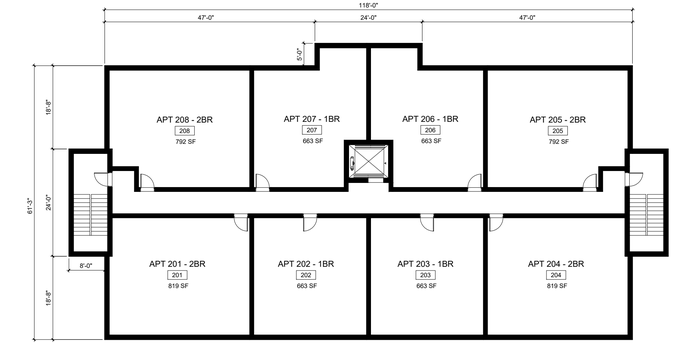
**45 Beekman Street**
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

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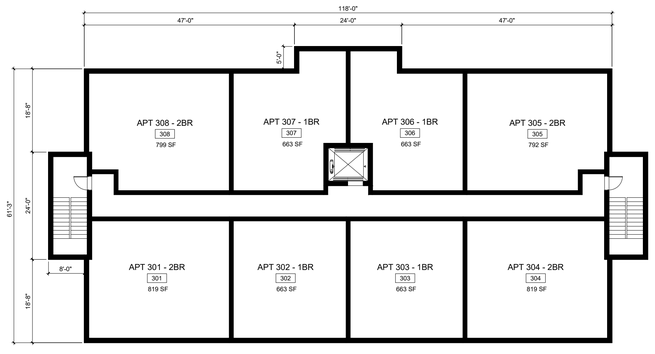

## 4th Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"



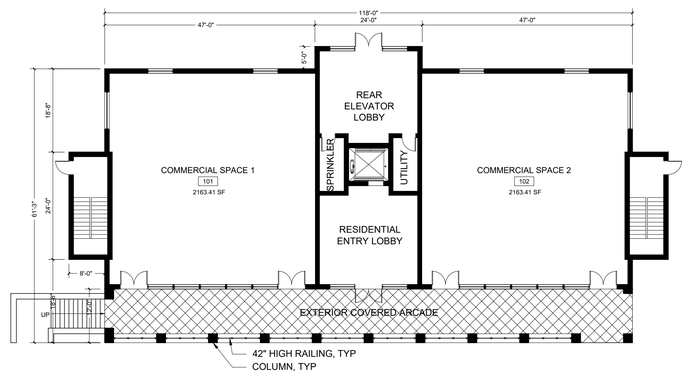

## 2nd Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"




## 3rd Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"




## 1st Floor Plan

Scale: $\frac{1}{16}$" = 1'-0"

# Site Plan Application

**Sheet A-103 - Building Plans - High Street**

*Owner / Applicant:*
**Beekman Arts Center LLC**
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

*Owner / Applicant:*
**Bayridge Studios LLC**
(Tax ID: 5954-26-781983 & 5954-26-689990)
268 Main Street
Beacon, NY 12508

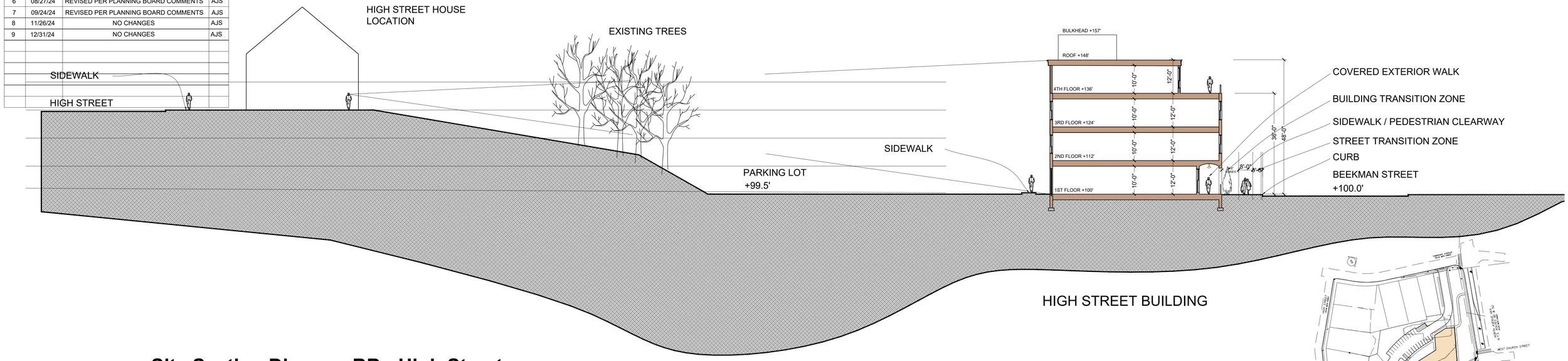
*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Site / Civil Engineer:*
**Colliers Engineering & Design**
555 Hudson Valley Avenue - Suite 101
New Windsor, NY 12553

*Surveyor:*
**Automated Construction Enhanced Solutions, Inc.**
1229 Route 300 - Suite 4
Newburgh, NY 12550

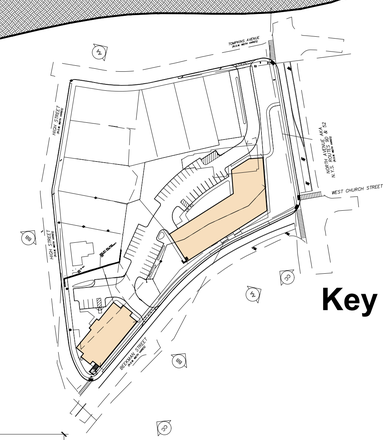
**45 Beekman Street**
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

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| 7 | 09/24/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 8 | 11/26/24 | NO CHANGES | AJS |
| 9 | 12/31/24 | NO CHANGES | AJS |

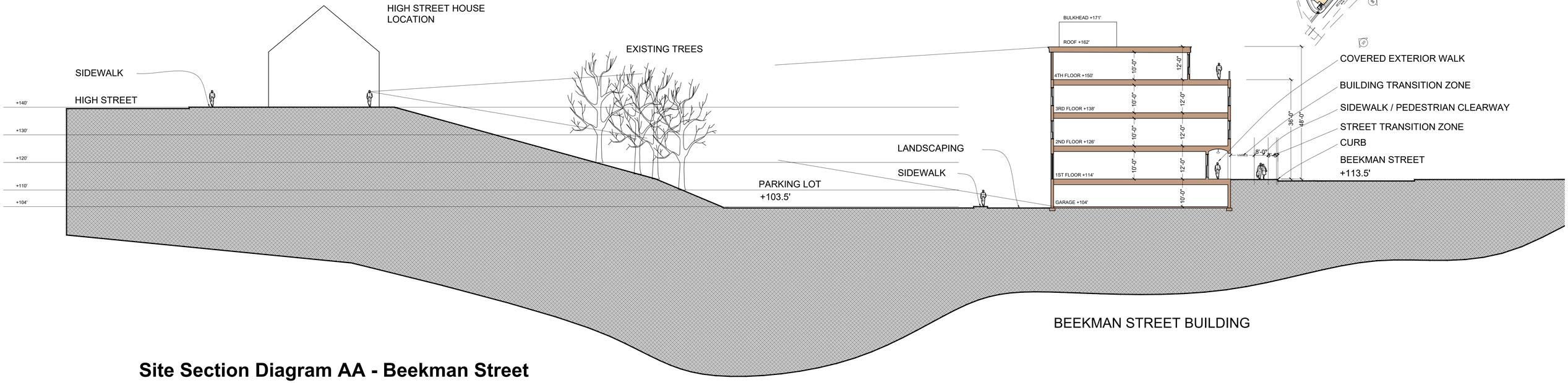



## Site Section Diagram BB - High Street

Scale: $\frac{1}{16}$" = 1'-0"




## Key Plan




## Site Section Diagram AA - Beekman Street

Scale: $\frac{1}{16}$" = 1'-0"

# Site Plan Application

**Sheet A-104 - Site Section Diagram**

*Owner / Applicant:*
**Beekman Arts Center LLC**
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

*Owner / Applicant:*
**Bayridge Studios LLC**
(Tax ID: 5954-26-781983 & 5954-26-689990)
268 Main Street
Beacon, NY 12508

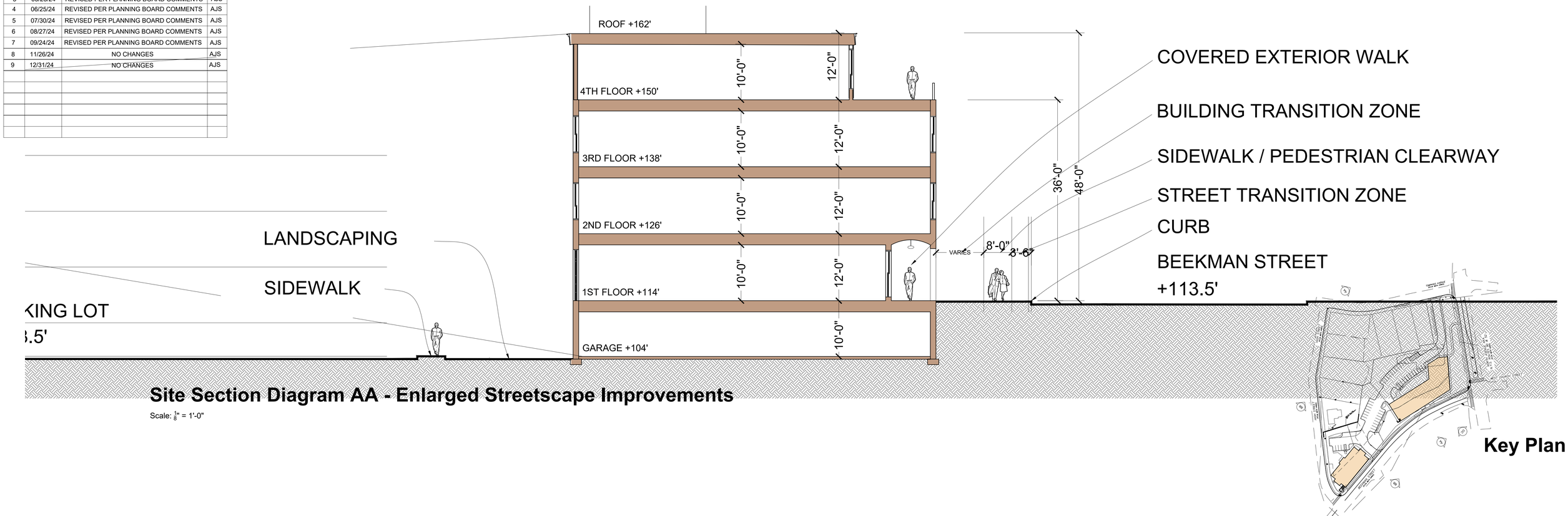
*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Site / Civil Engineer:*
**Colliers Engineering & Design**
555 Hudson Valley Avenue - Suite 101
New Windsor, NY 12553

*Surveyor:*
**Automated Construction Enhanced Solutions, Inc.**
1229 Route 300 - Suite 4
Newburgh, NY 12550

**45 Beekman Street**
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 01/29/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 2 | 04/30/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 3 | 05/28/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 4 | 06/25/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 5 | 07/30/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 6 | 08/27/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 7 | 09/24/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 8 | 11/26/24 | NO CHANGES | AJS |
| 9 | 12/31/24 | NO CHANGES | AJS |

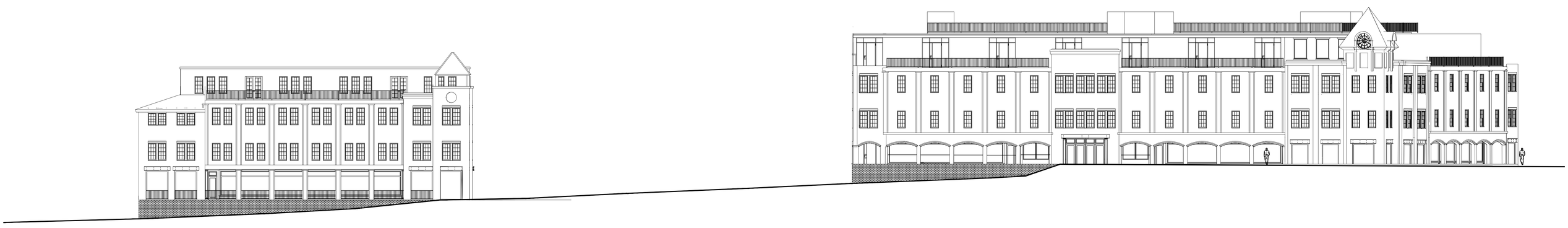



## Site Section Diagram AA - Enlarged Streetscape Improvements

Scale: $\frac{1}{8}$" = 1'-0"



**Key Plan**



HIGH STREET BUILDING

BEEKMAN STREET BUILDING

## Site Section Diagram CC - At Sidewalk Along Beekman Street

Scale: $\frac{1}{16}$" = 1'-0"

NOTE: THE ELEVATIONS SHOWN IN THE SITE SECTION DIAGRAM ARE SCHEMATIC, AND ARE MEANT TO SHOW THE GENERAL SCALE OF THE BUILDING IN RELATION TO THE SIDEWALK FROM BEEKMAN STREET.

# Site Plan Application

**Sheet A-105 - Site Section Diagram**

*Owner / Applicant:*
**Beekman Arts Center LLC**
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

*Owner / Applicant:*
**Bayridge Studios LLC**
(Tax ID: 5954-26-781983 & 5954-26-689990)
268 Main Street
Beacon, NY 12508

*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Site / Civil Engineer:*
**Colliers Engineering & Design**
555 Hudson Valley Avenue - Suite 101
New Windsor, NY 12553

*Surveyor:*
**Automated Construction Enhanced Solutions, Inc.**
1229 Route 300 - Suite 4
Newburgh, NY 12550

**45 Beekman Street**
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 01/29/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 2 | 04/30/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 3 | 05/28/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 4 | 06/25/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 5 | 07/30/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 6 | 08/27/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 7 | 09/24/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 8 | 11/26/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 9 | 12/31/24 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| 10 | 01/14/25 | REVISED PER PLANNING BOARD COMMENTS | AJS |
| | | | |
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# Site Plan Application

## Sheet A-106 - Elevations

*Owner / Applicant:*
**Beekman Arts Center LLC**
(Tax ID: 5955-19-706012)
268 Main Street
Beacon, NY 12508

*Owner / Applicant:*
**Bayridge Studios LLC**
(Tax ID: 5954-26-781983 & 5954-26-689990)
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Beacon, NY 12508

*Architect:*
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*Site / Civil Engineer:*
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New Windsor, NY 12553

*Surveyor:*
**Automated Construction Enhanced Solutions, Inc.**
1229 Route 300 - Suite 4
Newburgh, NY 12550

**45 Beekman Street**
Beacon, New York
Scale: 1/16" = 1'-0"
November 28, 2023

Colliers Engineering & Design

# Stormwater Pollution Prevention Plan

December 31, 2024

## 45 Beekman Street Mixed-Use Development
## City of Beacon, Dutchess County, New York

Prepared for:

Beekman Arts Center LLC &
Bay Ridge Studios LLC
268 Main Street
Beacon, NY 12508

Prepared by:




**Connor P. McCormack, P.E.**
New York State
Professional Engineer
License No. 103756

Digitally signed by Connor Patrick McCormack
Date: 2024.12.31 10:34:35-04'00'

**Colliers Engineering & Design**
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Colliersengineering.com

Project No. 23010468A

Colliers
Engineering & Design

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Appendix 1 – Watershed Maps
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Appendix 3 – NYSDEC Green Infrastructure Worksheets
Appendix 4 – Draft SPDES General Permit GP-0-25-001
Appendix 5 – Draft Notice of Intent (NOI)
Appendix 6 – Draft Notice of Termination (NOT)
Appendix 7 – MS4 Acceptance Form
Appendix 8 – NRCS Hydrologic Soil Mapping
Appendix 9 – Construction Site Logbook
Appendix 10 – NYSDEC Construction Stormwater Inspection Manual
Appendix 11 – Contractor Certification Form
Appendix 12 – NYSDEC Deep-Ripping & Decompaction Manual
Appendix 13 – NOAA Precipitation Data
Appendix 14 – Erosion and Sediment Control Plans
Appendix 15 – NJ CAT Certification – First Defense

# EXECUTIVE SUMMARY

| Project Name: | Owner Name and Address: |
|---|---|
| 45 Beekman Street Mixed-Use Development<br>City of Beacon<br>Dutchess County<br>New York | Beekman Arts Center LLC &<br>Bay Ridge Studios LLC<br>268 Main Street<br>Beacon, NY 12508 |
| **Project Location:** | **Project Engineer and Firm:** |
| 45 Beekman Street<br>City of Beacon, Dutchess County , NY 12508<br>Tax lots: 5955-19-706012, 5954-26-689990,<br>5954-26-781983 | Connor P. McCormack, P.E.<br>Colliers Engineering & Design<br>555 Hudson Valley Avenue, Ste 101<br>New Windsor, NY 12553<br>(845) 564-4495 |
| **MS4 Contact:** | **Contractor Name and Address:** |
| City of Beacon (NYR20A040)<br>1 Municipal Plaza<br>Beacon, NY 12508 | TBD |

## Figure 1: Project Location Aerial



## INTRODUCTION

The project site is in the city of Beacon, Dutchess County, New York, bounded by North Avenue (Rt 9D), Beekman Street, High Street, and Tompkins Avenue. The property is comprised of tax lots 5955-19-706012, 5954-26-689990, & 5954-26-781983 and is located within the Linkage (L) Zoning District and has a total lot area 77,717 square feet, or 1.79 acres. The existing site is partially developed with an existing art studio, driveways, and parking lot. The balance of the site is maintained by lawn and woods.

The applicant proposes to redevelop the site with two (2) 4-story mixed-use buildings with ground floor commercial space and multi-family residential units. The project will include off-street surface and garage parking facilities (91 total spaces) using existing driveway connections to Tompkins Avenue and Beekman Street. The site improvements also include water and sanitary sewer service connections to City of Beacon mains, stormwater management features necessary to support the development, and landscaping and lighting improvements.

To meet the stormwater requirements, (1) one bioretention basin, (1) one subsurface detention system, and (1) hydrodynamic separator is proposed on site. These stormwater features have been designed in accordance with the July 31, 2024 New York State Stormwater Management Design Manual and local municipal requirements.

Due to the size of the project, coverage under the State Pollutant Discharge Elimination System Draft General Permit (SPDES GP 0-25-001), administered by New York State Department of Environmental Conservation (NYSDEC), is required.

# STORMWATER MANAGEMENT GOALS

The Stormwater Pollution Prevention Plan (SWPPP) has been prepared in compliance with the New York State Department of Environmental Conservation (NYSDEC), State Pollutant Discharge Elimination System (SPDES) and The Draft General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-0-25-001 (See ***Appendix 4***). The SWPPP is a plan for controlling runoff and pollutants from a site during and after construction activities. The principal objective of this document is to comply with the SPDES Permit for construction activities by planning and implementing the following practices:

- Reduction or elimination of erosion and sediment loading to water bodies during and after construction.
- Control of the impact of stormwater runoff on the water quality of the receiving waters.
- Control of the peak rate of runoff during and after construction.
- Maintenance of stormwater controls during and after completion of construction.

## Classification & Standards

The activities associated with this project are eligible for coverage under this permit. Using the General Permit guidelines for coverage, a summary of classification and requirements is provided below:

Project Type:

- *Commercial developments.*
- *Multi-family residential developments.*

Classification: ***Appendix B***, Table 2, of the GP-0-25-001 "Construction activities that require the preparation of a SWPPP that includes Post Construction Stormwater Practices".

The following guidance documents, in addition to various resources located on the NYS Department of Environmental Conservation website, were used in the preparation of this SWPPP.

- The New York State Stormwater Management Design Manual, by New York State Department of Environmental Conservation, July 31,2024.
- New York Standard Specifications for Erosion and Sediment Control, by New York State Department of Environmental Conservation, November 2016.

The SWPPP is intended to be a *'living'* document and should be revised and updated whenever site conditions dictate. Any proposed modifications shall be reviewed by the owner/operator prior to incorporation in the SWPPP and implementation at the project site. The certifying engineer of this SWPPP document shall be notified of any proposed modifications to this document. Modifications shall be in accordance with the NYSDEC technical standards.

# METHODOLOGY

1. The watersheds are divided into subareas, by topography, soils, and land use. A summary of the watershed areas, composite curve numbers, and travel times are shown in Table 1.
2. Rainfall depths used for this analysis were taken from NOAA Atlas 14 data for the 100, 10, and 1-year 24-hour storms as directed in the NYSSMDM.
3. Topographical mapping is taken from a survey titled "Topographic Contour Survey of the lands Beekman Arts Center, LLC & Bayridge Studios, LLC", prepared by Jonathan N. Millen, LLS; Dated 11/3/2023 and supplemented with best available mapping.
4. The required water quality volume (WQv) was calculated in accordance with Section 4.2 and Chapter 9 (redevelopment) of the NYSSMDM. This is also the required RRv as per Section 4.3 of the NYSSMDM.
5. The provided RRv was calculated with the Green Infrastructure (GI) Worksheets, Version 1.6, provided by NYSDEC. The worksheets are included in ***Appendix 3***.
6. As this project is defined as re-development with an increase in impervious areas, the study shows mitigation of the proposed impervious areas as required per the NYSSMDM.
7. The peak flows from the watersheds in the existing condition are computed using the runoff curve numbers taken from TR-55 to determine undeveloped peak runoff and runoff hydrographs at the design points. The existing peak flows are presented in the report.
8. In the post-development condition, the peak flows from the proposed development are computed using the runoff curve numbers taken from TR-55. The watersheds are adjusted for the proposed improvements and grading of the site. The runoff flows are hydraulically routed for updated travel times, diversions, and new storage structures, as necessary. The resulting proposed peak flows at the design point are presented in the report.

9. Erosion and sediment control plans and details have been included with the site plans. A full Erosion & Sediment Control Plan (plans and construction sequencing) designed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (aka the "bluebook") has been included in the ***Appendix*** of this document.
10. Maps indicating the various drainage conditions are enclosed in this report. Schematic diagrams of the flow models in the existing and proposed conditions are included in the HydroCAD output within ***Appendix 2***.
11. A Notice of Intent (NOI) for GP-0-20-001 has been included in the ***Appendix*** of this report.

# DISCUSSION

## Discussion of Design Points

The Project has one (1) design point, studied to mitigate stormwater peak flow and provide the required water quality requirements. The design point and drainage area were limited, wherever possible to the area of the proposed project site. The design point evaluated in this report is described as follows:

**Design Point 1** is located at a storm drain at the northern corner of Beekman Street and High Street. It receives runoff from the project site, the surrounding rights-of-way, and the surrounding properties to the north and west of the project site. The runoff enters the design point via storm pipes either from other inlets on High Street or from the flared outlet section located on the project site along Beekman Street.

### Table 1: Watershed Characteristics

| **Existing Conditions** | | | |
|---|---|---|---|
| **WS Name** | **Area** | **CN** | **Tc (min)** |
| WS 1 | 4.348 | 76 | 15.4 |
| **Totals** | 4.348 | - | - |
| **Proposed Conditions** | | | |
| **WS Name** | **Area** | **CN** | **Tc** |
| PWS-1 | 0.602 | 80 | 6.0 |
| PWS-2 | 0.621 | 72 | 6.0 |
| PWS-3 | 0.121 | 98 | 6.0 |
| PWS-4 | 0.257 | 98 | 6.0 |
| PWS-5 | 2.099 | 75 | 6.0 |
| PWS-6 | 0.178 | 98 | 6.0 |
| PWS-7 | 0.015 | 91 | 6.0 |
| PWS-8 | 0.388 | 85 | 6.0 |
| PWS-9 | 0.068 | 85 | 6.0 |
| **Totals** | 4.348 | - | - |

## Soil Types

Soil data for this project was obtained from the NRCS Web Soil Survey (WSS) as operated by the USDA Natural Resources Conservation Service (NRCS) (See ***Appendix 8***)

One (1) soil designation is identified within the project site. The project site consists entirely of Dutchess-Cardigan complex, undulating, rocky (DwB). A further detailed description of the soil characteristics and properties can be found in ***Appendix 8*** of this report***.***

## Hydrologic Soil Group (HSG)

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four (4) groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long duration storms. The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D and C/D). Conservatively, dual-class soil groups are considered "D" soils.

### Table 2: Hydrologic soil groups

| HSG | Soil (abbreviation) |
|---|---|
| B | DwB |

## Soil Boring and Infiltration Testing

Project specific soil testing has not yet been conducted as part of the preliminary stormwater designs. The required stormwater testing shall be conducted to confirm the existing soil conditions within the proposed basin locations. The final SWPPP and stormwater design shall be adjusted as necessary based on forthcoming soil testing.

## Redevelopment.

As defined in Chapter 9 of the NYSSMDM, redevelopment activity is disturbance and reconstruction of existing impervious surfaces. This includes impervious surfaces removed within the last five (5) years. Redevelopment is distinguished from new development in that new development refers to construction on land where there had not been previous construction. Redevelopment specifically applies to constructed areas with impervious surface.

According to the Design Manual, Redevelopment of previously developed sites is encouraged from a watershed protection standpoint because it often provides an opportunity to conserve natural resources in less impacted areas by targeting development to areas with existing services and infrastructure. At the same time, redevelopment provides an opportunity to correct existing problems and reduce pollutant discharges from older developed areas that were constructed without effective stormwater pollution controls.

Site constraints associated with pre-developed project sites are another factor that makes it more difficult to provide standard stormwater practices (SMPs). The biggest constraints encountered on this site are primarily the presence of highly compacted and poorly drained soils. Chapter 9 of the NYSSMDM sets forth alternative design criteria for certain redevelopment projects because the technical standards contained elsewhere in the Manual were primarily intended for new development projects and compliance with those standards may present a challenge to some redevelopment projects.

All of the new development is located within the watershed's tributary to design point 1, therefore the net increase in impervious surface (0.31 acres) has been treated in these watersheds. A breakdown of the change in impervious areas for the project has been included below.

## Table 3: Redevelopment Impervious Cover Comparison

| Existing Tributary Impervious Area (Acres) | Proposed Tributary Impervious Area (Acres) | Net Change in Tributary Impervious Area (Acres) | Percent Change in Tributary Impervious Area |
|---|---|---|---|
| 1.90 | 2.21 | 0.31 | 16% |

Section 9.2.1 of the NYSSMDM details the sizing criteria for both water quantity and water quality control practices. If redevelopment results in no increase or a reduction of impervious area or changes to hydrology that increase the discharge rate, the one-, ten-, and hundred-year criteria will not be necessary. This consideration does not mean that quality or existing quantity controls may be neglected in planned designs. Since there are no existing quality or quantity controls on site, they cannot be neglected; therefore, the proposed design incorporates practices ensuring the reduction of peak flow rates for all criteria at all design points.

Because the project is considered "redevelopment with an increase in the impervious area", the water quality design will utilize two sets of design criteria. The 0.31 acres of additional impervious area will be considered new development. A Bioretention basin within underdrains has been decided to provide WQv for this "new development" (see table 5). The remaining impervious area shall be treated as redevelopment. As outlined in Section 9.2.1.B.IV of the design manuals. **The redevelopment water quality requirement shall be designed to treat 75% of the water quality volume from the impervious area within the LOD (1.469 Acres).**

The project has been designed to treat the required redevelopment water quality volume using an alternative treatment practice, a hydrodynamic separator. The hydrodynamic separator is a rate-based practice but has been designed to capture and treat the required impervious area outlined below:

- Required redevelopment treatment area = 75% * 1.469 acres = 1.102 acres
- Provided redevelopment treatment area = 1.1259 acres (impervious area from watersheds PWS-3, PWS-4, PWS-5 & PWS-9)

The sizing information for the hydrodynamic separator has been included later in this report.

## Zero-Net Increase:

The proposed storm water improvements for the site provide the required channel protection (CPv), overbank flood protection (Qp), and extreme flood protection (Qf). Peak flows have been reduced at the selected design point in the proposed condition for the 100, 10, and 1-year storms. These peak flow reductions can also be found in Table 4 below.

### Table 4: Existing and Proposed Peak Flow Summary

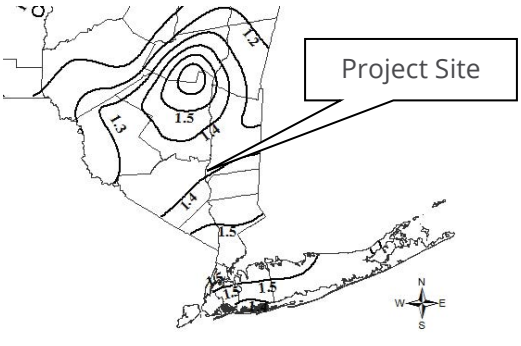
| | Storm Events | Existing | Proposed | Diff. | Percent |
|---|---|---|---|---|---|
| DP 1 | 1 | 2.47 | 2.41 | -0.06 | -2.43% |
| | 10 | 9.68 | 9.68 | -0.00 | -0.00% |
| | 100 | 19.50 | 19.47 | -0.03 | -0.15% |

*Peak Flows in Cubic Feet per second (CFS)

As is evident in the table above, attenuation of the peak flows by diversion, site planning, and the utilization of SMP's with RRv capacity have effectively reduced or maintained the peak discharge while providing the required water quality, which will be further discussed below.

## Water Quality Volume (WQv):

The Water Quality Volume (WQv) is designed to improve water quality. The design captures and treats 90% of the average annual stormwater runoff volume. The WQv is directly related to the impervious cover created at a site. The 90% rainfall event value (P) used in the calculations (1.40") is shown below in the portion of Figure 4.1 from Section 4.2, pages 4-3 in the NYSSMDM.




**90% Rule:**

$WQ_v = [(P)(R_v)(A)] /12$
$Rv = 0.05+0.009(I)$
I = Impervious Cover (Percent)
Minimum Rv = 0.2
P = 90% Rainfall Event Number (See Figure 4.1)
A = site area in acres

Colliers Engineering & Design determined the impervious area for each watershed in the proposed condition. The Runoff Coefficient "Rv" in the computation of Water Quality Volume WQv is

dependent on the percent impervious cover. As per Section 4.2 of the NYSSMDM, 100% of the water quality volume shall be treated.

Table 5: Required Water Quality Calculation

| Watershed | Area (A) Acres | 90% Rainfall Event Number (P) Inches | Impervious Area treated Acres | Percent Impervious (I) % | Runoff Coefficient Rv | Required WQv Cf | Provided WQv Cf |
|---|---|---|---|---|---|---|---|
| PWS-1 | 0.60 | 1.40 | 0.31 | 52% | 0.52 | 1,570* | 1,570 |

* The required WQv is based on the 0.31 Acres of new impervious area.

The total required water quality volume per NYSDEC standards is based on the proposed increase in impervious area (new development) 0.31 acres, is 1,570 Cf or 0.036 Ac-ft. As shown in table 5 above, the current design provides the required Water quality volume.

## Runoff Reduction Volume

The runoff reduction volume (RRv) is designed to reduce the stormwater volume leaving the site by capturing an amount equal to the computed water quality volume and infiltrating it onsite. However, for sites that cannot reduce runoff in an amount equal to the water quality volume, a minimum RRv is allowed if the project demonstrates acceptable limitations. The minimum RRv requirement (in acre-feet) was calculated as follows:

$RRv_{min}$ = [(P)($\bar{R}$v)(S)(Aic)]/12 where,
I = Percent Impervious Cover (must be 100%)
P = 90% rainfall event = 1.4
$\bar{R}$v = 0.05+ [(0.009) (I)] = 0.95
S = Hydrologic Soil Group Reduction Factor = 0.40 (100% HSG B)
Aic = Total Area of new impervious cover (acres) = 0.31

$$RRv_{min} = \frac{[(P)(\bar{R}v)(S)(Aic)]}{12} = \frac{[(1.4)(0.95)(0.40)(0.31)]}{12} = 0.014 \text{ Acre-ft} = \mathbf{599\ ft^3}$$

Runoff from the new development impervious area has been treated by bioretention basins. Within these proposed practices, the entire WQv has not been reduced using standard SMPs with RRv capacity. The RRv and for each proposed practice is included in Table 6 below. Supporting calculations are provided in ***Appendix 3***.

## Table 6 –RRv Volumes Provided

| Watershed | Treatment Practice | RRv Provided (CF.) |
|---|---|---|
| PWS-1 | Bioretention Basin (F-5) | 632 |

The proposed development requires a minimum runoff reduction of 541 cf (0.012 Ac-Ft) to be reduced and total water quality to be treated for the proposed improvements. The proposed design exceeds the minimum requirement, providing an RRv of 632 cf (0.058 Ac-ft) and meets the requirement set forth by the NYSDEC requirements. This aspect of the design has been met.

## Runoff Reduction Volume (RRv) through Site Planning:

The application of site planning and green infrastructure to reduce water quality volume with runoff reduction practices can either reduce the required water quality volume to be treated; or can completely account for the required water quality volume. The summary of this analysis can be found below. The combination of practices provided on site exceeds the minimum required water quality and runoff reduction for the proposed development.

The basic premise of runoff reduction is to recognize the water quality benefits of certain practices by allowing for a reduction in the water quality treatment volume. Runoff reduction is first achieved through better site design during the planning stages and has been implemented in the planning and design of this project as described in this report.

In accordance with Section 5.2 "Planning for Green Infrastructure: Reduction of Impervious Cover" of the NYSDEC Stormwater Management Design Manual, the proposed site plan has been designed to meet the planning techniques as follows:

## Table 7: Green Infrastructure Site Planning

| **Preservation of undisturbed Areas** | |
|---|---|
| Delineate and place into permanent conservation undisturbed forests, native vegetated areas, riparian corridors, wetlands, and natural terrain. | The extent of the clearing was limited to meet the user's needs. The project site is within the city and most of the site has been disturbed for construction in the past. |
| **Preservations of Buffers** | |
| Define, delineate and preserve naturally vegetated buffers along perennial streams, rivers, shorelines and wetlands. | Not applicable for this project. |
| **Reduction of Clearing & Grading** | |

| | |
|---|---|
| Limit clearing and grading to the minimum amount needed for roads, driveways, foundations, utilities and stormwater management facilities. | The clearing limit was minimized using maximum allowable slopes and retaining walls to meet grade where applicable. |
| **Locating Development in Less Sensitive Areas** | |
| Avoid sensitive resource areas such as floodplains, steep slopes, erodible soils, wetlands, mature forests and critical habitats by locating development to fit the terrain in areas that will create the least impact. | The project is classified as redevelopment and there are no environmentally sensitive areas on site. |
| **Open Space Design** | |
| Use clustering, conservation design or open space design to reduce impervious cover, preserve more open space and protect water resources. | Open areas are proposed on site. |
| **Soil Restoration** | |
| Restore the original properties and porosity of the soil by deep till and amendment with compost to reduce the generation of runoff and enhance the runoff reduction performance of post construction practices. | Compacted soils located in open areas without shallow existing utilities will be tilled in order to restore the original properties of the soil prior to seeding. (*see* ***Appendix 11***) |
| **Roadway Reduction** | |
| Minimize roadway widths and lengths to reduce site impervious area. | Roadway widths were reduced wherever possible to meet the end users needs and for emergency vehicle access. |
| **Sidewalk Reduction** | |
| Minimize sidewalk lengths and widths to reduce site impervious area. | Sidewalks added where needed to adequately and safely serve the pedestrian needs of the facility. |
| **Driveway Reduction** | |
| Minimize driveway lengths and widths to reduce site impervious area. | The proposed driveways have been minimized wherever possible. |
| **Cul-de-Sac Reduction** | |
| Minimize the number of cul-de-sacs and incorporate landscaped areas to reduce their impervious cover. | N/A no Cul-de-Sacs are proposed. |
| **Building Footprint Reduction** | |

| | |
|---|---|
| Reduce the impervious footprint of residences and commercial buildings by using alternate or taller buildings while maintaining the same floor to area ratio. | The building were designed to meet the potential end user's needs. |
| **Parking Reduction** | |
| Reduce imperviousness on parking lots by eliminating unneeded spaces, providing compact car spaces and efficient parking lanes, minimizing stall dimensions, using porous pavement surfaces in overflow parking areas, and using multi-storied parking decks where appropriate. | The parking spaces were limited to what is required by local municipal code and the end users needs. |

Green Infrastructure Techniques (GITs):

After considering the reductions through Site Planning mentioned above, RRv remains to be treated through GITs and/or Standard SMPs. Chapter 5 of the NYSSMDM outlines the various Green Infrastructure Techniques that can be implemented on-site to achieve runoff reduction. The GI Worksheets included in the ***Appendix*** of this report provide the calculations for the Green Infrastructure Techniques chosen to treat the Runoff Reduction Volume for this project. Below is a brief description of each Green Infrastructure Technique along with a discussion regarding the feasibility of each technique with respect to this project.

## Table 8: Green Infrastructure Feasibility

| | |
|---|---|
| **Conservation of Natural Areas** | |
| Retain the pre-development hydrologic and water quality characteristics of undisturbed natural areas, stream and wetland buffers by restoring and/or permanently conserving these areas on a site. | There are no natural areas on the project site. it is located at the center of the City of beacon and is surrounded on all sides with development. |
| **Sheetflow to Riparian Buffers or Filter Strips** | |
| Undisturbed natural areas such as forested conservation areas and stream buffers or vegetated filter strips and riparian buffers can be used to treat and control stormwater runoff from some areas of a development project. | Not applicable for this project. |
| **Vegetated Open Swale** | |
| The natural drainage paths, or properly designed vegetated channels, can be used instead of constructing underground storm sewers or concrete open channels to increase time of | Vegetated open swales were used to divert clean runoff around the site, towards the design point. |

| | |
|---|---|
| concentration, reduce the peak discharge, and provide infiltration. | |
| **Tree Planting/Tree Box** | |
| Plant or conserve trees to reduce stormwater runoff, increase nutrient uptake, and provide bank stabilization. Trees can be used for applications such as landscaping, stormwater management practice areas, conservation areas and erosion and sediment control. | Tree planting has been proposed through the site but has not been quantified as a stormwater mitigation. |
| **Disconnection of Rooftop Runoff** | |
| Direct runoff from residential rooftop areas and upland overland runoff flow to designated pervious areas to reduce runoff volumes and rates. | Based on the site of the proposed building this is not a recomendded pratice. |
| **Stream Daylighting for Redevelopment Projects** | |
| Stream Daylight previously-culverted/piped streams to restore natural habitats, better attenuate runoff by increasing the storage size, promoting infiltration, and help reduce pollutant loads. | This strategy is not applicable to the project. |
| **Rain Garden** | |
| Manage and treat small volumes of stormwater runoff using a conditioned planting soil bed and planting materials to filter runoff stored within a shallow depression. | There are a few green locations proposed throughout the development but rain gardens have not been proposed on site. |
| **Green Roof** | |
| Capture runoff by a layer of vegetation and soil installed on top of a conventional flat or sloped roof. The rooftop vegetation allows evaporation and evapotranspiration processes to reduce volume and discharge rate of runoff entering conveyance system. | The structural design and use of the proposed buildings do not allow for this technique. |
| **Stormwater Planter** | |
| Small landscaped stormwater treatment devices that can be designed as infiltration or filtering practices. Stormwater planters use soil infiltration and biogeochemical processes to decrease stormwater quantity and improve quality. | Landscaping in green areas and planted beds are proposed throughout the development, but planters have not been proposed for treatment. No credit has been taken in the SWPPP. |

| Rain Tank or Cistern | |
|---|---|
| Capture and store stormwater runoff to be used for irrigation systems or filtered and reused for non-contact activities. | This practice has not been used for the proposed development. |
| **Porous Pavement** | |
| Pervious types of pavements that provide an alternative to conventional paved surfaces, designed to infiltrate rainfall through the surface, thereby reducing stormwater runoff from a site and providing some pollutant uptake in the underlying soils. | Due to maintenance concerns and the redevelopment classification of the site, this practice was not proposed. |

The bioretention basins account for the runoff reduction as required. The site has been designed to meet the required water quality requirements without accounting for the pretreatment volume tributary to the proposed basins.

Soil restoration efforts, including mechanical decompaction and compost amendment in accordance with Section 5.1.6 and Table 5.3 of the NYSSMDM, are proposed for areas to be disturbed for improvements that will not be impervious at the final buildout.

Refer to Tables 7 and 8 above for the decision-making matrices utilized here. The design for the project utilized standard SMPs with RRv capacity to attain the required minimum runoff reduction volume and water quality for new construction and redevelopment, respectively. NYSDEC Green Infrastructure (GI) worksheets can be found in ***Appendix 3*** summarizing calculations.

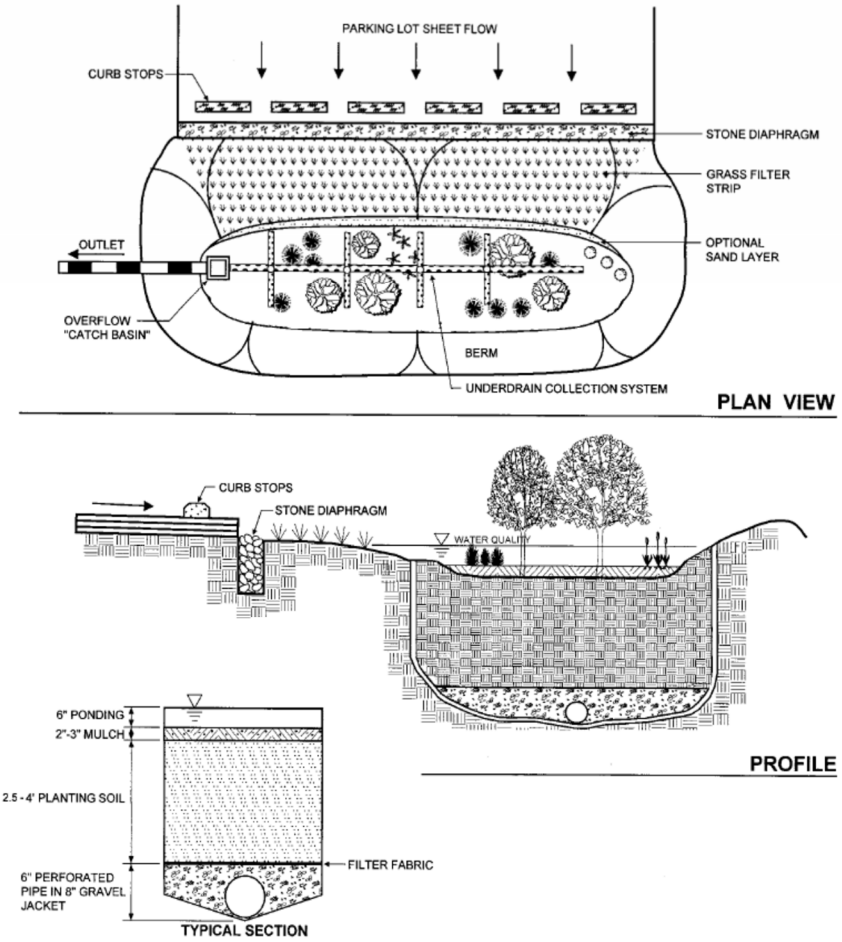
## Bioretention Basin with Underdrain (No Infiltration):

The proposed development causes an increase in impervious cover. As such the runoff must be mitigated for water quality. One of the SMPs utilized for the proposed development is the use of bioretention with a proposed underdrain (F-5). Runoff from the development is proposed to be routed to a bioretention basin to provide runoff reduction capacity as well as water quality treatment volume. The basins are proposed with a 3-inch mulch layer, 2.5 feet of soil media, and a 12-inch drainage layer with a 6-inch underdrain which ultimately connects to an outlet control structure and discharges downstream to provide WQv. Bioretention soils shall meet the design criteria outlined in Appendix H of the NYSSMDM; soil deep ripping and de-compaction shall be in accordance with the NYSDEC guidelines found in the Appendix.

The sizing calculation for the bioretention system was completed in accordance with the design requirements set forth in Section 6.4.4 of the NYSSMDM. Flush curbs with rip rap leading to a forebay with a storage volume of 701 CF have been provided in all locations for pre-treatment of the sheet flow from the paved areas.

The stage/storage information of the bioretention areas can be found in the HydroCAD output within the Appendix of this report. The NYSDEC GI worksheet for runoff reduction and water quality treatment can be found in the Appendix for RRv capacity calculations (See NYSDEC GI worksheet). A summary of the water quality provided in these facilities can be found in Table 6.

**Figure 6.19 Bioretention (F-5)**




## StormTech Subsurface Detention Chamber:

The StormTech MC-3500 is a subsurface resin chamber that allows the storage of large volumes at reasonable depths. One underground system has been designed to the west of the proposed building #1. Sizing for these systems include the standard 9" stone base to increase storage capacity for the given footprint and can be found in the HydroCAD output. The system has been designed to provide detention only and no credit is taken for infiltration of stormwater. The calculations shown include the volume within the chambers and stone voids (StormTech assumes a porosity of 40%).

## Hydrodynamic Separator (Swirl Chamber):

The applicant proposes to install a hydrodynamic separator to provide water quality for the redevelopment portions of the site. Hydrodynamic separators are devices that move water in a circular, centrifugal manner to accelerate the separation and deposition of primary sediment from the water. They are suitable for the removal of coarse particles, oils, and fuels over small drainage areas. The NYSDEC refers to the New Jersey Department of Environmental Protection for a list of Stormwater Manufactured Treatment Devices which have received Interim Certification (included in the Appendix). One of the products on the list is the Hydro International First Defense unit.

Sizing of the First Defense system (an alternative stormwater practice) requires the application of a "rate-based" sizing approach for water quality treatment. In the "rate-based" approach, the device should be sized to treat the peak rate of runoff from the WQv storm; utilizing the WQv storm precipitation depth, the peak runoff for each tributary area can then be determined, and the associated devices sized appropriately. HydroCAD was used to determine the water quality flow rate for treatment sizing of the First Defense system. The table below lists the water quality storm event, its associated flowrate for the treatment structure, the tributary catchments, and the appropriately sized First Defense system capacity which provides in excess of the required flow, for the location shown on the plans

**Table 1.** First Defense® High Capacity Design Criteria.

| First Defense® High Capacity Model Number | Diameter | Typical TSS Treatment Flow Rates | | | Peak Online Flow Rate | Maximum Pipe Diameter[1] | Oil Storage Capacity | Typical Sediment Storage Capacity[2] | Minimum Distance from Outlet Invert to Top of Rim[3] | Standard Distance from Outlet Invert to Sump Floor |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NJDEP Certified | 106µm | 230µm | | | | | | |
| | (ft / m) | (cfs / L/s) | (cfs / L/s) | (cfs / L/s) | (cfs / L/s) | (in / mm) | (gal / L) | ($yd^3$ / $m^3$) | (ft / m) | (ft / m) |
| FD-3HC | 3 / 0.9 | 0.84 / 23.7 | 0.3 / 8.77 | 0.53 / 15.0 | 15 / 424 | 18 / 457 | 125 / 473 | 0.4 / 0.3 | 2.0 - 3.5 / 0.6 - 1.0 | 3.71 / 1.13 |
| FD-4HC | 4 / 1.2 | 1.50 / 42.4 | 0.7 / 20 | 1.2 / 34 | 18 / 510 | 24 / 600 | 191 / 723 | 0.7 / 0.5 | 2.3 - 3.9 / 0.7 - 1.2 | 4.97 / 1.5 |
| FD-5HC | 5 / 1.5 | 2.34 / 66.2 | 1.3 / 37.9 | 2.2 / 62.2 | 20 / 566 | 24 / 609 | 300 / 1135 | 1.1 / .84 | 2.5 - 4.5 / 0.7 - 1.3 | 5.19 / 1.5 |
| FD-6HC | 6 / 1.8 | 3.38 / 95.7 | 2.2 / 63 | 3.8 / 108 | 32 / 906 | 30 / 750 | 496 / 1,878 | 1.6 / 1.2 | 3.0 - 5.1 / 0.9 - 1.6 | 5.97 / 1.8 |
| FD-8HC | 8 / 2.4 | 6.00 / 169.9 | 5.1 / 144 | 8.6 / 243 | 50 / 1,415 | 48 / 1219 | 1120 / 4239 | 2.8 / 2.1 | 3.0 - 6.0 / 0.9 -1.8 | 7.40 / 2.2 |

[1]Contact Hydro International when larger pipe sizes are required.
[2]Contact Hydro International when custom sediment storage capacity is required.
[3]Minimum distance for models depends on pipe diameter.

The First Defense treatment system has the capacity of bypassing high flow rates internally as well as controlling flow through the treatment chamber so as to avoid wash-out of previously captured pollutants. The HydroCAD output can be found in the Appendix of this report. Specifications for the First Defense Systems can also be found in the appendix of this report along with certification from NYSDEC that it is an accepted proprietary device. The NJCAT testing certification is also included within the Appendix.

Table 9: Swirl Chamber Sizing Calculations

| Proposed First Defense System | 90% Rainfall Event Number (P) Inches | Tributary Catchment Areas (WS-#) | Required Water Quality Flow, cfs | Hydro International First Defense Model | Treatment Capacity, cfs |
|---|---|---|---|---|---|
| S-10 (4' Dia) | 1.4 | PDA-1C | 0.6 | FD-4HC | 1.50 |

## Stormwater Conveyance & Pipe Capacity

The storm pipes and structures were designed to convey flows from the 25-year storm event per New York State standards. Drainage areas to each drainage structures were delineated, and the land uses within the drainage area were calculated. The design information, along with the proposed pipe sizes, material, slopes and inlet capacities were entered into the HydroFlow Storm sewer program to analyze the capacity of the storm conveyance system. It should be noted that this program uses the rational method for calculation while the HydroCAD program uses TR-55.

# EROSION & SEDIMENT CONTROL

## General Erosion Control Plan:

Construction operations shall be carried out in such a manner that erosion will be controlled and sediment migration minimized. Federal, State, and Local laws concerning pollution reduction will be followed. The control practices indicated in the attached Erosion & Sediment Control Plans shall be installed and used on this project.

In the event control practices not contained within the attached Erosion & Sediment Control Plans are required due to unforeseen/unknown existing conditions this SWPPP document contains applicable Erosion and Sediment Control details in ***Appendix 14*** as a reference. Details in ***Appendix 14*** are considered, as needed, and are not part of the construction documents for bidding purposes.

The list of measures and practices below are contained in the attached Erosion and Sediment Control Plans and shall be installed and maintained per the most current edition of the New York Standard Specifications for Erosion and Sediment Control Handbook. All erosion control measures implemented shall be in accordance with the construction sequence schedule as described in Section VIII of this narrative.

## Temporary Measures

- *Silt Fence* – Silt fence shall be placed at a minimum along the toe of all fill areas or any location where surface sheet flow could be expected in accordance with temporary soil erosion and sediment control plans serving to reduce runoff velocity and effect deposition of transported sediment load. Where silt fence ends, the end shall turn and run perpendicular

to contours for a length of ten (10) feet, or for a difference in elevation of two (2) feet, whichever comes first.

- *Mulching* – Mulching of all disturbed surfaces will be mandatory. Hydroseeding with mulch only mixes will be the preferred method.
- *Stabilized Construction Access* - A stabilized pad of aggregate underlain with geotextile located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of stabilized construction access is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets.

The access shall be maintained in a condition which will prevent tracking of sediment onto public rights-of-way or streets. This may require periodic top dressing with additional aggregate. All sediment spilled, dropped, or washed onto public rights-of-way must be removed immediately. When necessary, wheels must be cleaned to remove sediment prior to entrance onto public right-of-ways. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches, or watercourses.

- *Concrete Washout Station* - A temporary concrete washout station is to be used near the entrance to the site. The station will have a depth of 24 inches and shall be a minimum of 10 feet by 10 feet. The station shall be lined with a 10mil waterproof plastic membrane. Tools or equipment that were used for concrete work will be cleaned here before leaving the site.

## Permanent Measures

- *Topsoil, Seed & Mulch* – Final vegetative stabilization shall be used at all locations where the ground has been disturbed and impervious covers are not specified. Mulch shall be applied with, or immediately after seeding.
- *Rock outlet protection*- Stone riprap is to be placed at the outlet end of the culverts beneath the flared end section to slow down the flow of the runoff and reduce erosion.
- *-site grading and retaining walls* – The site grading has been designed to reduce the steep slopes on site, reducing the possibility of erosion due to runoff.

## Maintenance and Inspection of Measures

All temporary and permanent soil erosion and sediment measures shall be maintained by the contractor during the life of the project. The contractor shall have a *trained contractor,* as defined in the GP-0-20-001 (See ***Appendix 4***), on site at all times. The *trained contractor* shall be responsible for the day-to-day construction and maintenance of all erosion and sediment control measures.

All temporary measures (silt fence, inlet protection, etc.) and permanent measures (landscaping) shall be inspected by the *Qualified Inspector* every seven (7) calendar days. The *Qualified Inspector* role and inspection requirements are outlined in Part IV.C of the GP-0-20-001 (See ***Appendix 4***). All inspections are required to be completed within one calendar day. Any comments, suggestions or corrective actions the *Qualified Inspector* notes shall be addressed by the contractor within 24 hours of the inspection.

## Construction Sequence:

The construction sequence for the proposed development will be as follows:

- Schedule a pre-construction meeting at least 1 week prior to any construction site disturbance or equipment staging. At a minimum, the pre-construction meeting shall consist of the Cities Representatives including the Engineer as well as Contractors, Project Managers and Foreman.
- Install construction entrance.
- Stake limits of disturbance and orange construction fence for wetland protection.
- Install perimeter silt fencing on downhill areas as shown on plan.
- Install sediment ponds. Install temporary swales to direct all open soil area disturbance to sediment ponds, as necessary. Locations and size of the erosions and sediment control practices are noted on the plan. these may vary depending on the contractor's schedule and approach but 3,600 cf of storage must be provided at a minimum per acre of upstream disturbance. Sediment traps shall be installed in accordance with the plans and details. Sediment traps and basins shall be sized in accordance with the New York standards and specifications for erosion and sediment control manual.
- Rough grade the site to allow for the construction of the northern retaining wall. Once complete, the proposed driveway/road and building footprint shall be rough graded. The building foundation and wall shall be installed to stabilize the center of the phase 1 construction as soon as practicable.
- Disturbed soils shall be temporarily stabilized as soon as practical. Materials stored in stockpiles shall be cordoned off with a silt fence per the appropriate specifications and details. The operator shall initiate stabilization measures as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than (14) days after the construction activity in that portion of the site has temporarily or permanently ceased.
- Utilities shall be installed. (non-pressure utilities shall be installed prior to watermain)
- Construct roads, drives, buildings, parking areas and install drainage systems.
- Topsoil/hay/seed lawn areas.
- When upstream drainage areas have been stabilized, the bioretention media, plantings and mulch can be installed and the sediment ponds can be removed. The phase 1 construction

- The project site must meet final stabilization criteria prior to removing all erosion and sediment control devices and closing out the project. Litter and construction debris shall be removed as practical throughout the life of the project.

    - *Final Stabilization* means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock riprap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

- Upon final stabilization being met, the Contractor shall clear drainage pipes and structures of any sediment which may have accumulated. Additional erosion control measures shall be installed, as may be necessary, required and/or requested by authorities, to prevent the incidental discharge of silt laden runoff from entering a water course or a drainage system. The general permit for stormwater discharges from construction activities states that it is unlawful for any person to cause or contribute to a violation of water quality standards.

- Additional erosion control measures shall be installed, as may be necessary, required and/or requested by authorities, to prevent the incidental discharge of silt laden runoff from entering a water course or a drainage system. The general permit for stormwater discharges from construction activities states that it is unlawful for any person to cause or contribute to a violation of water quality standards.

For additional, general Erosion and Sediment Control notes including seeding, please refer to the Erosion and Sediment Control Plans.

# Good Housekeeping

Good housekeeping practices are inexpensive, relatively easy to implement, and are often effective in preventing stormwater contamination. Specific activities that should be completed by the contractor are listed below:

## Spill Inventory

The materials or substances listed below are expected to be present on-site during construction:

- Concrete
- Fertilizers
- Piping
- Paints (enamel & latex)
- Treated and non-treated wood
- Seed
- Tar
- Petroleum-based products
- Reinforcing steel
- Cleaning solvents
- Masonry block
- Paving materials

## Material Management Practices

The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff:

- Products shall be kept in original containers unless they are not resealable.

- Original labels and material safety data sheets (MSDS) shall be retained; they contain important product information.
- An effort shall be made to store only enough products required to do the job.
- All materials stored onsite shall be stored in a neat, orderly manner in their appropriate containers, and if possible, under a roof or other enclosure and/or on non-porous blacktop.
- Products shall be kept in their original containers with the original manufacturer's label.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all a product shall be used up before disposing of the container.
- Manufacturer's recommendations for proper use and disposal shall be followed.
- The contractor's site superintendent shall inspect daily to ensure proper use and disposal of materials on site.

## Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices shall be followed for spill prevention and cleanup.

- Spills, of any size, of toxic or hazardous material and/or petroleum products shall be reported to the NYSDEC and Central Hudson's Environmental Affairs division.
- Manufacturer's recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the locations of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup shall be kept in the material storage area onsite. Equipment and materials shall include but not be limited to brooms, dust pans, mops, rags, gloves, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills shall be cleaned up immediately after discovery.
- The spill area shall be kept well ventilated, and personnel shall wear appropriate PPE to prevent injury from contact with a hazardous substance.
- The spill prevention plan shall be adjusted to include measures to prevent toxic or hazardous material spills from recurring and how to clean up the spill. A description of the spill, what caused it, and the cleanup measures shall also be included.

The contractor's site superintendent is responsible for the day-to-day site operations and shall be the spill prevention and cleanup coordinator.

## Product Specific Practices

The following product specific practices shall be followed onsite.

- Petroleum Products – All onsite vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers that are clearly labeled. Any asphalt substances used on site shall be applied according to manufacturer's recommendations.
- Fertilizers – Fertilizers shall be applied only in the minimum amounts recommended by the manufacturer. Use only fertilizers that have five (5) or fewer parts phosphorous. Once

applied, fertilizers shall be worked into the soil to limit exposure to stormwater. Storage shall be in a covered shed. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.

- Paints – All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the storm sewer system but shall be properly disposed of according to the manufacturer's instructions or state and local regulations.
- Concrete Trucks – Concrete trucks shall not be allowed to wash out or discharge surplus concrete or drum wash water on the site, unless in approved clean-out areas.
- Waste Disposal – All waste materials shall be collected and stored in a securely lidded metal dumpster rented from a licensed solid waste management company. The dumpster shall meet all local and any State solid waste management regulations. All trash and construction debris from the site shall be deposited in the dumpster. The dumpster shall be emptied as necessary, and the trash shall be hauled to a NYSDEC permitted landfill. No construction waste materials shall be buried onsite. All personnel shall be instructed regarding the correct procedure for waste disposal.
- Hazardous Waste – All hazardous waste materials shall be disposed of in a manner specified by local or State regulations or the manufacturer. Site personnel shall be instructed in these practices.
- Sanitary Waste – All sanitary waste shall be collected from the portable units by a licensed sanitary waste management contractor, as required by local regulation and as required to protect public health and safety.
- Recyclable Waste – All recyclable waste (cardboard, wood, etc.) shall be collected and recycled on a weekly schedule.

# Responsible Parties

## Implementation of SWPPP

The owner/operator is responsible for implementing the provisions of the SWPPP and ensuring that the appropriate contractors and subcontractors on the site provide certification in accordance with the provisions of the GP-0-20-001.

The owner/operator is also responsible for having *Trained Contractor* and *Qualified Inspector* inspect the active construction site in accordance with section 6.3 of this report and all provisions for inspections defined in the GP-0-20-001, (See ***Appendix 10)*** A *Trained Contractor* cannot conduct *Qualified Inspector* site inspections unless they meet the *Qualified Inspector* qualifications listed in appendices of the GP-0-20-001.

## Inspection Requirements

The owner/operator is responsible for implementing inspections of all erosion and sediment control measures. To do so, the owner/operator shall have a *Qualified Inspector* inspect the site in

accordance with the guidelines of Part IV of the GP-0-20-001. A sample inspection template is provided in this document (See ***Appendix 9***).

The owner/operator shall maintain a record of all inspection reports in a site logbook. The site logbook shall be kept on site and be made available to the permitting authority upon request. The owner/operator shall also retain a copy of this SWPPP document at the construction site during the life of the project.

# End of Project – Termination of Permit

## Final Inspection

Prior to filing the Notice of Termination (NOT), or at the end of the permit term, the owner/operator shall have a Qualified Inspector perform a final site inspection. The inspector shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods. Final stabilization means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of 80% has been established on all unpaved areas and areas not covered by permanent structures.

## Notice of Termination (NOT)

When the site has been finally stabilized, the owner/operator must submit a Notice of Termination (NOT) form to terminate coverage under SPDES General Permit GP-0-25-001. The permittee must identify all the permanent stormwater management structures that have been constructed. In addition, a manual describing the operation and maintenance practices that will be necessary for the structures(s) to function as designed after the site is stabilized must be developed and in place. The permittee must also certify that the permanent structure(s) have been constructed in conformance with this document. A copy of NOT is provided in this document (see ***Appendix 6***).

## Record Keeping

The owner/operator shall retain copies of SWPPP, any reports submitted in conjunction with this permit, and records of all data used to complete the NOI & NOT for a period of at least five (5) years from the date that the site is finally stabilized. A topographic as-built shall be provided for the stormwater facilities, as well as a certification letter being provided to the City of Beacon by the project engineer certifying that the stormwater facilities were constructed in accordance with the SWPPP and plans.

# SUMMARY OF PROPOSED STORMWATER IMPROVEMENTS

The proposed project falls under the New York State definition of redevelopment with an increase in impervious area, requiring coverage under the General permit. The site runoff has been attenuated for peak flows in the peak design storms. The proposed development has been designed

to treat the required water quality through SMP's with RRv capacity, and Alternative practices. The design utilizes DEC approved practices that help maintain the existing hydrology.

## CONCLUSION

As the storm water pollution prevention plan meets the water quality requirements for a new and redevelopment portion of the project, and meets peak flow mitigation to the applicable standards, there should be no adverse impacts due to storm water, on-site or off-site, as a result of the proposed site improvements.

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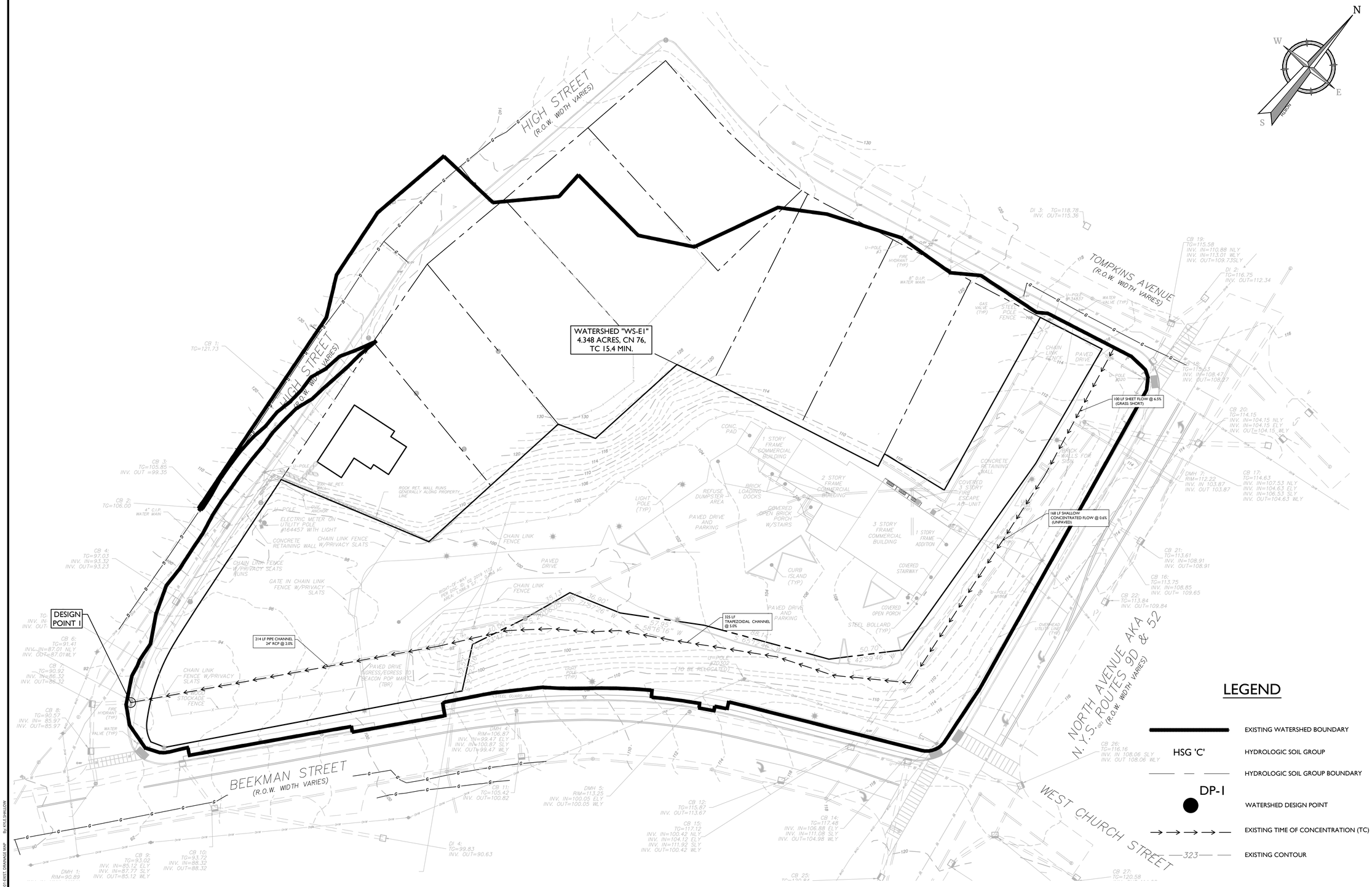
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# APPENDIX 1

# WATERSHED MAPS




UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Drainage Maps\C-DRNG.dwg|C-01 EXIST. DRAINAGE MAP By:KYLE.SHALLOW

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ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS. |
| 2 | 7/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS. |

WATERSHED MAP

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

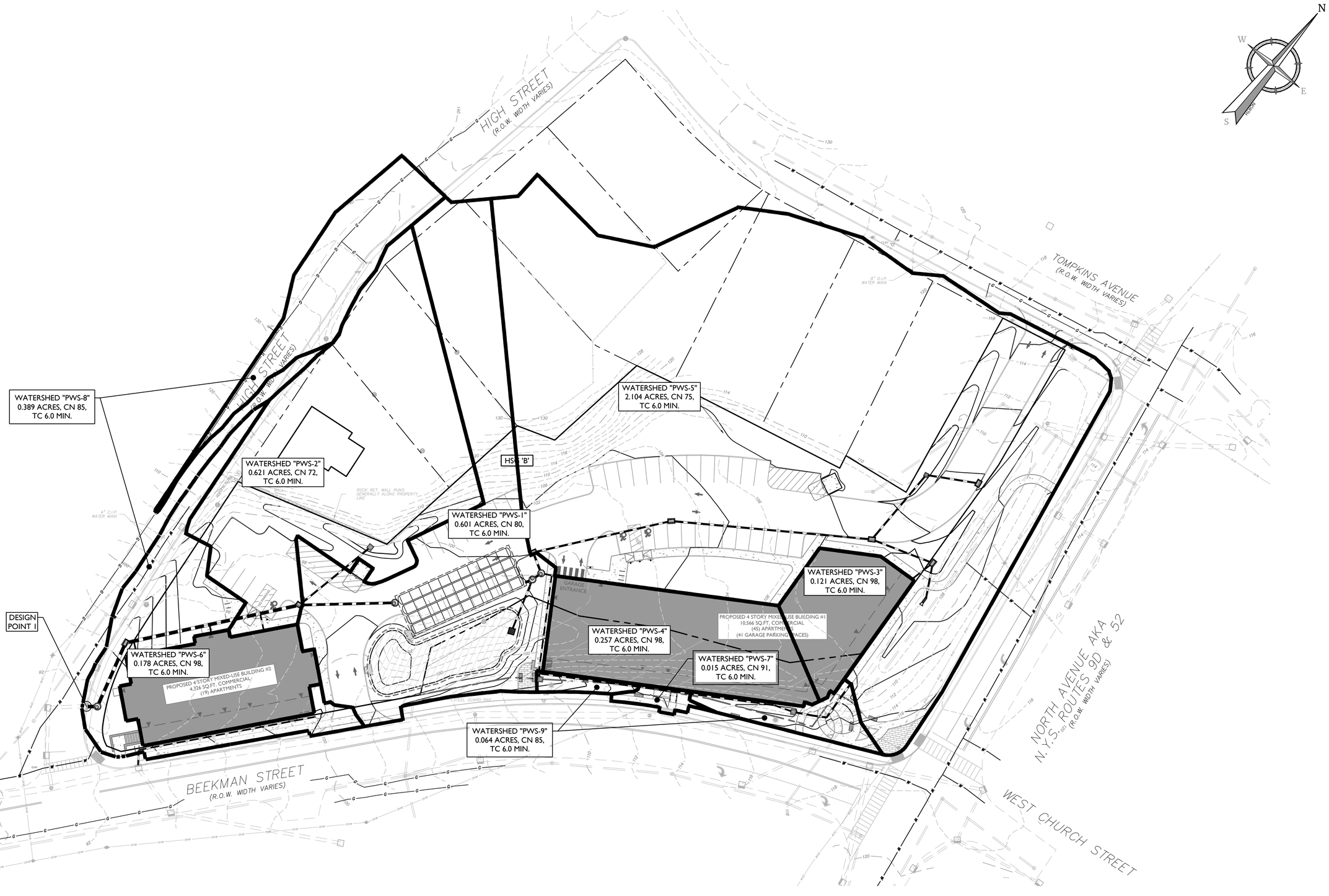
| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 1/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-DRNG

SHEET TITLE:
EXISTING
DRAINAGE MAP

SHEET NUMBER:
01 of 02

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.




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2023\23010468A\Engineering\Drainage Maps\C-DRNG.dwg\C-DRNG By: KATE SHALLOW

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS. |
| 2 | 7/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS. |

WATERSHED MAP

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
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| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 1/30/2024 | KAS | CPM |

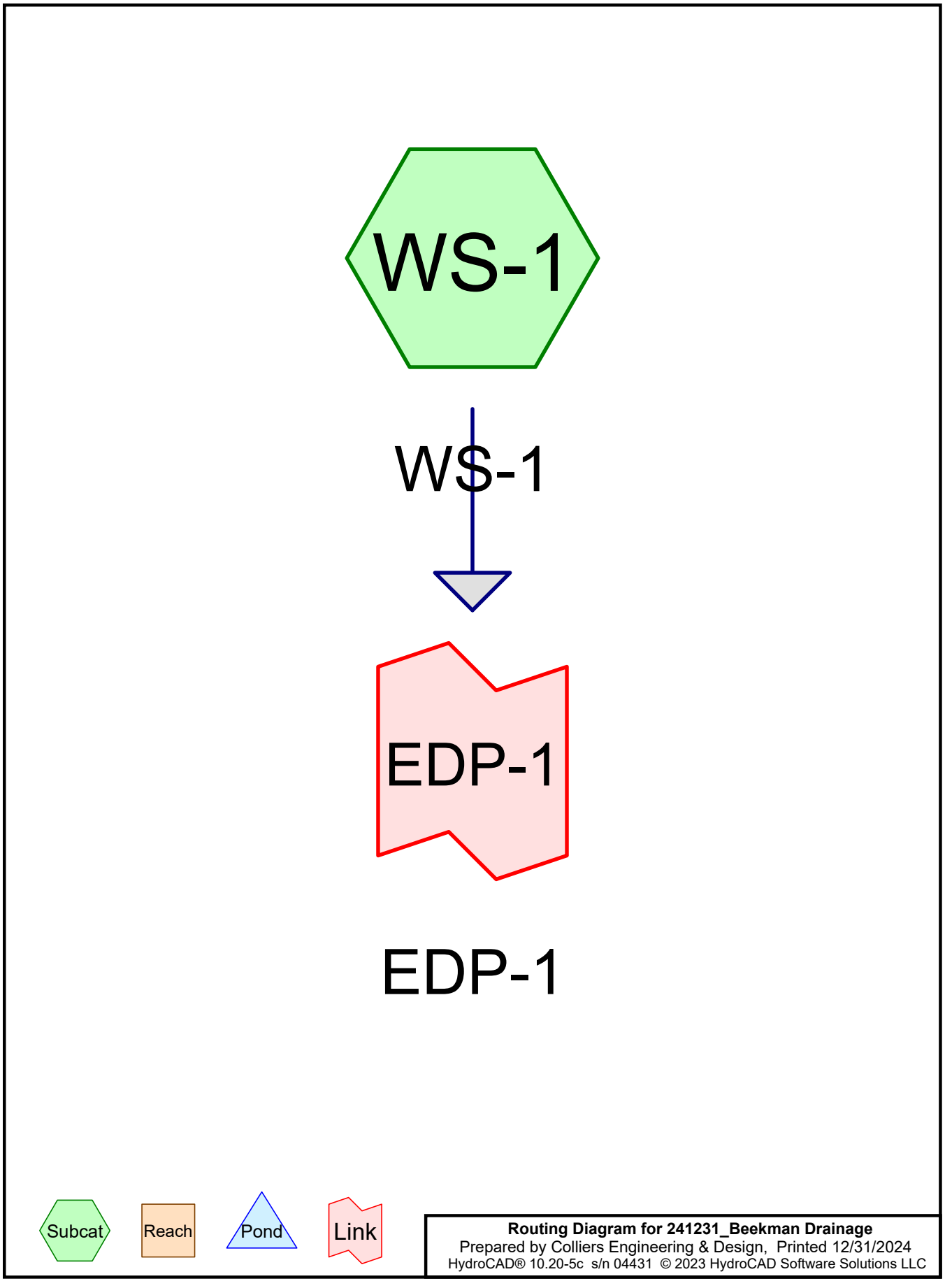
PROJECT NUMBER: 23010468A
DRAWING NAME: C-DRNG

SHEET TITLE:
PROPOSED DRAINAGE MAP

SHEET NUMBER:
02 of 02

# APPENDIX 2

# HYDROCAD MODEL OUTPUT


WS-1
WS-1
EDP-1
EDP-1
Subcat
Reach
Pond
Link
Routing Diagram for 241231_Beekman Drainage
Prepared by Colliers Engineering & Design, Printed 12/31/2024
HydroCAD® 10.20-5c s/n 04431 © 2023 HydroCAD Software Solutions LLC

## Summary for Subcatchment WS-1: WS-1

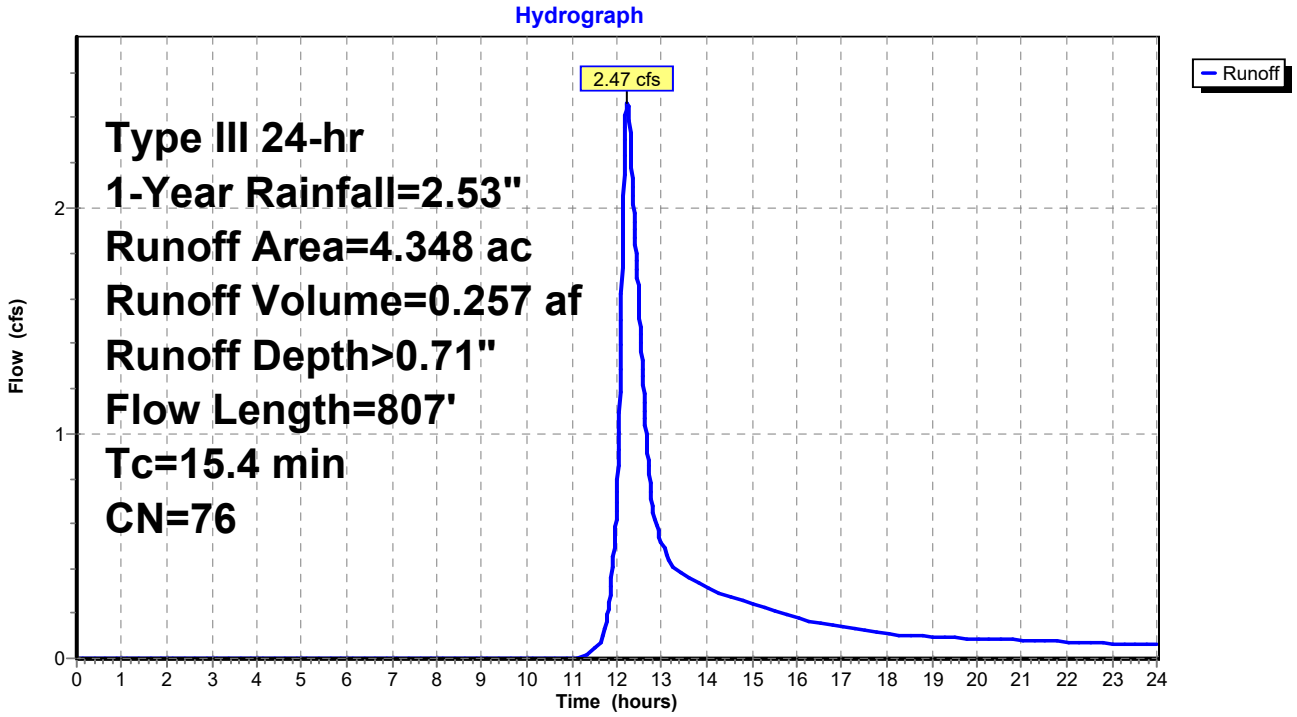
Runoff = 2.47 cfs @ 12.23 hrs, Volume= 0.257 af, Depth> 0.71"
Routed to Link EDP-1 : EDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 1.895 | 98 | Paved parking, HSG B |
| 0.963 | 55 | Woods, Good, HSG B |
| 1.490 | 61 | >75% Grass cover, Good, HSG B |
| 4.348 | 76 | Weighted Average |
| 2.453 | | 56.42% Pervious Area |
| 1.895 | | 43.58% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.2 | 100 | 0.0650 | 0.27 | | **Sheet Flow, grass: short**<br>Grass: Short n= 0.150 P2= 3.15" |
| 2.2 | 168 | 0.0060 | 1.25 | | **Shallow Concentrated Flow, unpaved**<br>Unpaved Kv= 16.1 fps |
| 6.7 | 325 | 0.0500 | 0.81 | 0.19 | **Trap/Vee/Rect Channel Flow,**<br>Bot.W=2.00' D=0.10' Z= 5.0 & 2.0 '/' Top.W=2.70'<br>n= 0.080 Earth, long dense weeds |
| 0.3 | 214 | 0.0200 | 11.03 | 34.66 | **Pipe Channel, RCP_Round 24"**<br>24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50'<br>n= 0.012 Concrete pipe, finished |
| 15.4 | 807 | Total | | | |

## Subcatchment WS-1: WS-1

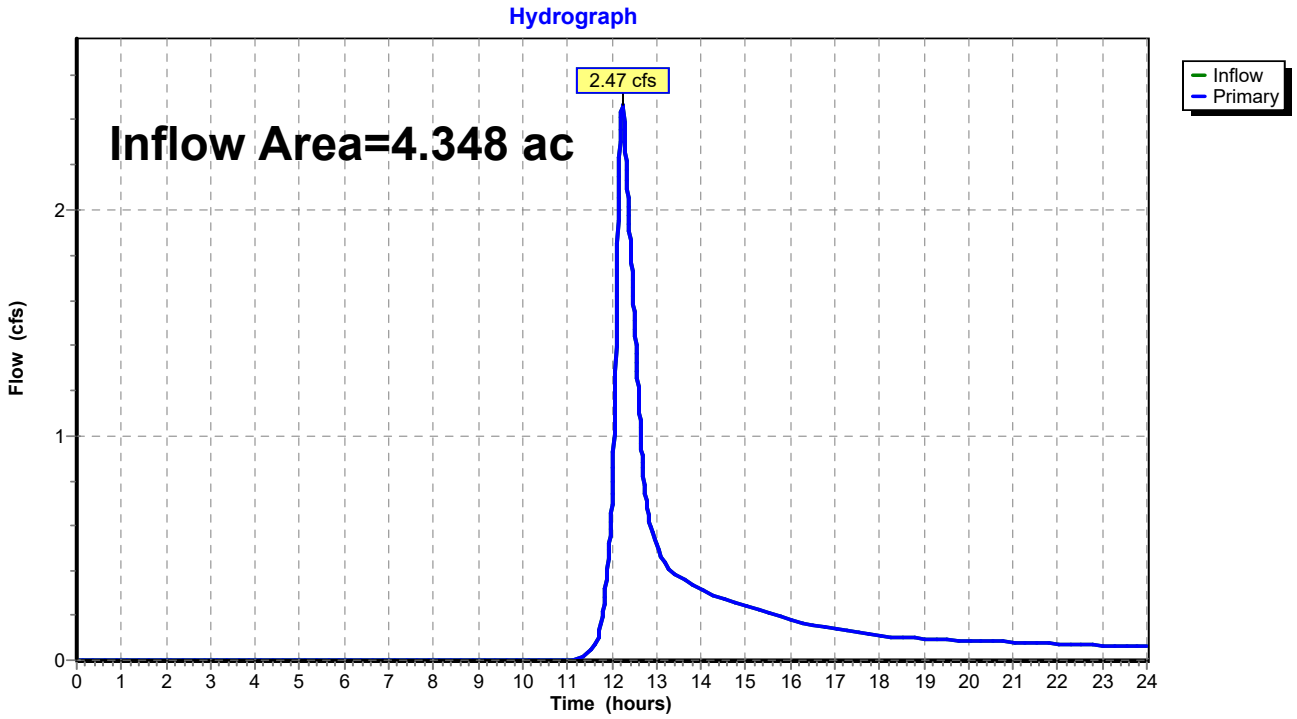


## Summary for Link EDP-1: EDP-1

Inflow Area = 4.348 ac, 43.58% Impervious, Inflow Depth > 0.71" for 1-Year event
Inflow = 2.47 cfs @ 12.23 hrs, Volume= 0.257 af
Primary = 2.47 cfs @ 12.23 hrs, Volume= 0.257 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

## Link EDP-1: EDP-1



## Summary for Subcatchment WS-1: WS-1

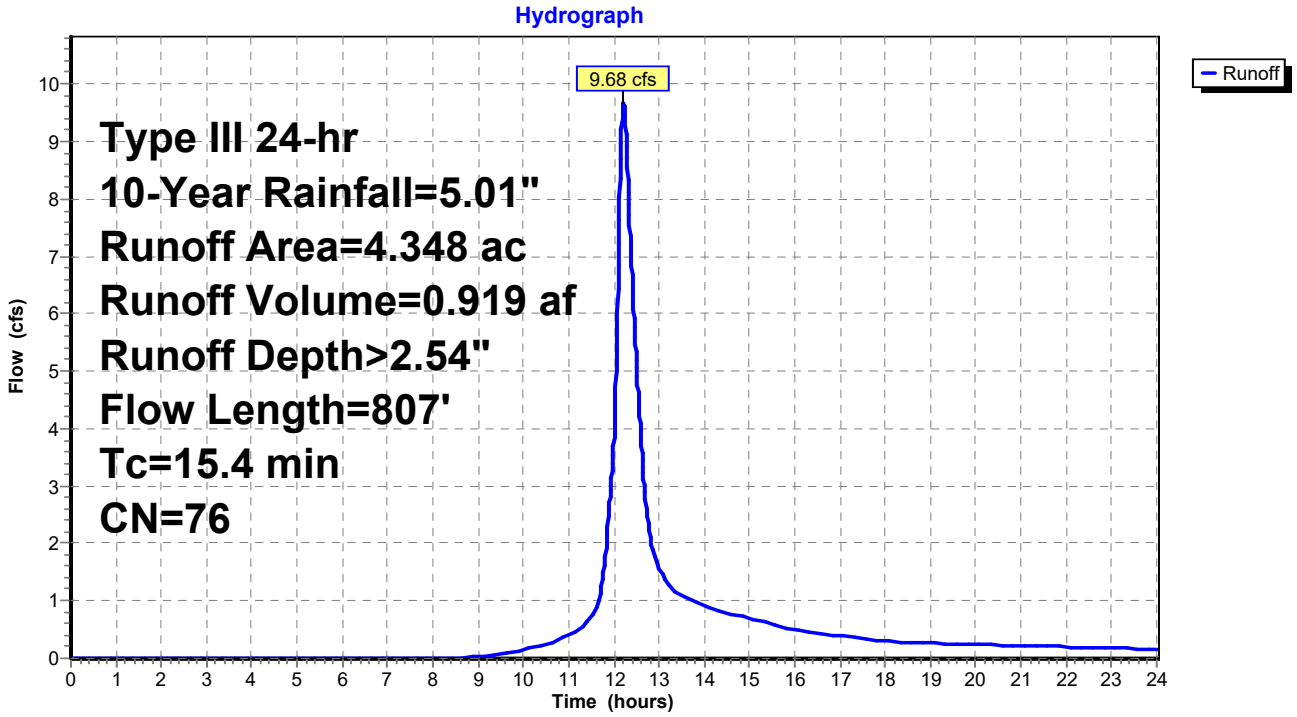
Runoff = 9.68 cfs @ 12.21 hrs, Volume= 0.919 af, Depth> 2.54"
Routed to Link EDP-1 : EDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 1.895 | 98 | Paved parking, HSG B |
| 0.963 | 55 | Woods, Good, HSG B |
| 1.490 | 61 | >75% Grass cover, Good, HSG B |
| 4.348 | 76 | Weighted Average |
| 2.453 | | 56.42% Pervious Area |
| 1.895 | | 43.58% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.2 | 100 | 0.0650 | 0.27 | | **Sheet Flow, grass: short**<br>Grass: Short n= 0.150 P2= 3.15" |
| 2.2 | 168 | 0.0060 | 1.25 | | **Shallow Concentrated Flow, unpaved**<br>Unpaved Kv= 16.1 fps |
| 6.7 | 325 | 0.0500 | 0.81 | 0.19 | **Trap/Vee/Rect Channel Flow,**<br>Bot.W=2.00' D=0.10' Z= 5.0 & 2.0 '/' Top.W=2.70'<br>n= 0.080 Earth, long dense weeds |
| 0.3 | 214 | 0.0200 | 11.03 | 34.66 | **Pipe Channel, RCP_Round 24"**<br>24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50'<br>n= 0.012 Concrete pipe, finished |
| 15.4 | 807 | Total | | | |

## Subcatchment WS-1: WS-1

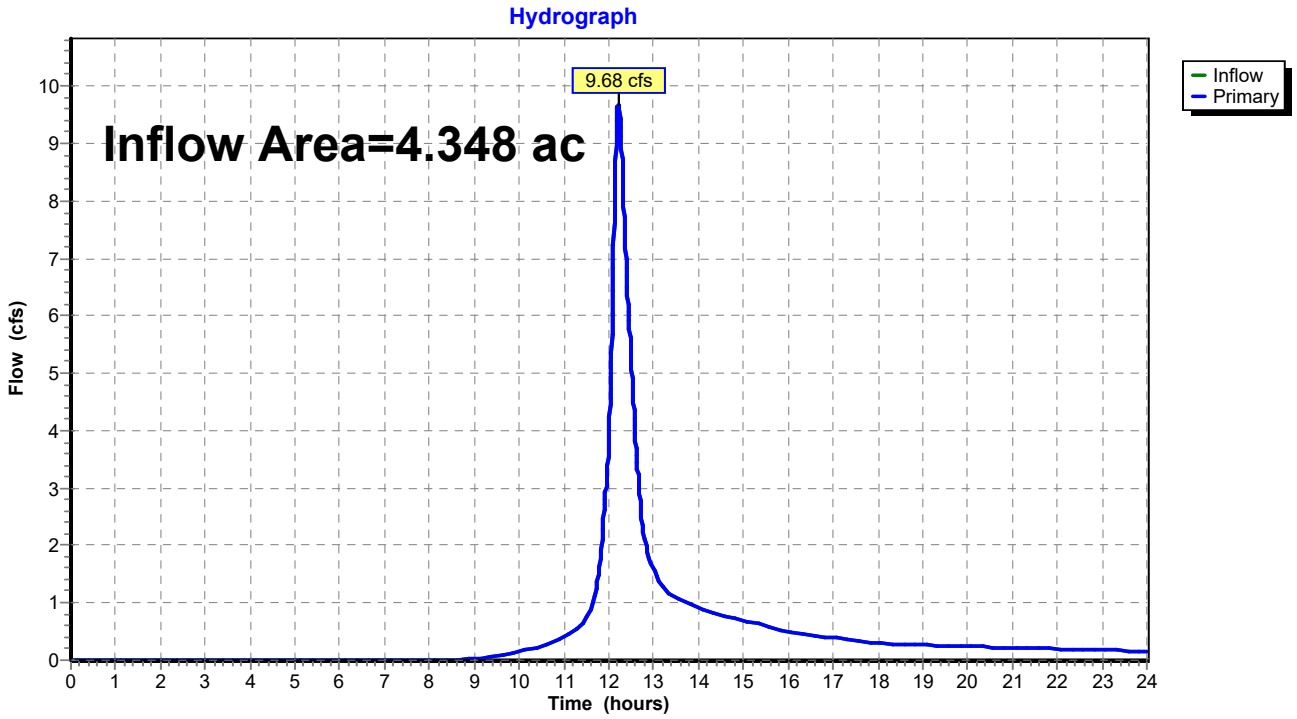


## Summary for Link EDP-1: EDP-1

Inflow Area = 4.348 ac, 43.58% Impervious, Inflow Depth > 2.54" for 10-Year event
Inflow = 9.68 cfs @ 12.21 hrs, Volume= 0.919 af
Primary = 9.68 cfs @ 12.21 hrs, Volume= 0.919 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

## Link EDP-1: EDP-1



## Summary for Subcatchment WS-1: WS-1

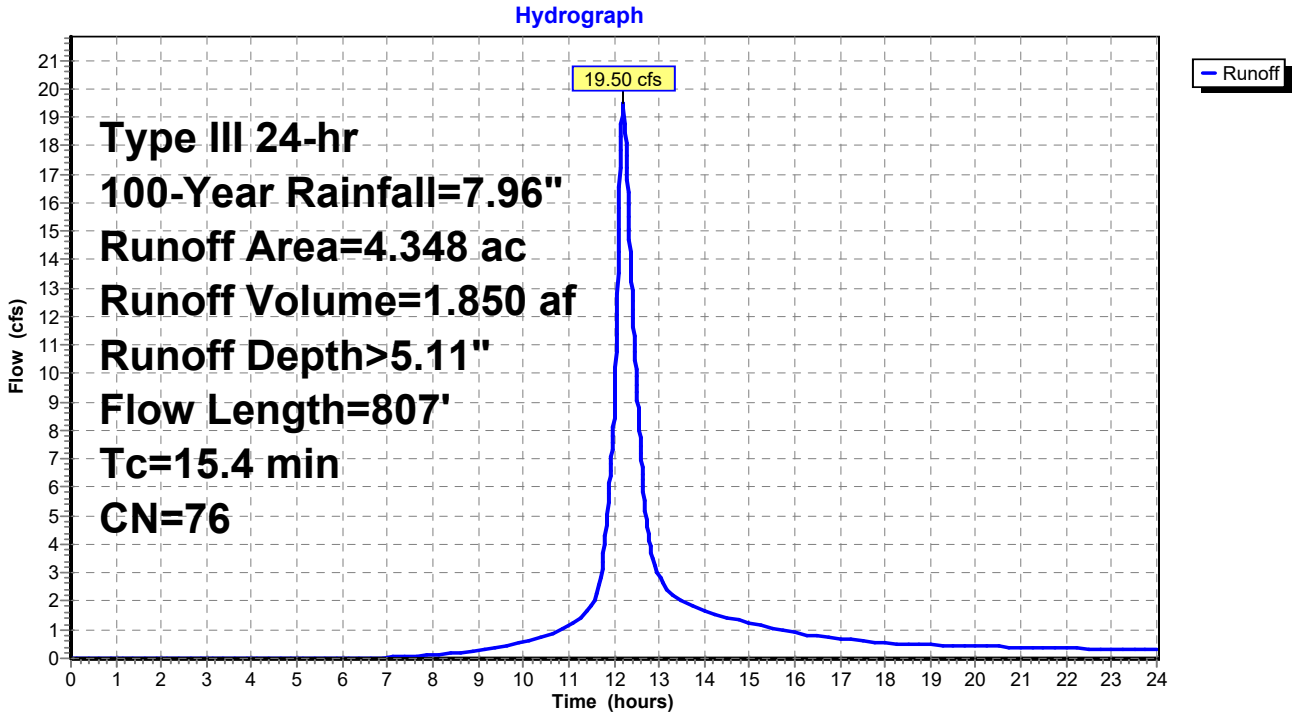
Runoff = 19.50 cfs @ 12.20 hrs, Volume= 1.850 af, Depth> 5.11"
Routed to Link EDP-1 : EDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 1.895 | 98 | Paved parking, HSG B |
| 0.963 | 55 | Woods, Good, HSG B |
| 1.490 | 61 | >75% Grass cover, Good, HSG B |
| 4.348 | 76 | Weighted Average |
| 2.453 | | 56.42% Pervious Area |
| 1.895 | | 43.58% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.2 | 100 | 0.0650 | 0.27 | | **Sheet Flow, grass: short**<br>Grass: Short n= 0.150 P2= 3.15" |
| 2.2 | 168 | 0.0060 | 1.25 | | **Shallow Concentrated Flow, unpaved**<br>Unpaved Kv= 16.1 fps |
| 6.7 | 325 | 0.0500 | 0.81 | 0.19 | **Trap/Vee/Rect Channel Flow,**<br>Bot.W=2.00' D=0.10' Z= 5.0 & 2.0 '/' Top.W=2.70'<br>n= 0.080 Earth, long dense weeds |
| 0.3 | 214 | 0.0200 | 11.03 | 34.66 | **Pipe Channel, RCP_Round 24"**<br>24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50'<br>n= 0.012 Concrete pipe, finished |
| 15.4 | 807 | Total | | | |

## Subcatchment WS-1: WS-1

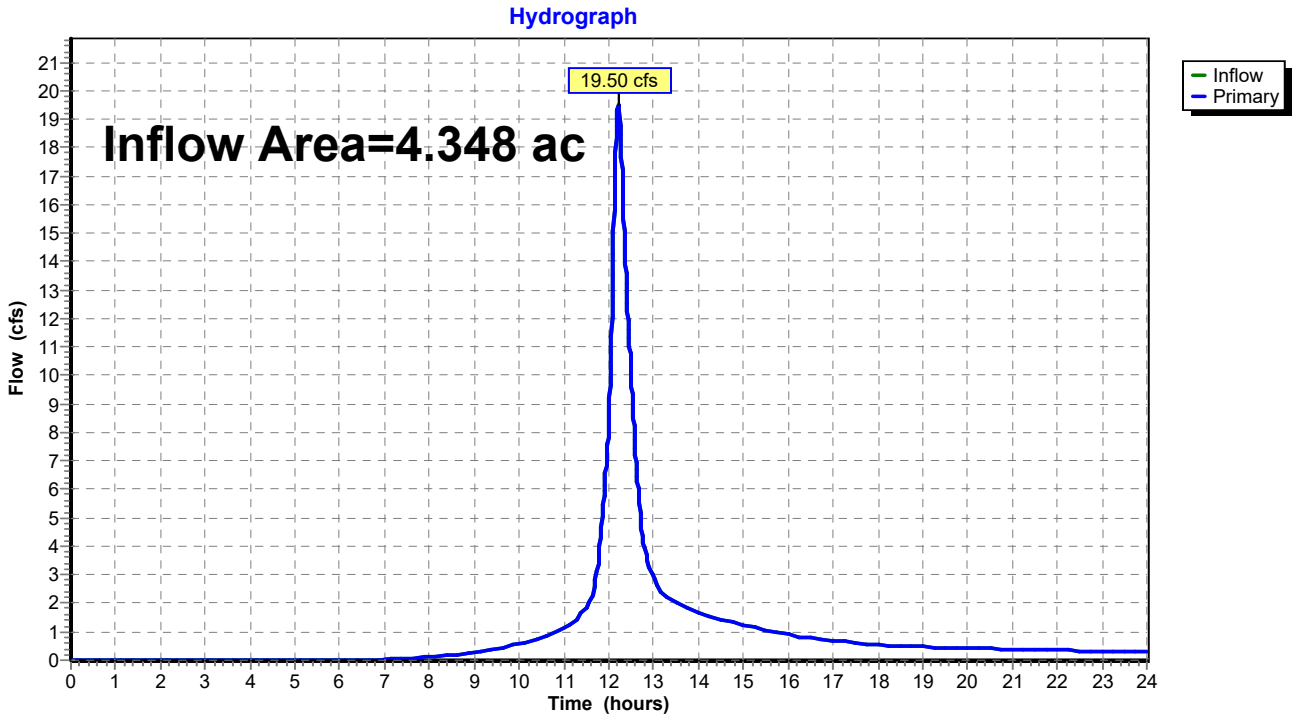


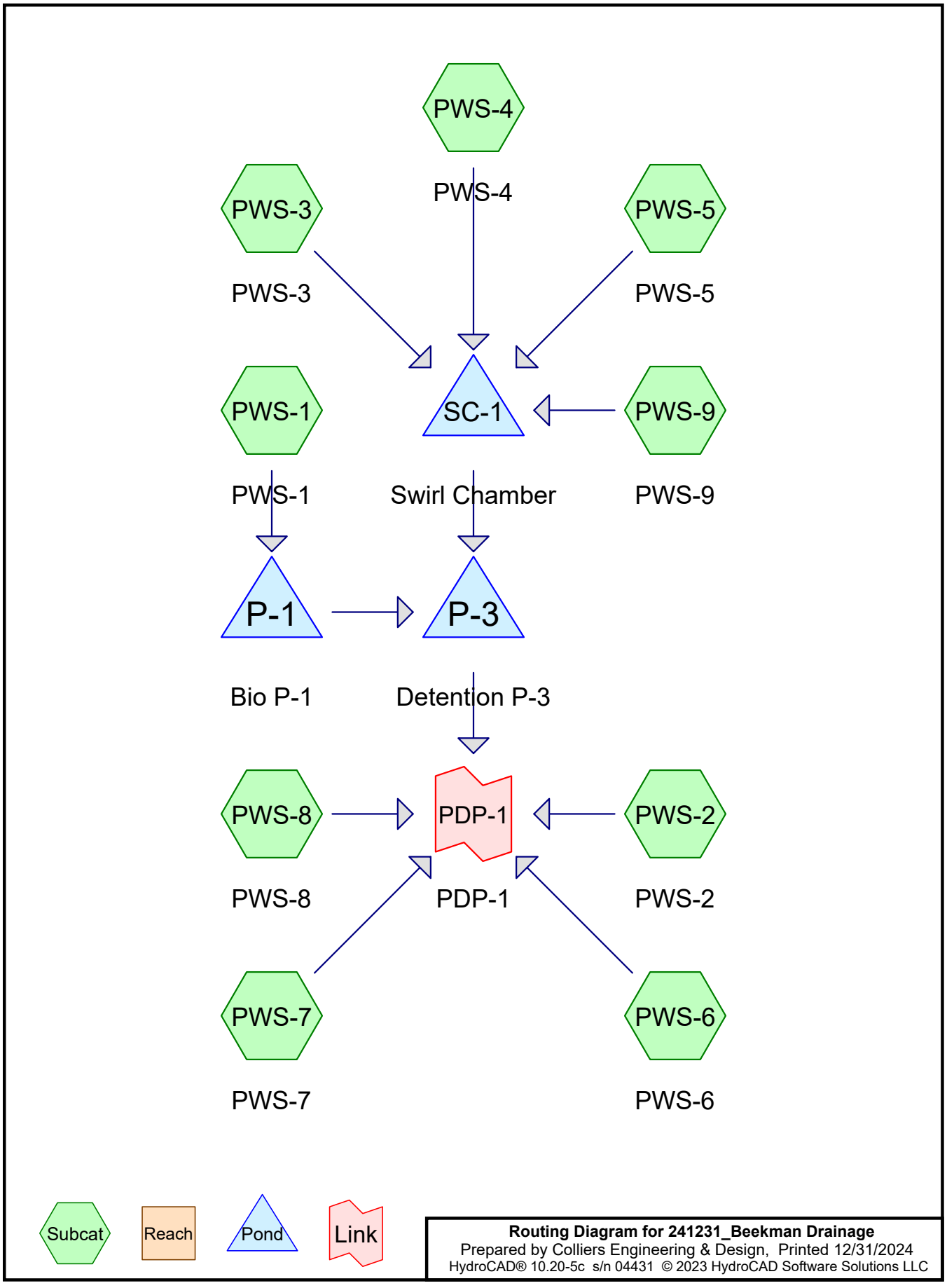
## Summary for Link EDP-1: EDP-1

Inflow Area = 4.348 ac, 43.58% Impervious, Inflow Depth > 5.11" for 100-Year event
Inflow = 19.50 cfs @ 12.20 hrs, Volume= 1.850 af
Primary = 19.50 cfs @ 12.20 hrs, Volume= 1.850 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

## Link EDP-1: EDP-1




PWS-4
PWS-4
PWS-3
PWS-5
PWS-3
PWS-5
PWS-1
SC-1
PWS-9
PWS-1
Swirl Chamber
PWS-9
P-1
P-3
Bio P-1
Detention P-3
PWS-8
PDP-1
PWS-2
PWS-8
PDP-1
PWS-2
PWS-7
PWS-6
PWS-7
PWS-6
Subcat
Reach
Pond
Link
Routing Diagram for 241231_Beekman Drainage
Prepared by Colliers Engineering & Design, Printed 12/31/2024
HydroCAD® 10.20-5c s/n 04431 © 2023 HydroCAD Software Solutions LLC

## Summary for Subcatchment PWS-1: PWS-1

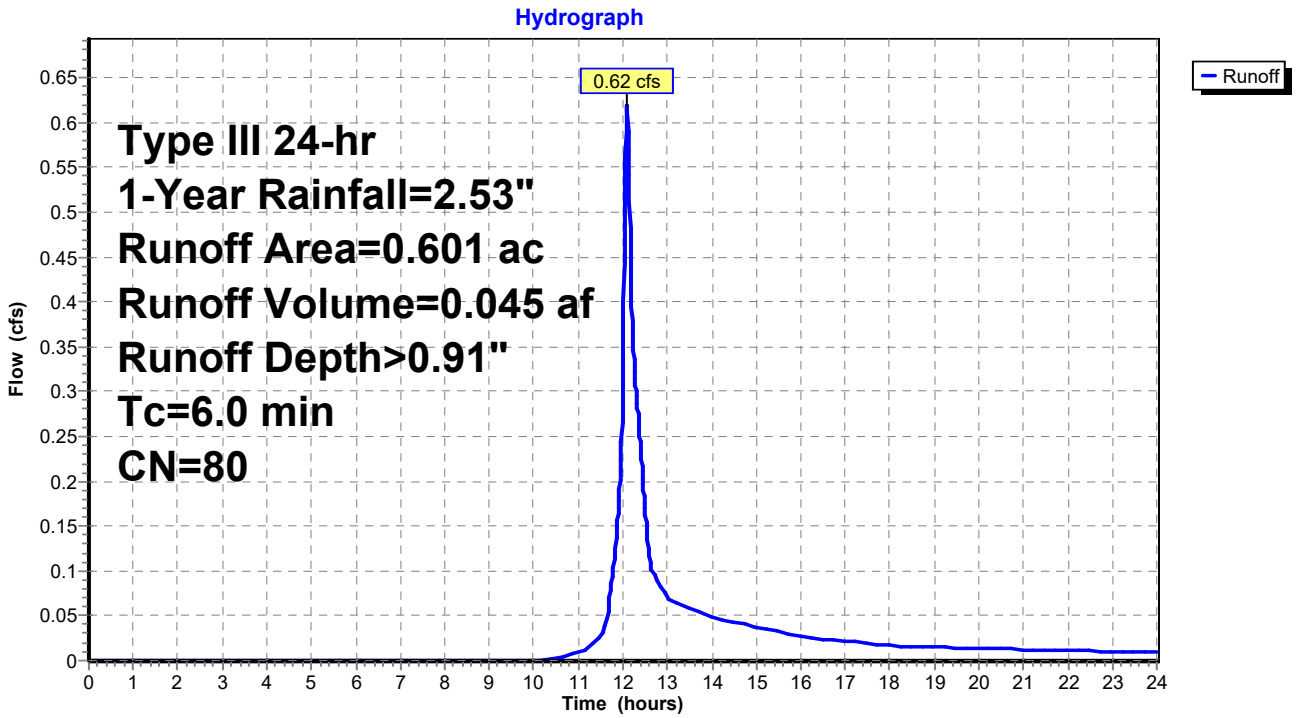
Runoff = 0.62 cfs @ 12.09 hrs, Volume= 0.045 af, Depth> 0.91"
Routed to Pond P-1 : Bio P-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.312 | 98 | Paved parking, HSG B |
| 0.260 | 61 | >75% Grass cover, Good, HSG B |
| 0.029 | 55 | Woods, Good, HSG B |
| 0.601 | 80 | Weighted Average |
| 0.289 | | 48.09% Pervious Area |
| 0.312 | | 51.91% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-1: PWS-1



## Summary for Subcatchment PWS-2: PWS-2

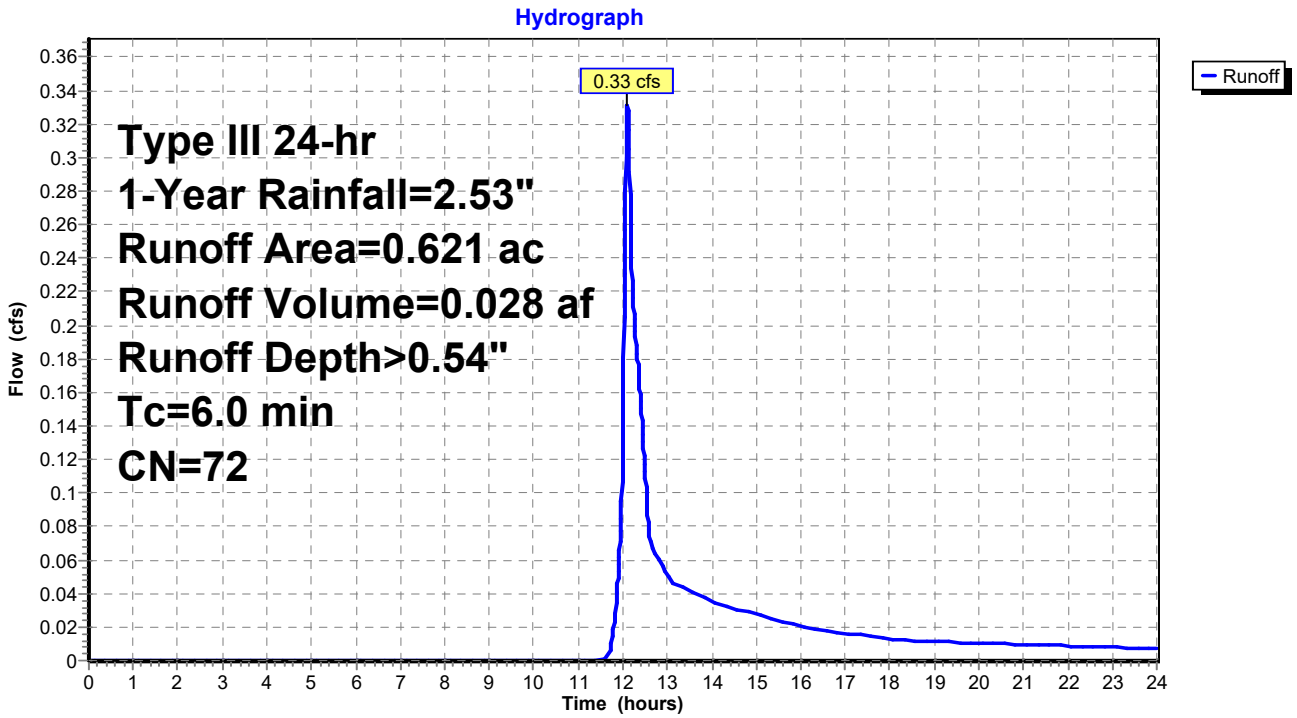
Runoff = 0.33 cfs @ 12.10 hrs, Volume= 0.028 af, Depth> 0.54"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.191 | 98 | Paved parking, HSG B |
| 0.356 | 61 | >75% Grass cover, Good, HSG B |
| 0.074 | 55 | Woods, Good, HSG B |
| 0.621 | 72 | Weighted Average |
| 0.430 | | 69.24% Pervious Area |
| 0.191 | | 30.76% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-2: PWS-2



## Summary for Subcatchment PWS-3: PWS-3

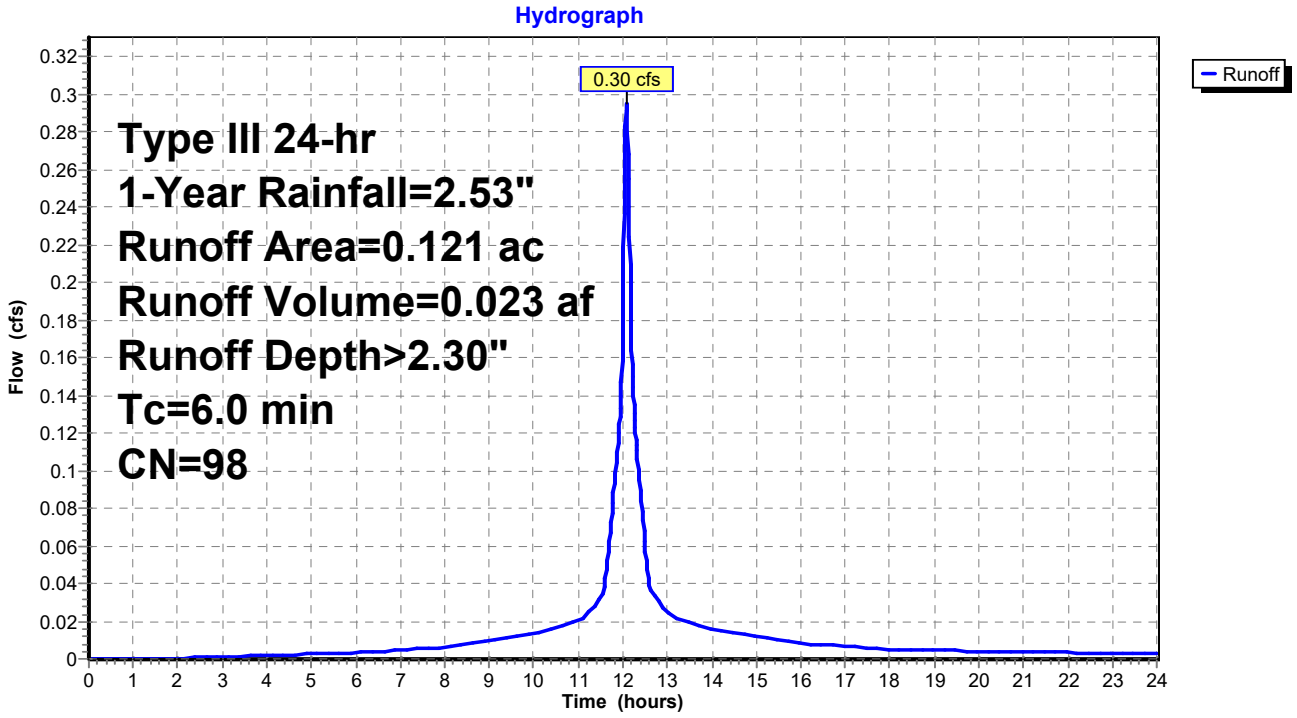
Runoff = 0.30 cfs @ 12.08 hrs, Volume= 0.023 af, Depth> 2.30"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.121 | 98 | Roofs, HSG B |
| 0.121 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-3: PWS-3



## Summary for Subcatchment PWS-4: PWS-4

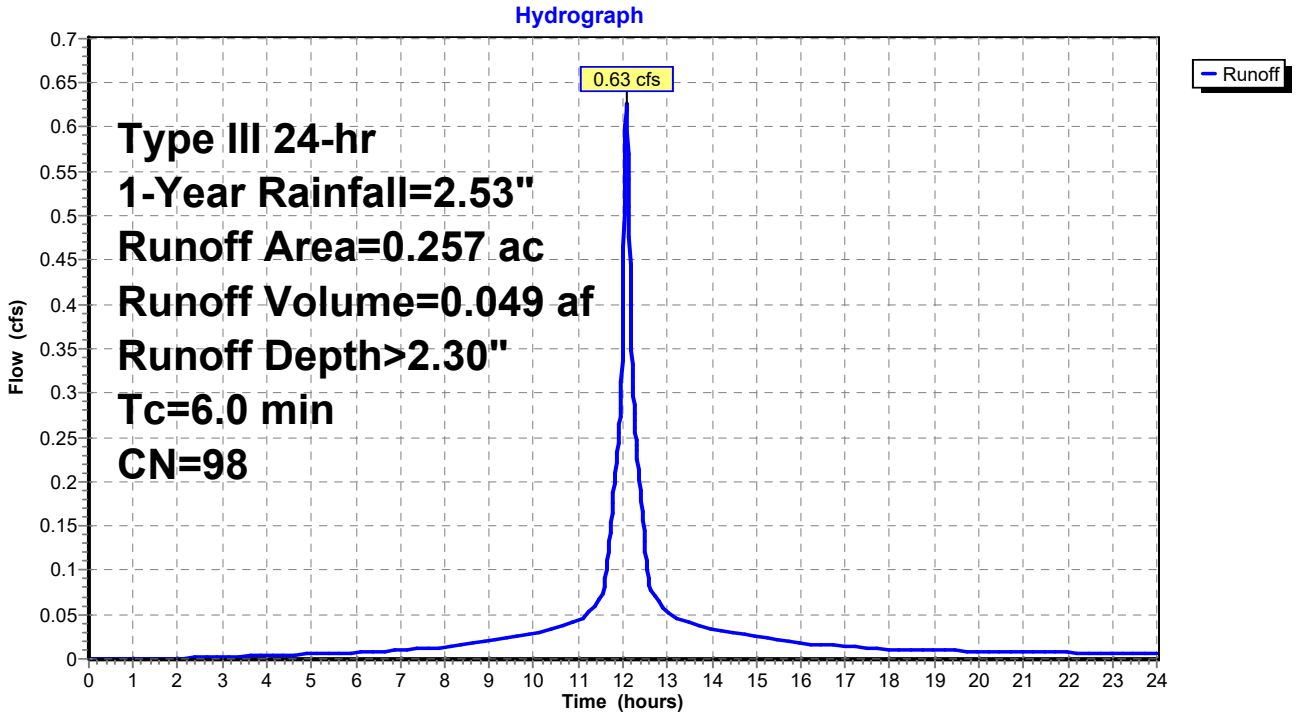
Runoff = 0.63 cfs @ 12.08 hrs, Volume= 0.049 af, Depth> 2.30"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.257 | 98 | Roofs, HSG B |
| 0.257 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-4: PWS-4



## Summary for Subcatchment PWS-5: PWS-5

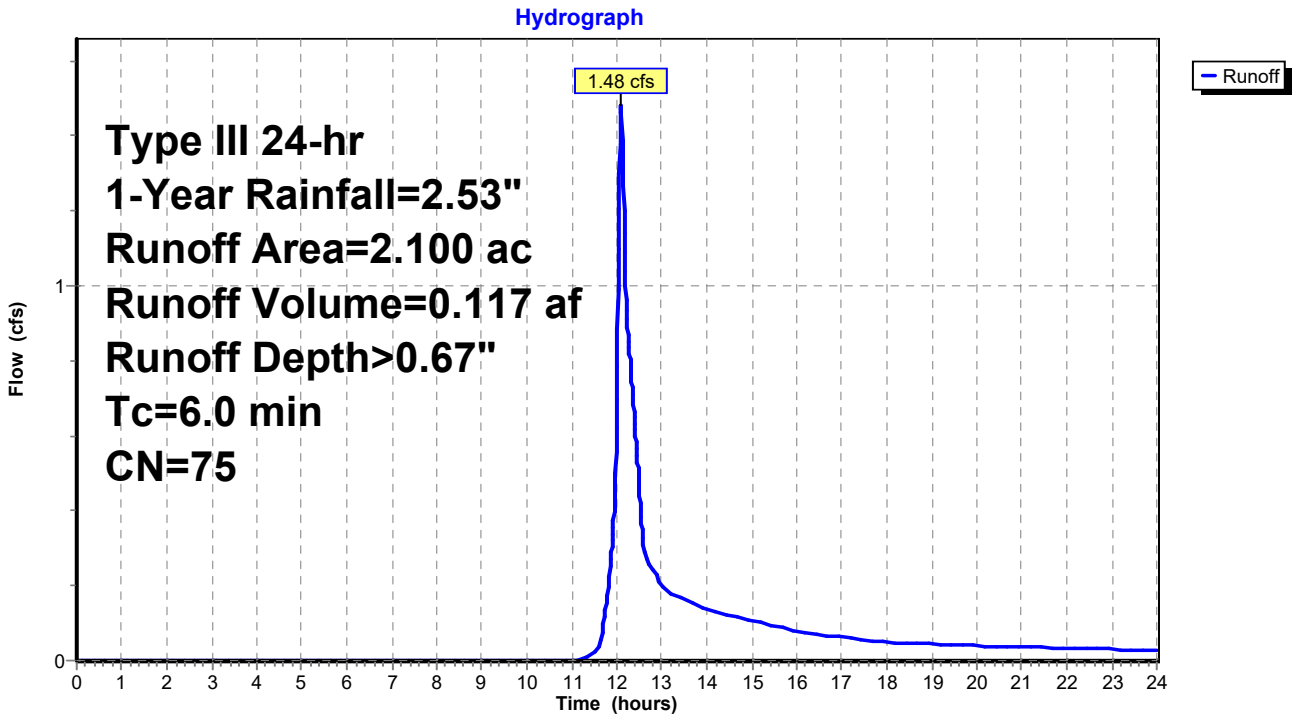
Runoff = 1.48 cfs @ 12.10 hrs, Volume= 0.117 af, Depth> 0.67"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.838 | 98 | Paved parking, HSG B |
| 0.993 | 61 | >75% Grass cover, Good, HSG B |
| 0.269 | 55 | Woods, Good, HSG B |
| 2.100 | 75 | Weighted Average |
| 1.262 | | 60.10% Pervious Area |
| 0.838 | | 39.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-5: PWS-5



## Summary for Subcatchment PWS-6: PWS-6

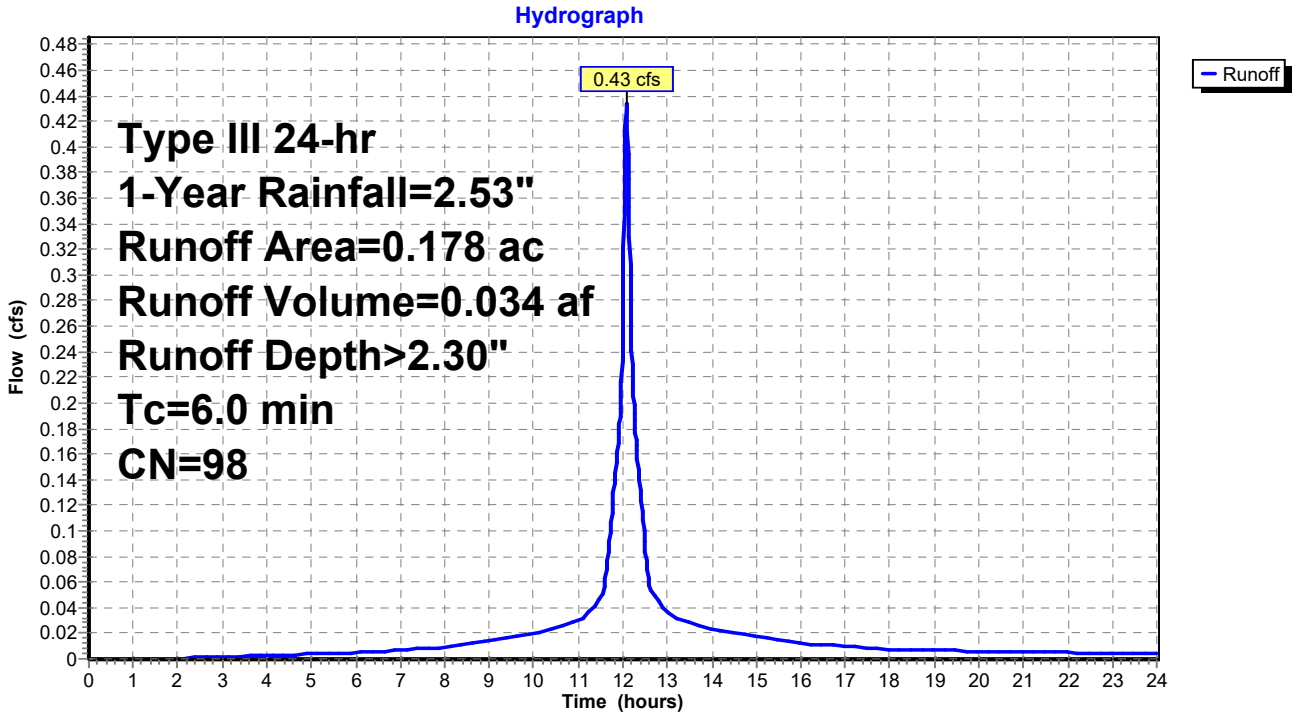
Runoff = 0.43 cfs @ 12.08 hrs, Volume= 0.034 af, Depth> 2.30"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.178 | 98 | Roofs, HSG B |
| 0.178 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-6: PWS-6



## Summary for Subcatchment PWS-7: PWS-7

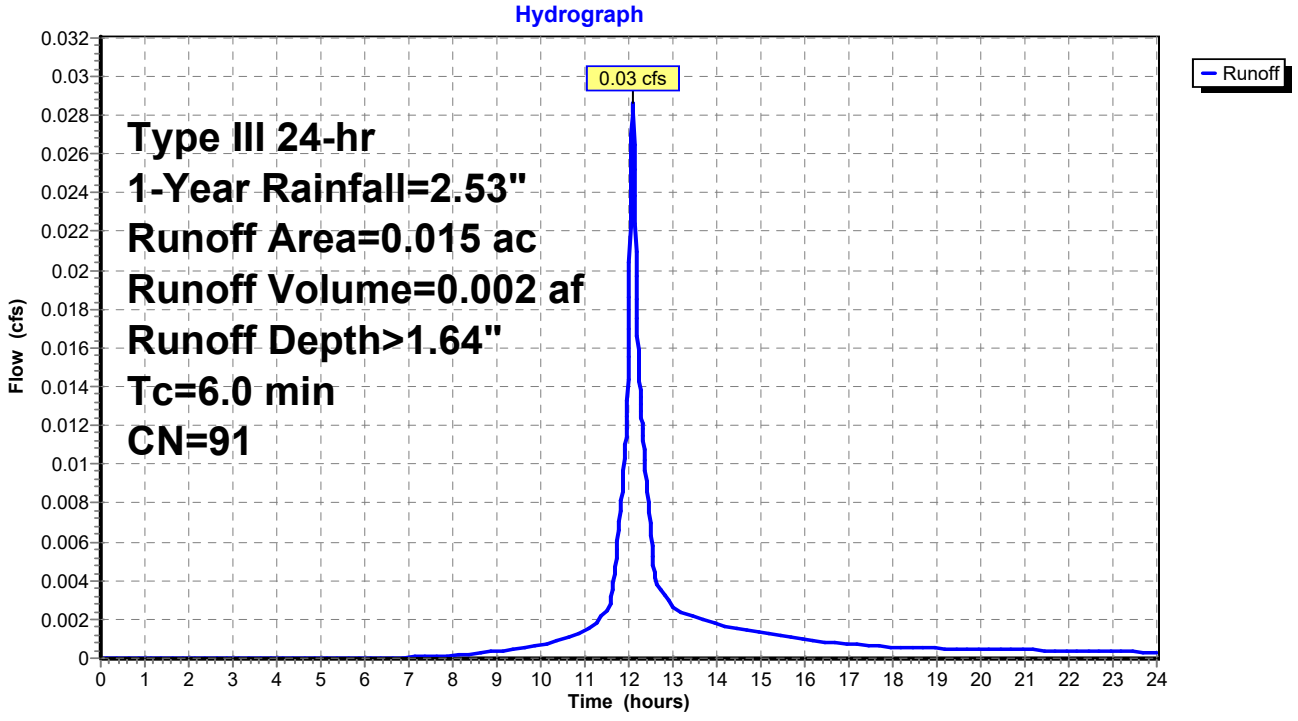
Runoff = 0.03 cfs @ 12.09 hrs, Volume= 0.002 af, Depth> 1.64"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.012 | 98 | Paved parking, HSG B |
| 0.003 | 61 | >75% Grass cover, Good, HSG B |
| 0.015 | 91 | Weighted Average |
| 0.003 | | 20.00% Pervious Area |
| 0.012 | | 80.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment PWS-7: PWS-7



## Summary for Subcatchment PWS-8: PWS-8

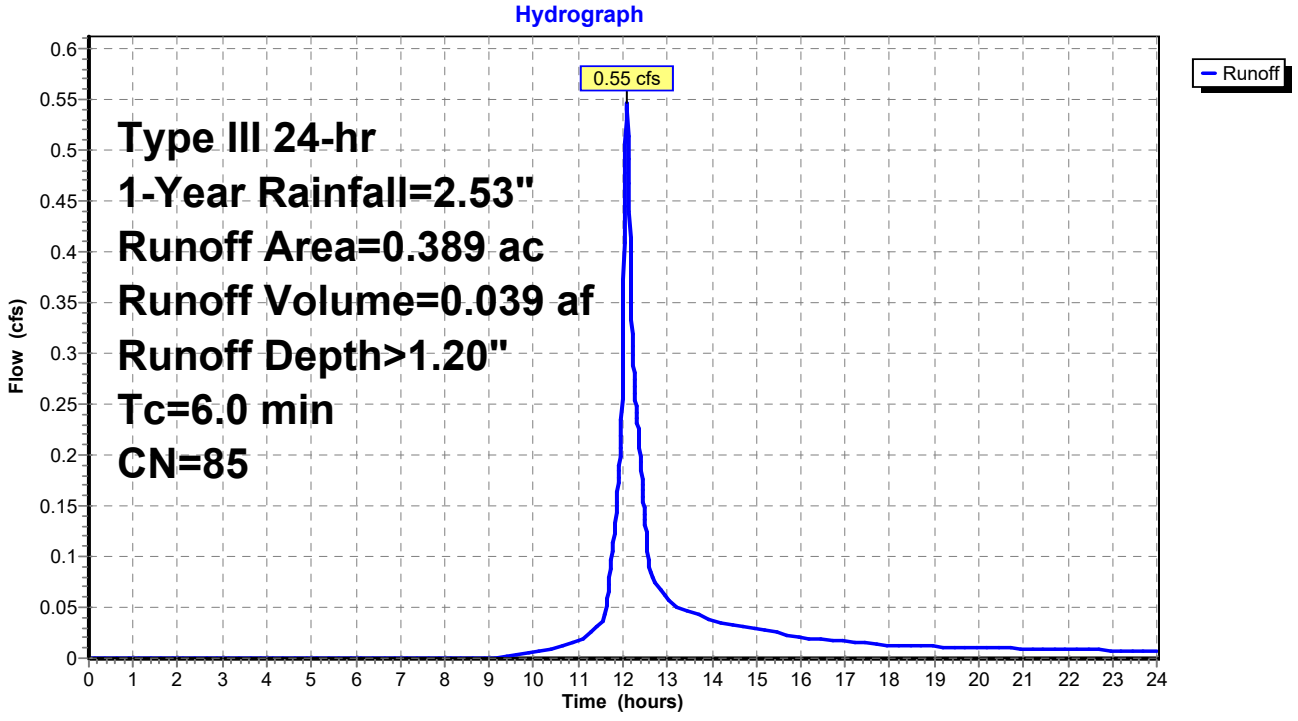
Runoff = 0.55 cfs @ 12.09 hrs, Volume= 0.039 af, Depth> 1.20"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.252 | 98 | Paved parking, HSG B |
| 0.137 | 61 | >75% Grass cover, Good, HSG B |
| 0.389 | 85 | Weighted Average |
| 0.137 | | 35.22% Pervious Area |
| 0.252 | | 64.78% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-8: PWS-8



## Summary for Subcatchment PWS-9: PWS-9

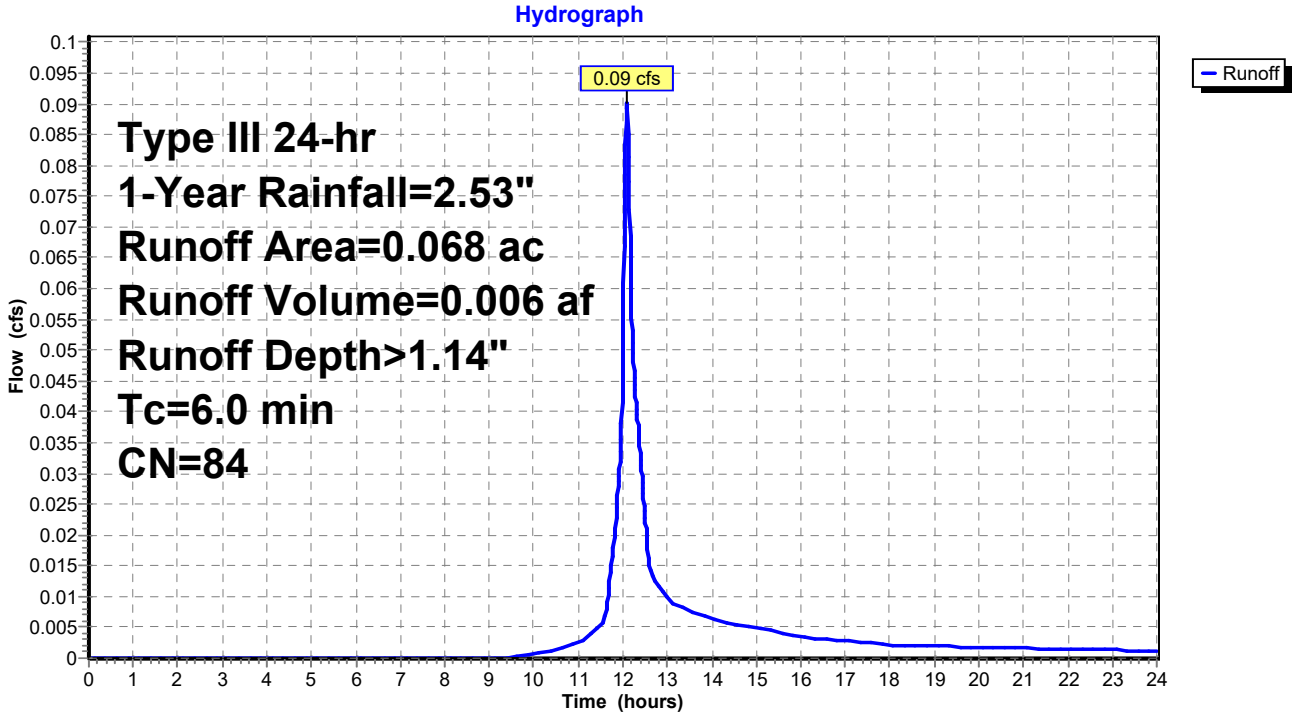
Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.006 af, Depth> 1.14"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=2.53"

| Area (ac) | CN | Description |
|---|---|---|
| 0.043 | 98 | Paved parking, HSG B |
| 0.025 | 61 | >75% Grass cover, Good, HSG B |
| 0.068 | 84 | Weighted Average |
| 0.025 | | 36.76% Pervious Area |
| 0.043 | | 63.24% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment PWS-9: PWS-9



## Summary for Pond P-1: Bio P-1

Inflow Area = 0.601 ac, 51.91% Impervious, Inflow Depth > 0.91" for 1-Year event
Inflow = 0.62 cfs @ 12.09 hrs, Volume= 0.045 af
Outflow = 0.04 cfs @ 14.57 hrs, Volume= 0.018 af, Atten= 93%, Lag= 148.6 min
Primary = 0.04 cfs @ 14.57 hrs, Volume= 0.018 af
Routed to Pond P-3 : Detention P-3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 99.04' @ 14.57 hrs Surf.Area= 2,504 sf Storage= 1,239 cf

Plug-Flow detention time= 324.5 min calculated for 0.018 af (41% of inflow)
Center-of-Mass det. time= 192.2 min ( 1,047.0 - 854.8 )

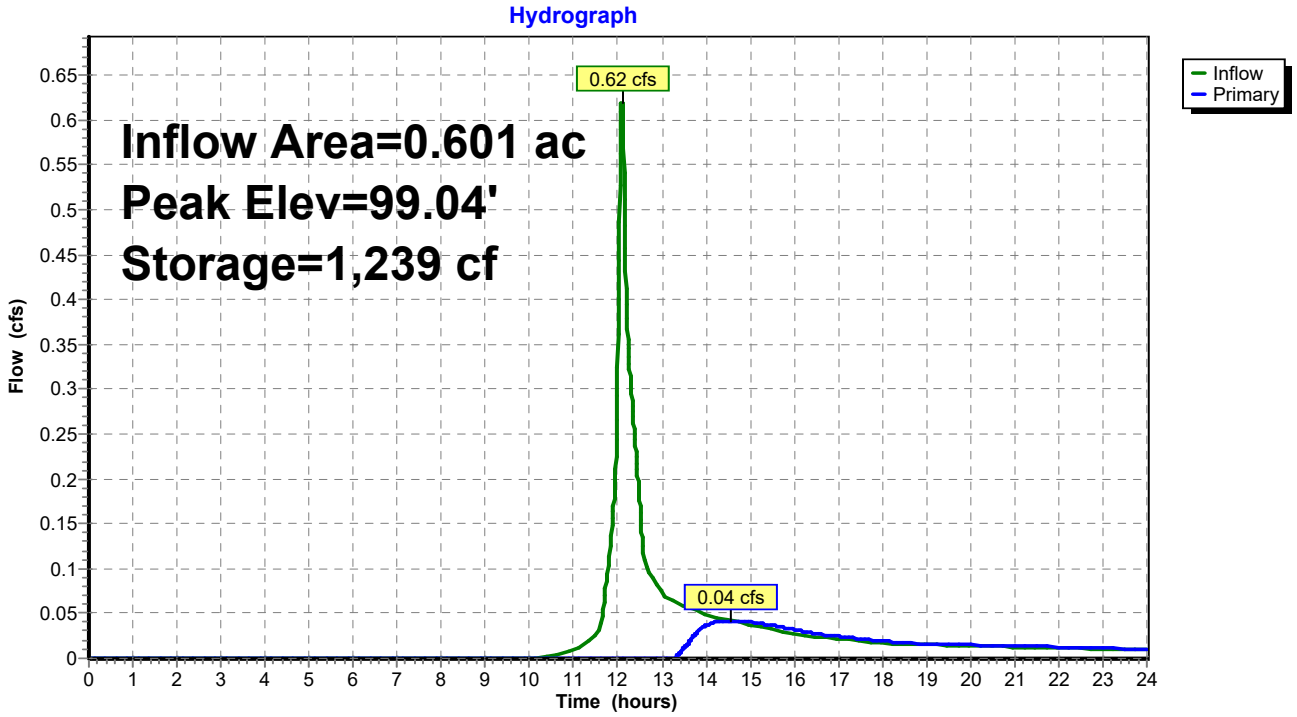
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 98.50' | 5,726 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 98.50 | 2,102 | 0 | 0 |
| 99.50 | 2,849 | 2,476 | 2,476 |
| 100.50 | 3,652 | 3,251 | 5,726 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Device 3 | 99.00' | **2.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |
| #2 | Device 3 | 99.50' | **14.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |
| #3 | Primary | 95.00' | **12.0" Round Culvert** L= 38.0' Ke= 0.500<br>Inlet / Outlet Invert= 95.00' / 94.61' S= 0.0103 '/' Cc= 0.900<br>n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.04 cfs @ 14.57 hrs HW=99.04' (Free Discharge)
└**3=Culvert** (Passes 0.04 cfs of 7.11 cfs potential flow)
├**1=Broad-Crested Rectangular Weir** (Weir Controls 0.04 cfs @ 0.55 fps)
└**2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

## Pond P-1: Bio P-1



## Summary for Pond P-3: Detention P-3

Inflow Area = 3.147 ac, 49.92% Impervious, Inflow Depth > 0.82" for 1-Year event
Inflow = 2.48 cfs @ 12.09 hrs, Volume= 0.214 af
Outflow = 1.23 cfs @ 12.29 hrs, Volume= 0.212 af, Atten= 50%, Lag= 11.5 min
Primary = 1.23 cfs @ 12.29 hrs, Volume= 0.212 af
Routed to Link PDP-1 : PDP-1

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 93.47' @ 12.29 hrs Surf.Area= 0.058 ac Storage= 0.028 af

Plug-Flow detention time= 18.8 min calculated for 0.212 af (99% of inflow)
Center-of-Mass det. time= 13.1 min ( 862.6 - 849.5 )

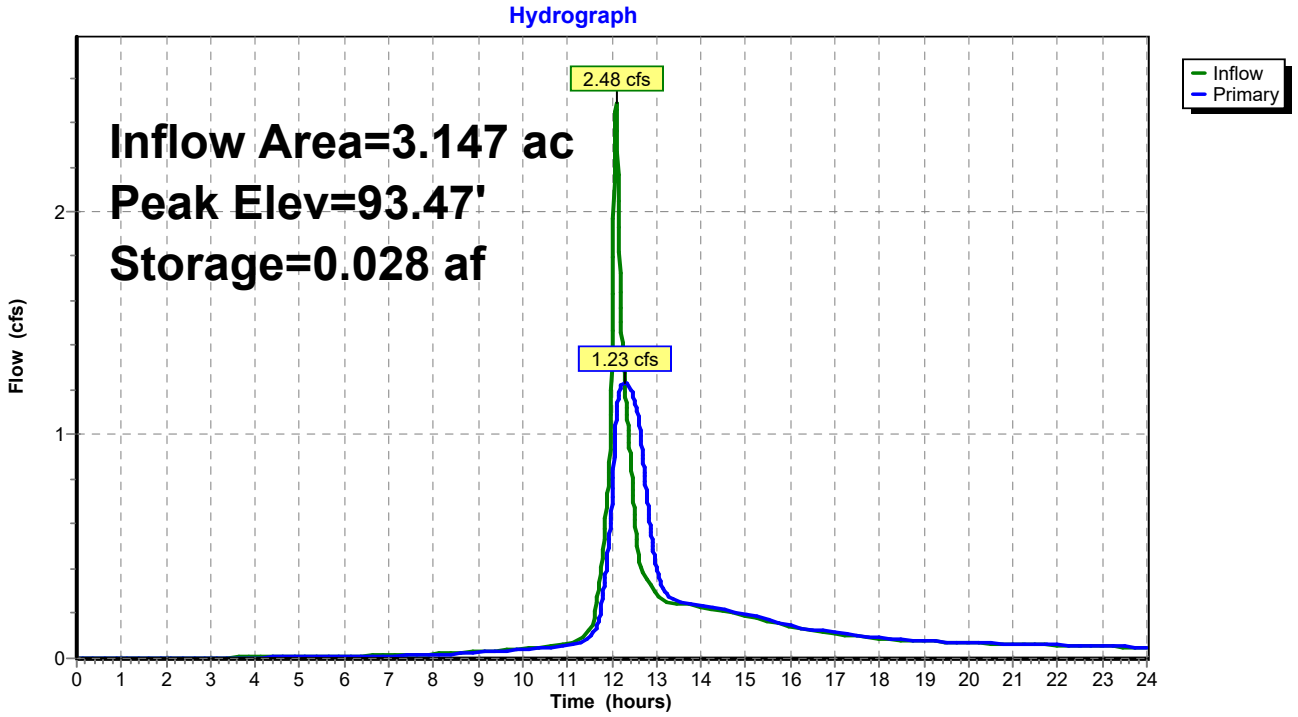
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1A | 92.50' | 0.082 af | **29.92'W x 84.57'L x 5.50'H Field A**<br>0.319 af Overall - 0.114 af Embedded = 0.206 af x 40.0% Voids |
| #2A | 93.25' | 0.114 af | **ADS_StormTech MC-3500 d +Cap**x 44 Inside #1<br>Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf<br>Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap<br>44 Chambers in 4 Rows<br>Cap Storage= 14.9 cf x 2 x 4 rows = 119.2 cf |
| | | 0.196 af | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 92.50' | **18.0" Round Culvert**<br>L= 45.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 92.50' / 92.00' S= 0.0111 '/' Cc= 0.900<br>n= 0.010 PVC, smooth interior, Flow Area= 1.77 sf |
| #2 | Device 1 | 92.50' | **5.2" Vert. Orifice/Grate X 2.00** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Device 1 | 93.50' | **24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 96.25' | **22.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #5 | Device 1 | 97.50' | **4.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |

**Primary OutFlow** Max=1.23 cfs @ 12.29 hrs HW=93.47' (Free Discharge)
└**1=Culvert** (Passes 1.23 cfs of 4.05 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 1.23 cfs @ 4.18 fps)
├**3=Orifice/Grate** ( Controls 0.00 cfs)
├**4=Orifice/Grate** ( Controls 0.00 cfs)
└**5=Broad-Crested Rectangular Weir**( Controls 0.00 cfs)

## Pond P-3: Detention P-3

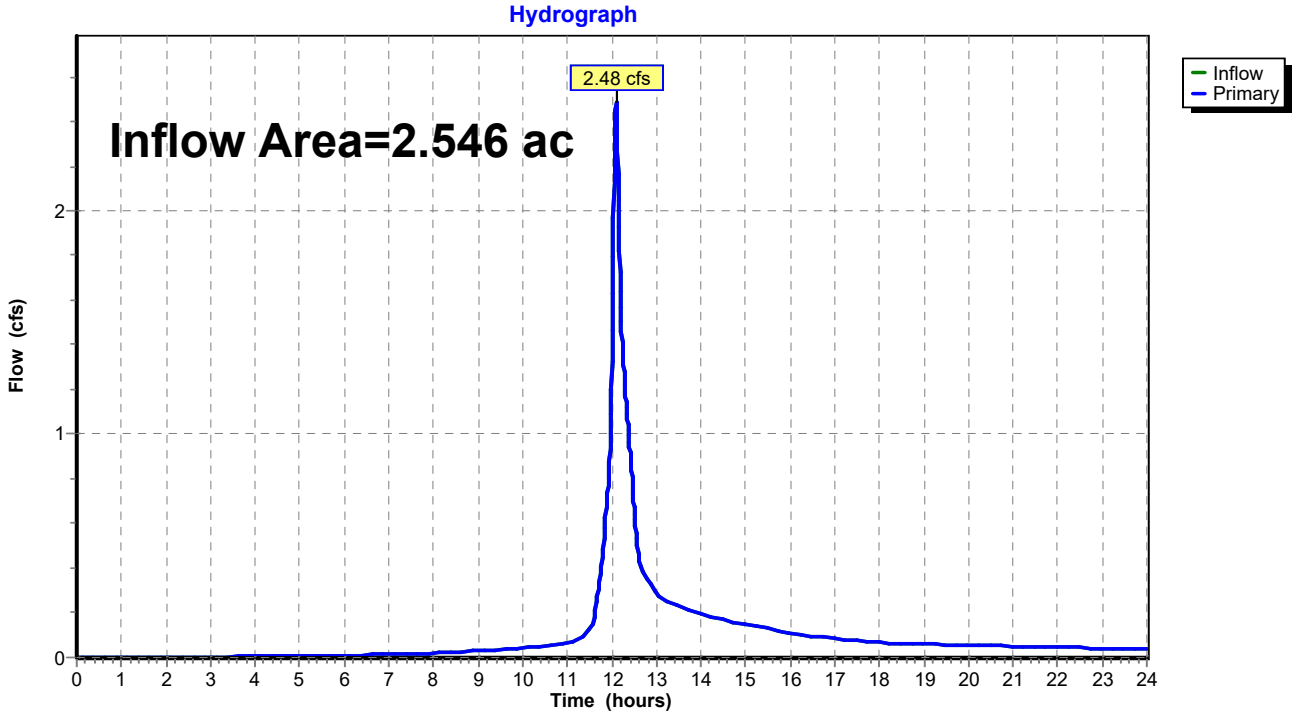


## Summary for Pond SC-1: Swirl Chamber

Inflow Area = 2.546 ac, 49.45% Impervious, Inflow Depth > 0.92" for 1-Year event
Inflow = 2.48 cfs @ 12.09 hrs, Volume= 0.196 af
Primary = 2.48 cfs @ 12.09 hrs, Volume= 0.196 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P-3 : Detention P-3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

### Pond SC-1: Swirl Chamber

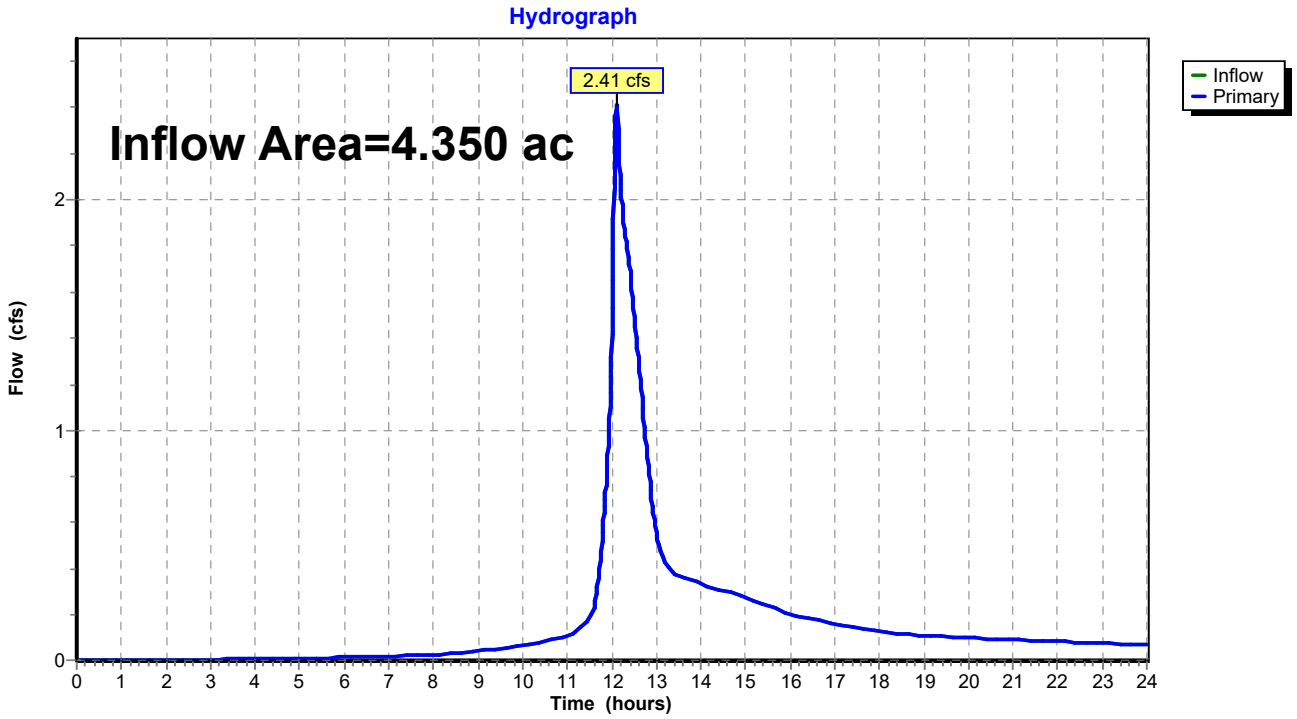


## Summary for Link PDP-1: PDP-1

Inflow Area = 4.350 ac, 50.67% Impervious, Inflow Depth > 0.87" for 1-Year event
Inflow = 2.41 cfs @ 12.10 hrs, Volume= 0.315 af
Primary = 2.41 cfs @ 12.10 hrs, Volume= 0.315 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

## Link PDP-1: PDP-1



## Summary for Subcatchment PWS-1: PWS-1

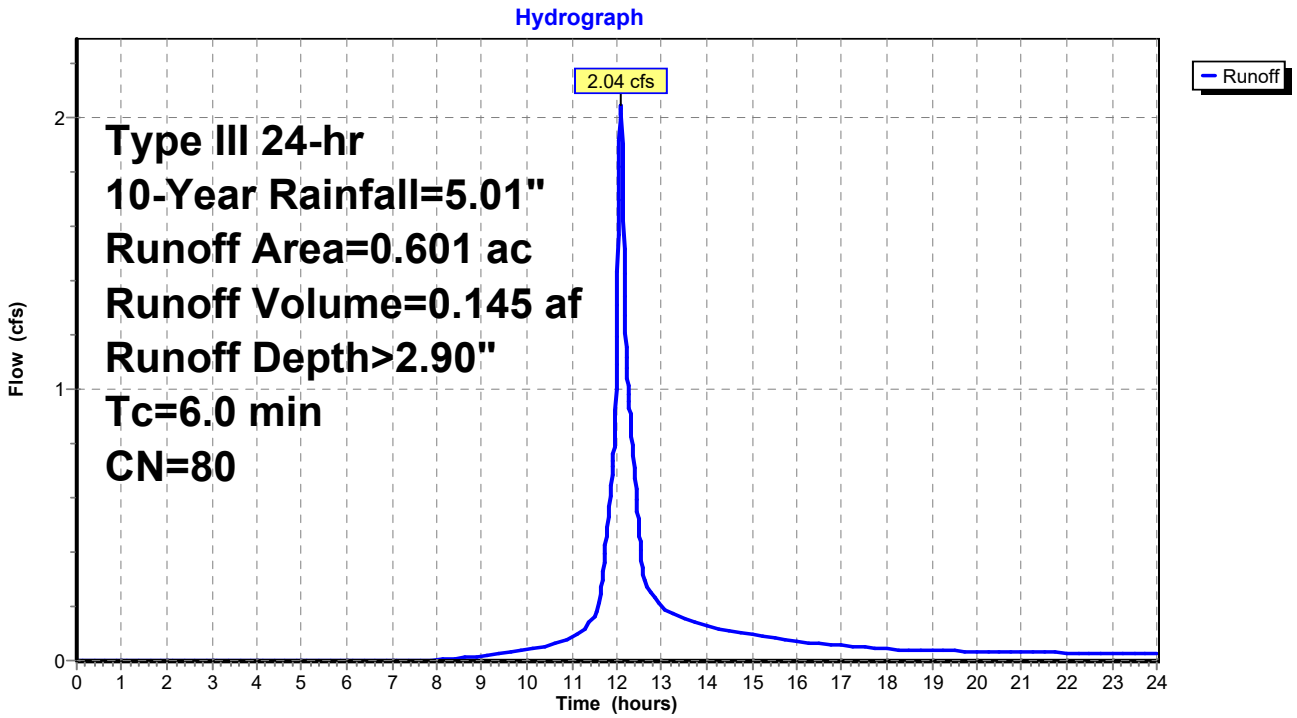
Runoff = 2.04 cfs @ 12.09 hrs, Volume= 0.145 af, Depth> 2.90"
Routed to Pond P-1 : Bio P-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.312 | 98 | Paved parking, HSG B |
| 0.260 | 61 | >75% Grass cover, Good, HSG B |
| 0.029 | 55 | Woods, Good, HSG B |
| 0.601 | 80 | Weighted Average |
| 0.289 | | 48.09% Pervious Area |
| 0.312 | | 51.91% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-1: PWS-1



## Summary for Subcatchment PWS-2: PWS-2

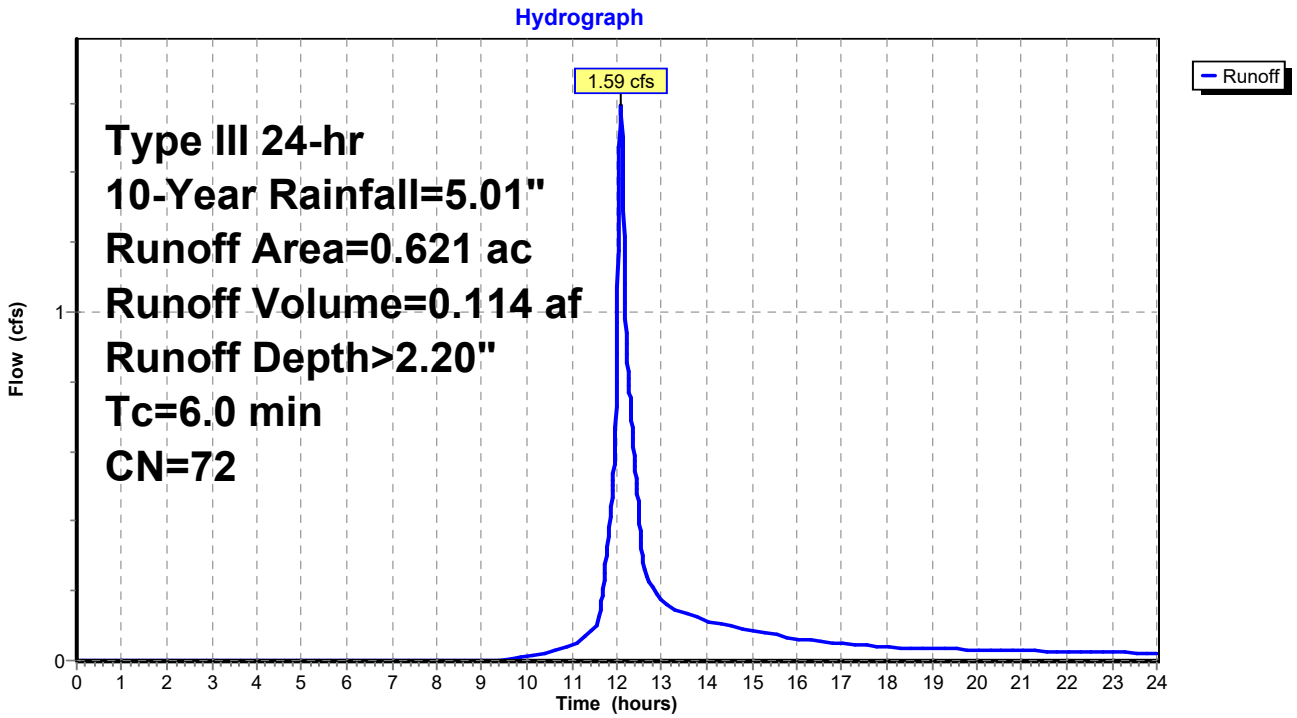
Runoff = 1.59 cfs @ 12.09 hrs, Volume= 0.114 af, Depth> 2.20"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.191 | 98 | Paved parking, HSG B |
| 0.356 | 61 | >75% Grass cover, Good, HSG B |
| 0.074 | 55 | Woods, Good, HSG B |
| 0.621 | 72 | Weighted Average |
| 0.430 | | 69.24% Pervious Area |
| 0.191 | | 30.76% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-2: PWS-2



## Summary for Subcatchment PWS-3: PWS-3

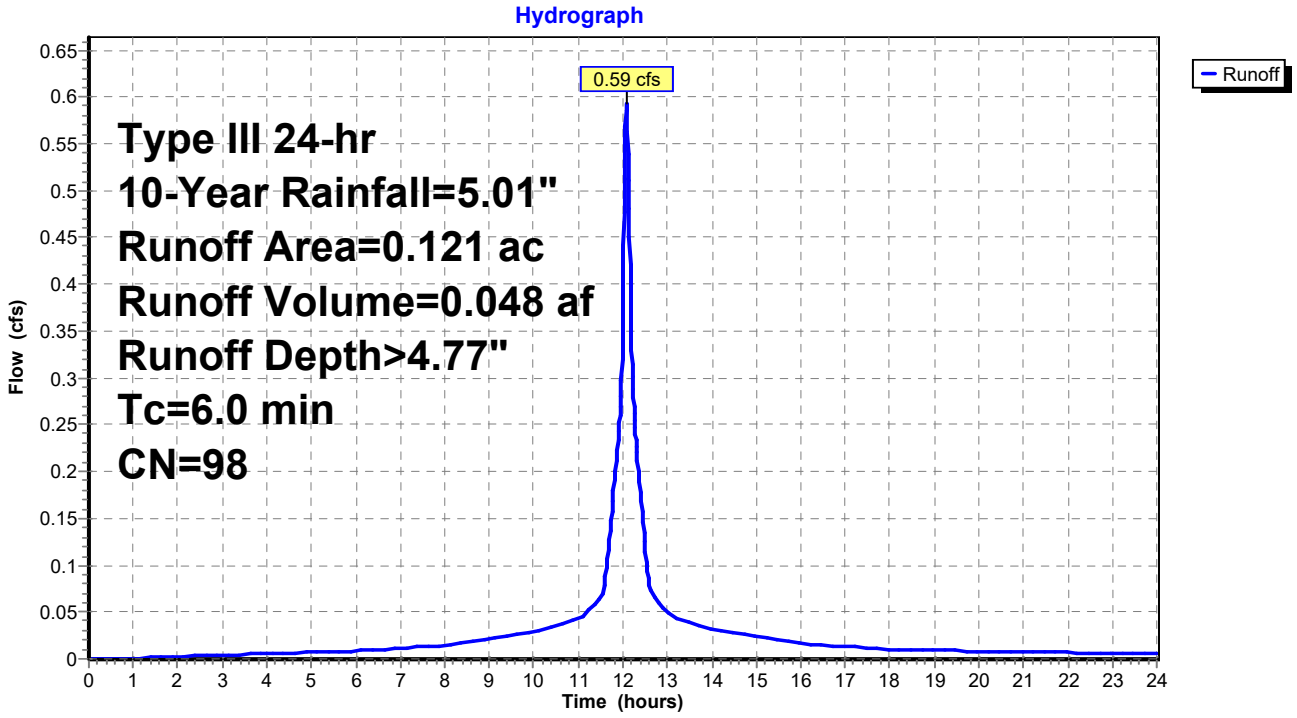
Runoff = 0.59 cfs @ 12.08 hrs, Volume= 0.048 af, Depth> 4.77"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.121 | 98 | Roofs, HSG B |
| 0.121 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-3: PWS-3



## Summary for Subcatchment PWS-4: PWS-4

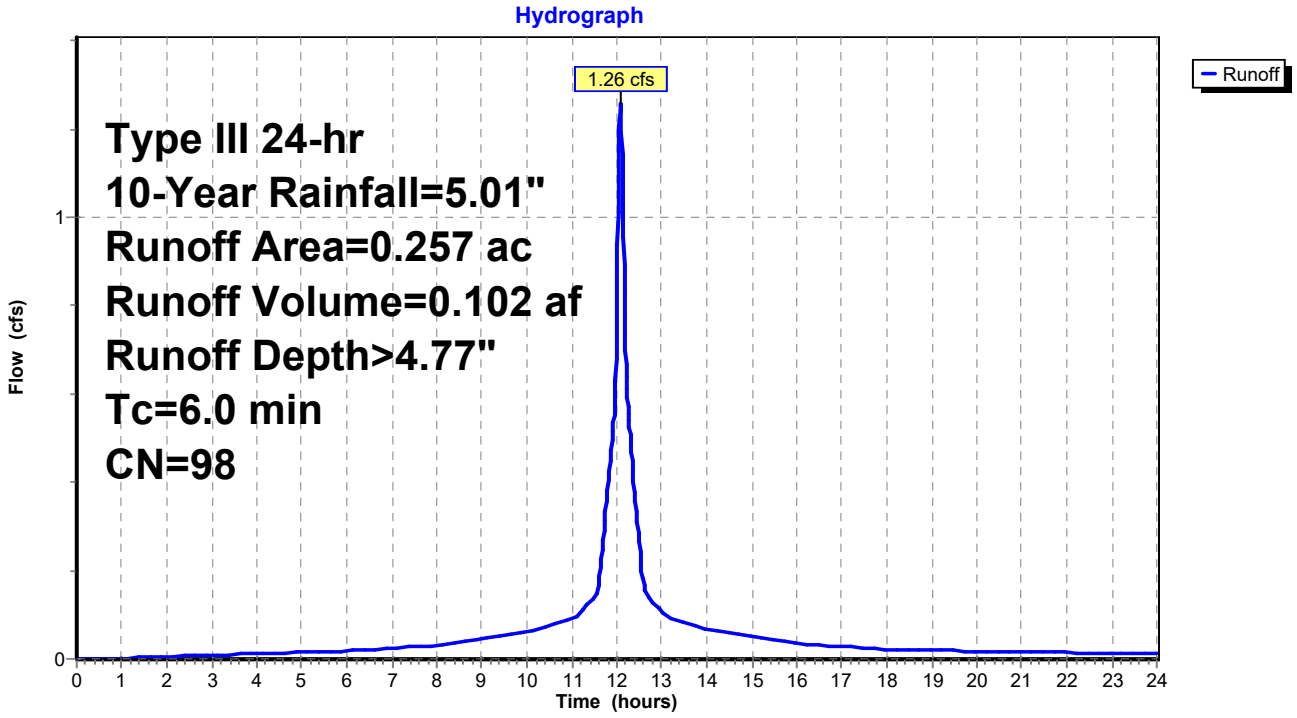
Runoff = 1.26 cfs @ 12.08 hrs, Volume= 0.102 af, Depth> 4.77"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.257 | 98 | Roofs, HSG B |
| 0.257 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-4: PWS-4



## Summary for Subcatchment PWS-5: PWS-5

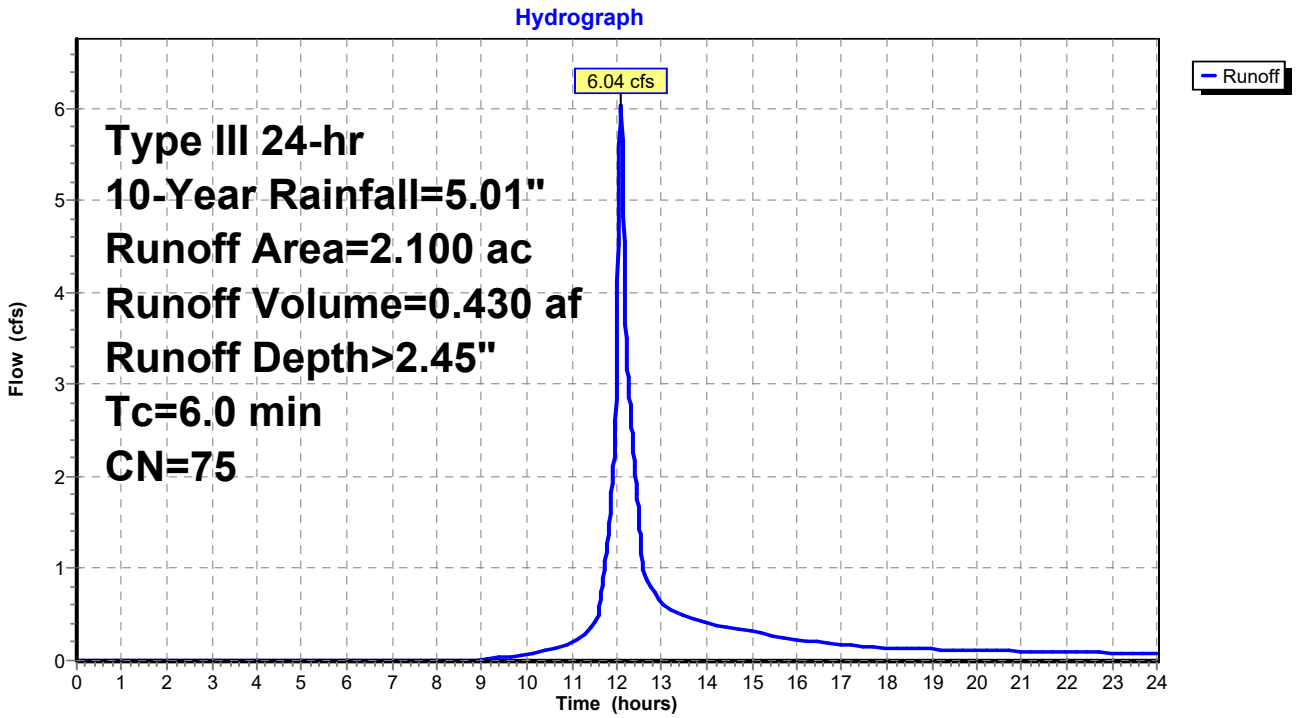
Runoff = 6.04 cfs @ 12.09 hrs, Volume= 0.430 af, Depth> 2.45"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.838 | 98 | Paved parking, HSG B |
| 0.993 | 61 | >75% Grass cover, Good, HSG B |
| 0.269 | 55 | Woods, Good, HSG B |
| 2.100 | 75 | Weighted Average |
| 1.262 | | 60.10% Pervious Area |
| 0.838 | | 39.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-5: PWS-5



## Summary for Subcatchment PWS-6: PWS-6

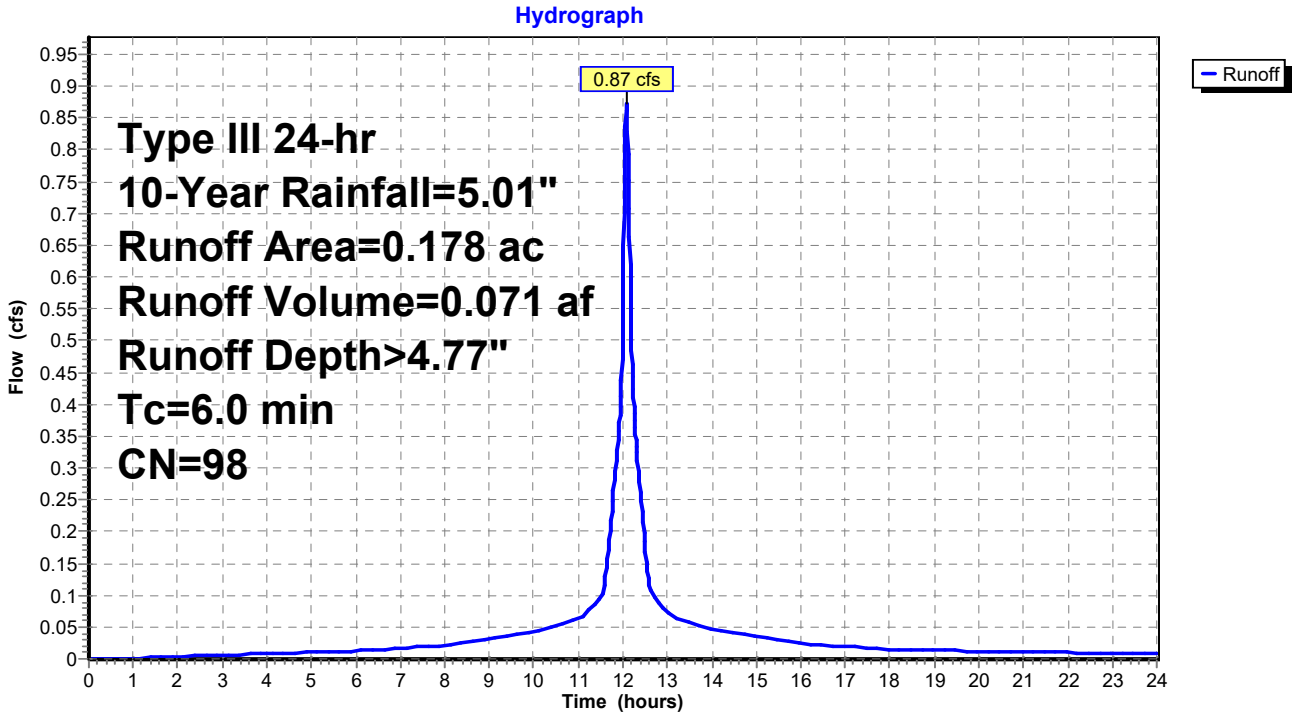
Runoff = 0.87 cfs @ 12.08 hrs, Volume= 0.071 af, Depth> 4.77"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.178 | 98 | Roofs, HSG B |
| 0.178 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-6: PWS-6



## Summary for Subcatchment PWS-7: PWS-7

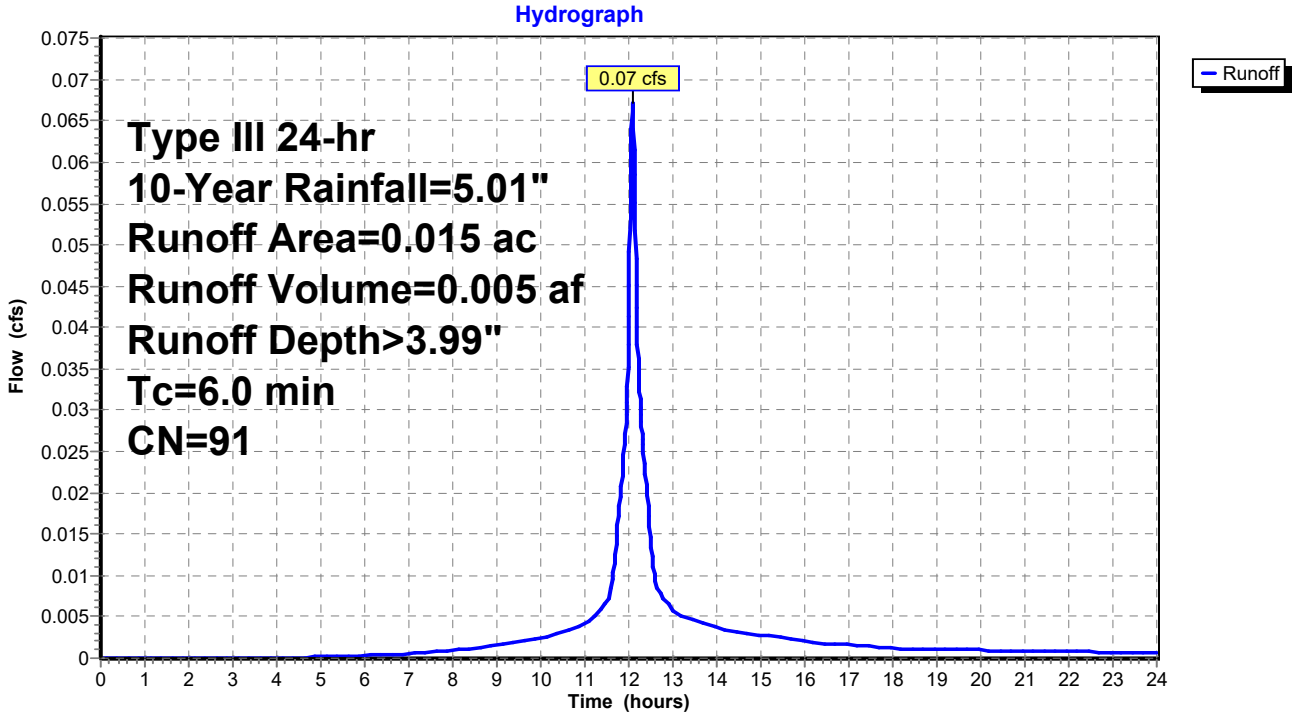
Runoff = 0.07 cfs @ 12.08 hrs, Volume= 0.005 af, Depth> 3.99"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.012 | 98 | Paved parking, HSG B |
| 0.003 | 61 | >75% Grass cover, Good, HSG B |
| 0.015 | 91 | Weighted Average |
| 0.003 | | 20.00% Pervious Area |
| 0.012 | | 80.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-7: PWS-7



## Summary for Subcatchment PWS-8: PWS-8

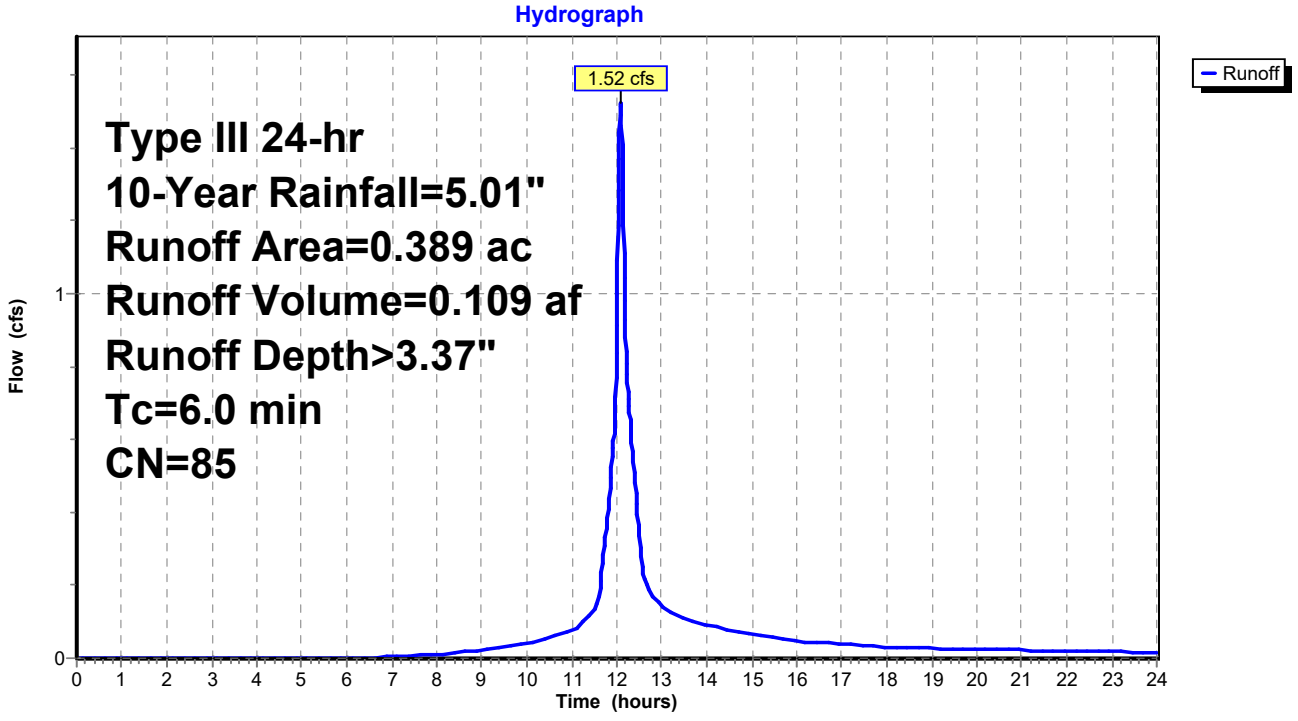
Runoff = 1.52 cfs @ 12.09 hrs, Volume= 0.109 af, Depth> 3.37"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.252 | 98 | Paved parking, HSG B |
| 0.137 | 61 | >75% Grass cover, Good, HSG B |
| 0.389 | 85 | Weighted Average |
| 0.137 | | 35.22% Pervious Area |
| 0.252 | | 64.78% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment PWS-8: PWS-8



## Summary for Subcatchment PWS-9: PWS-9

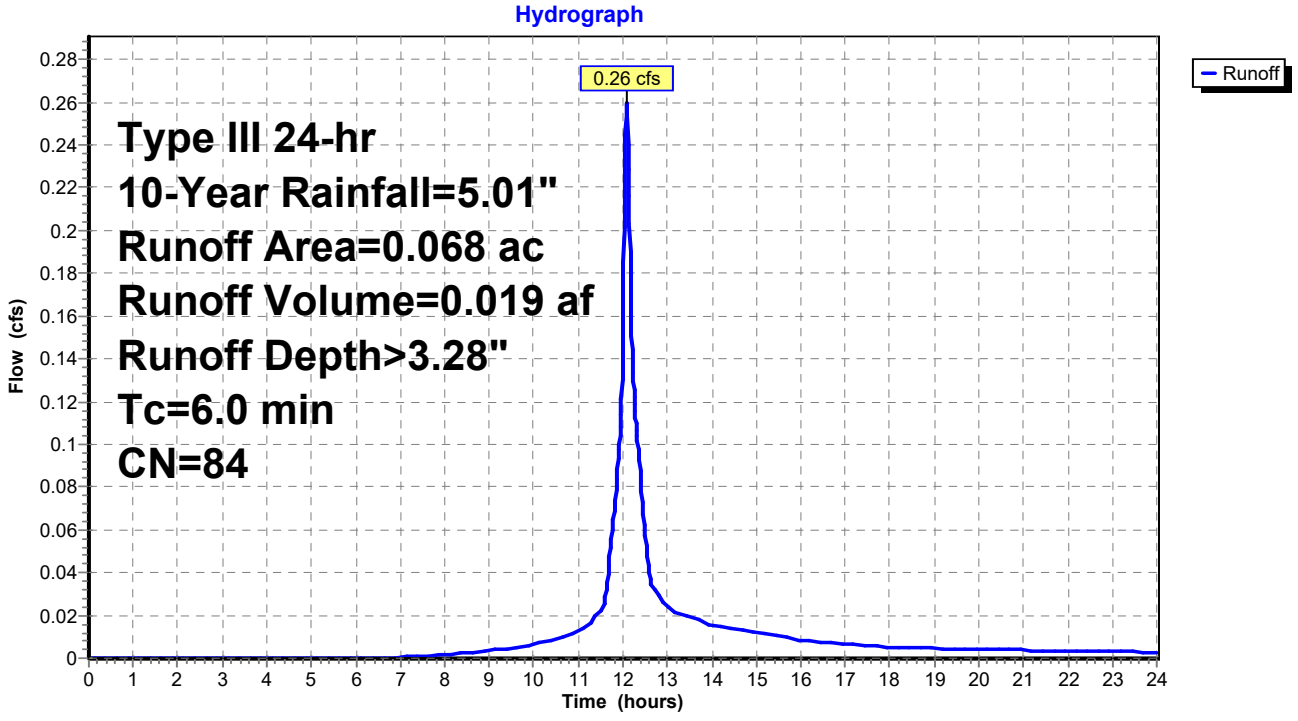
Runoff = 0.26 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 3.28"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=5.01"

| Area (ac) | CN | Description |
|---|---|---|
| 0.043 | 98 | Paved parking, HSG B |
| 0.025 | 61 | >75% Grass cover, Good, HSG B |
| 0.068 | 84 | Weighted Average |
| 0.025 | | 36.76% Pervious Area |
| 0.043 | | 63.24% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment PWS-9: PWS-9



## Summary for Pond P-1: Bio P-1

Inflow Area = 0.601 ac, 51.91% Impervious, Inflow Depth > 2.90" for 10-Year event
Inflow = 2.04 cfs @ 12.09 hrs, Volume= 0.145 af
Outflow = 1.18 cfs @ 12.21 hrs, Volume= 0.117 af, Atten= 42%, Lag= 7.1 min
Primary = 1.18 cfs @ 12.21 hrs, Volume= 0.117 af
Routed to Pond P-3 : Detention P-3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 99.35' @ 12.21 hrs Surf.Area= 2,734 sf Storage= 2,047 cf

Plug-Flow detention time= 123.9 min calculated for 0.117 af (81% of inflow)
Center-of-Mass det. time= 49.2 min ( 870.2 - 821.0 )

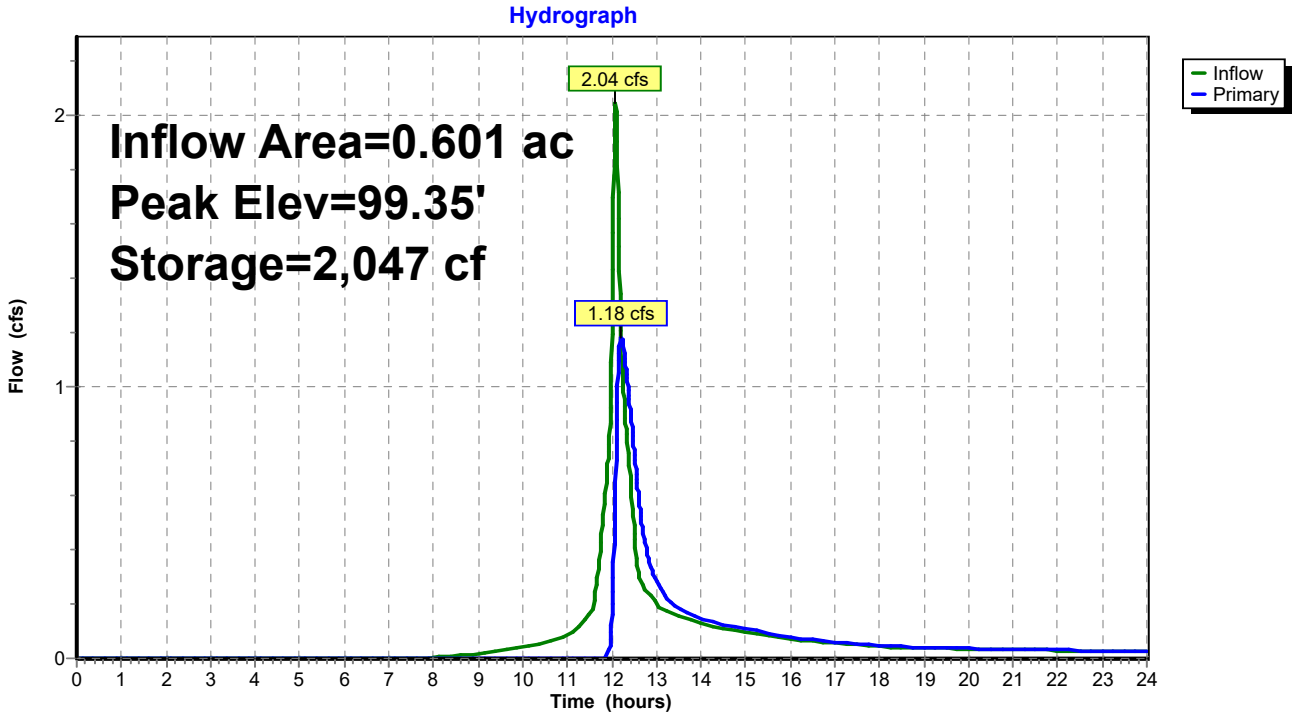
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 98.50' | 5,726 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 98.50 | 2,102 | 0 | 0 |
| 99.50 | 2,849 | 2,476 | 2,476 |
| 100.50 | 3,652 | 3,251 | 5,726 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Device 3 | 99.00' | **2.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |
| #2 | Device 3 | 99.50' | **14.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |
| #3 | Primary | 95.00' | **12.0" Round Culvert** L= 38.0' Ke= 0.500<br>Inlet / Outlet Invert= 95.00' / 94.61' S= 0.0103 '/' Cc= 0.900<br>n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.18 cfs @ 12.21 hrs HW=99.35' (Free Discharge)
└**3=Culvert** (Passes 1.18 cfs of 7.42 cfs potential flow)
├**1=Broad-Crested Rectangular Weir** (Weir Controls 1.18 cfs @ 1.70 fps)
└**2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

## Pond P-1: Bio P-1



## Summary for Pond P-3: Detention P-3

Inflow Area = 3.147 ac, 49.92% Impervious, Inflow Depth > 2.73" for 10-Year event
Inflow = 8.89 cfs @ 12.09 hrs, Volume= 0.716 af
Outflow = 6.39 cfs @ 12.19 hrs, Volume= 0.712 af, Atten= 28%, Lag= 5.4 min
Primary = 6.39 cfs @ 12.19 hrs, Volume= 0.712 af
Routed to Link PDP-1 : PDP-1

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 94.60' @ 12.19 hrs Surf.Area= 0.058 ac Storage= 0.082 af

Plug-Flow detention time= 13.3 min calculated for 0.712 af (99% of inflow)
Center-of-Mass det. time= 10.4 min ( 831.5 - 821.2 )

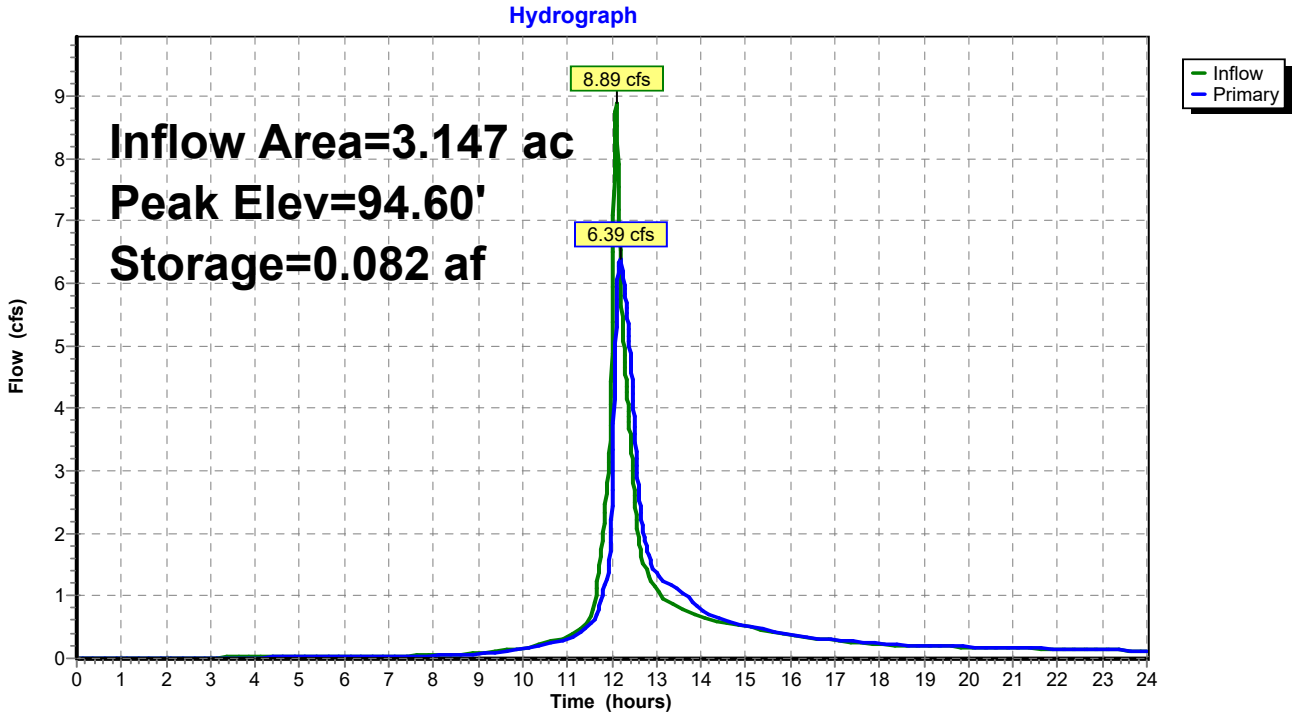
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1A | 92.50' | 0.082 af | **29.92'W x 84.57'L x 5.50'H Field A**<br>0.319 af Overall - 0.114 af Embedded = 0.206 af x 40.0% Voids |
| #2A | 93.25' | 0.114 af | **ADS_StormTech MC-3500 d +Cap**x 44 Inside #1<br>Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf<br>Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap<br>44 Chambers in 4 Rows<br>Cap Storage= 14.9 cf x 2 x 4 rows = 119.2 cf |
| | | 0.196 af | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 92.50' | **18.0" Round Culvert**<br>L= 45.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 92.50' / 92.00' S= 0.0111 '/' Cc= 0.900<br>n= 0.010 PVC, smooth interior, Flow Area= 1.77 sf |
| #2 | Device 1 | 92.50' | **5.2" Vert. Orifice/Grate X 2.00** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Device 1 | 93.50' | **24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 96.25' | **22.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #5 | Device 1 | 97.50' | **4.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |

**Primary OutFlow** Max=6.38 cfs @ 12.19 hrs HW=94.60' (Free Discharge)
└**1=Culvert** (Passes 6.38 cfs of 9.90 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 1.95 cfs @ 6.61 fps)
├**3=Orifice/Grate** (Orifice Controls 4.43 cfs @ 4.43 fps)
├**4=Orifice/Grate** ( Controls 0.00 cfs)
└**5=Broad-Crested Rectangular Weir**( Controls 0.00 cfs)

## Pond P-3: Detention P-3

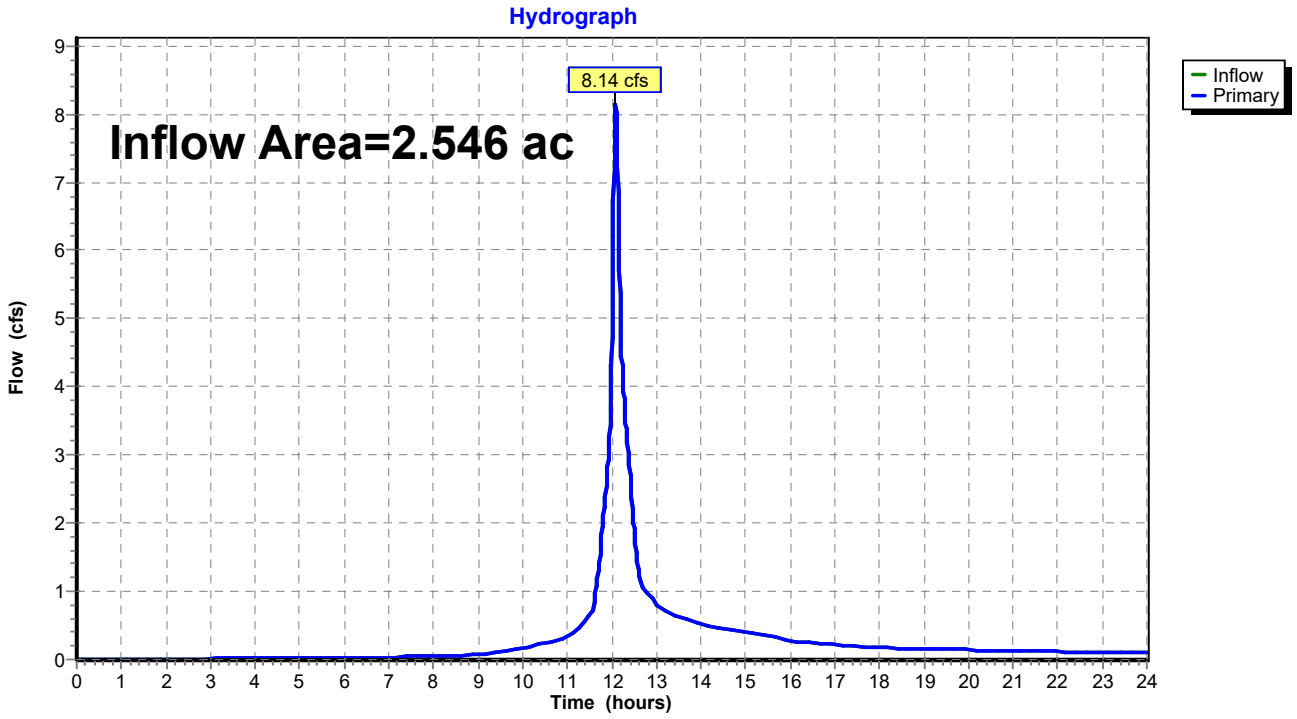


## Summary for Pond SC-1: Swirl Chamber

Inflow Area = 2.546 ac, 49.45% Impervious, Inflow Depth > 2.82" for 10-Year event
Inflow = 8.14 cfs @ 12.09 hrs, Volume= 0.598 af
Primary = 8.14 cfs @ 12.09 hrs, Volume= 0.598 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P-3 : Detention P-3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

### Pond SC-1: Swirl Chamber

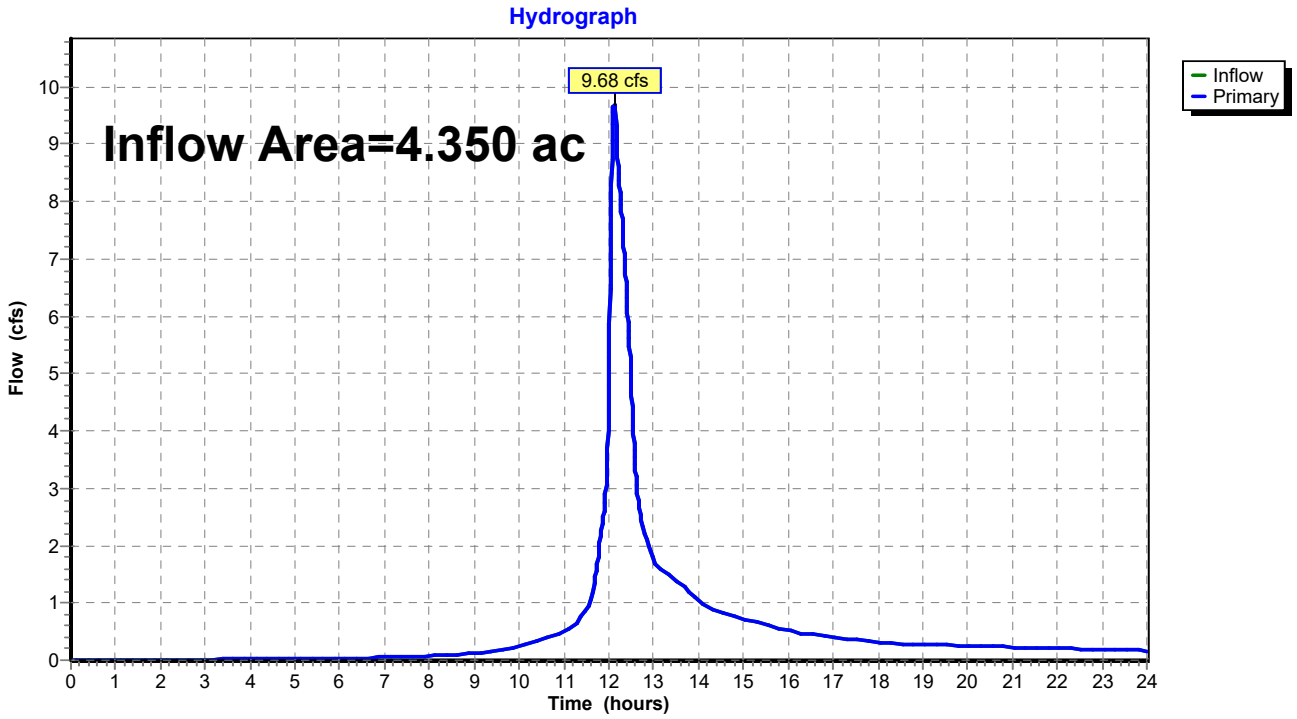


## Summary for Link PDP-1: PDP-1

Inflow Area = 4.350 ac, 50.67% Impervious, Inflow Depth > 2.79" for 10-Year event
Inflow = 9.68 cfs @ 12.12 hrs, Volume= 1.011 af
Primary = 9.68 cfs @ 12.12 hrs, Volume= 1.011 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

## Link PDP-1: PDP-1



## Summary for Subcatchment PWS-1: PWS-1

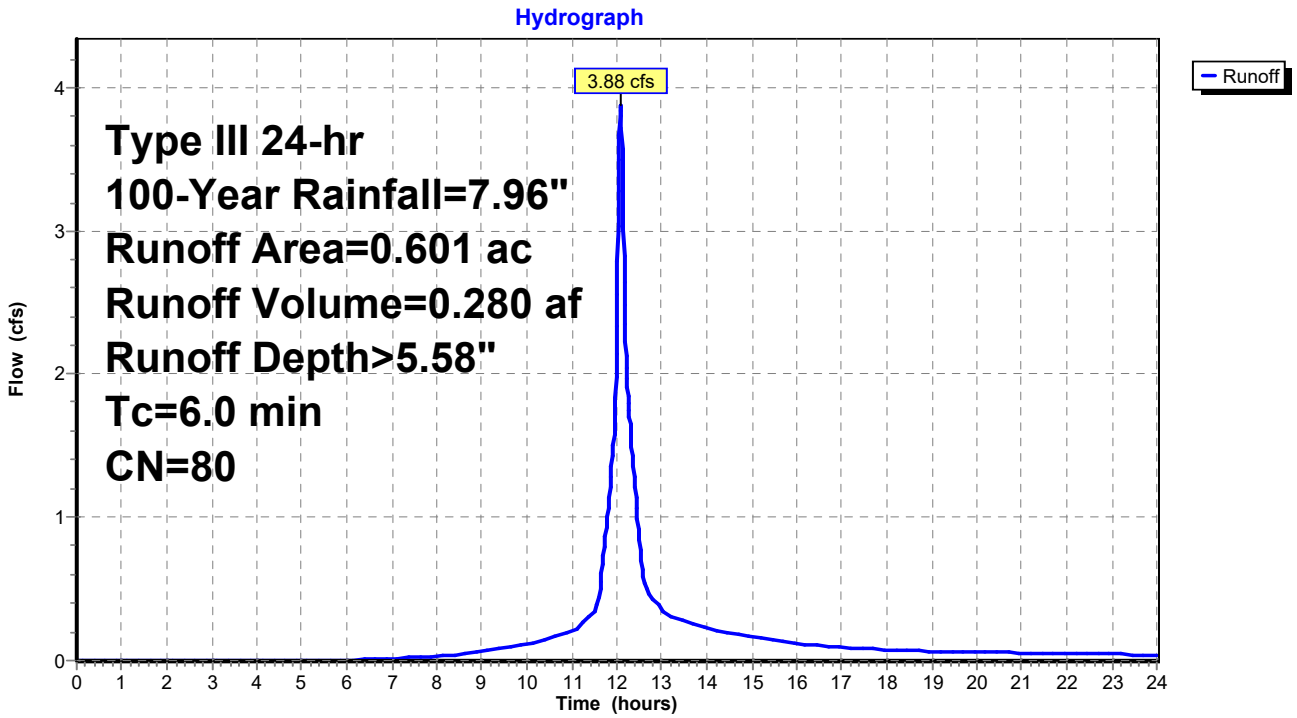
Runoff = 3.88 cfs @ 12.09 hrs, Volume= 0.280 af, Depth> 5.58"
Routed to Pond P-1 : Bio P-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.312 | 98 | Paved parking, HSG B |
| 0.260 | 61 | >75% Grass cover, Good, HSG B |
| 0.029 | 55 | Woods, Good, HSG B |
| 0.601 | 80 | Weighted Average |
| 0.289 | | 48.09% Pervious Area |
| 0.312 | | 51.91% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-1: PWS-1



## Summary for Subcatchment PWS-2: PWS-2

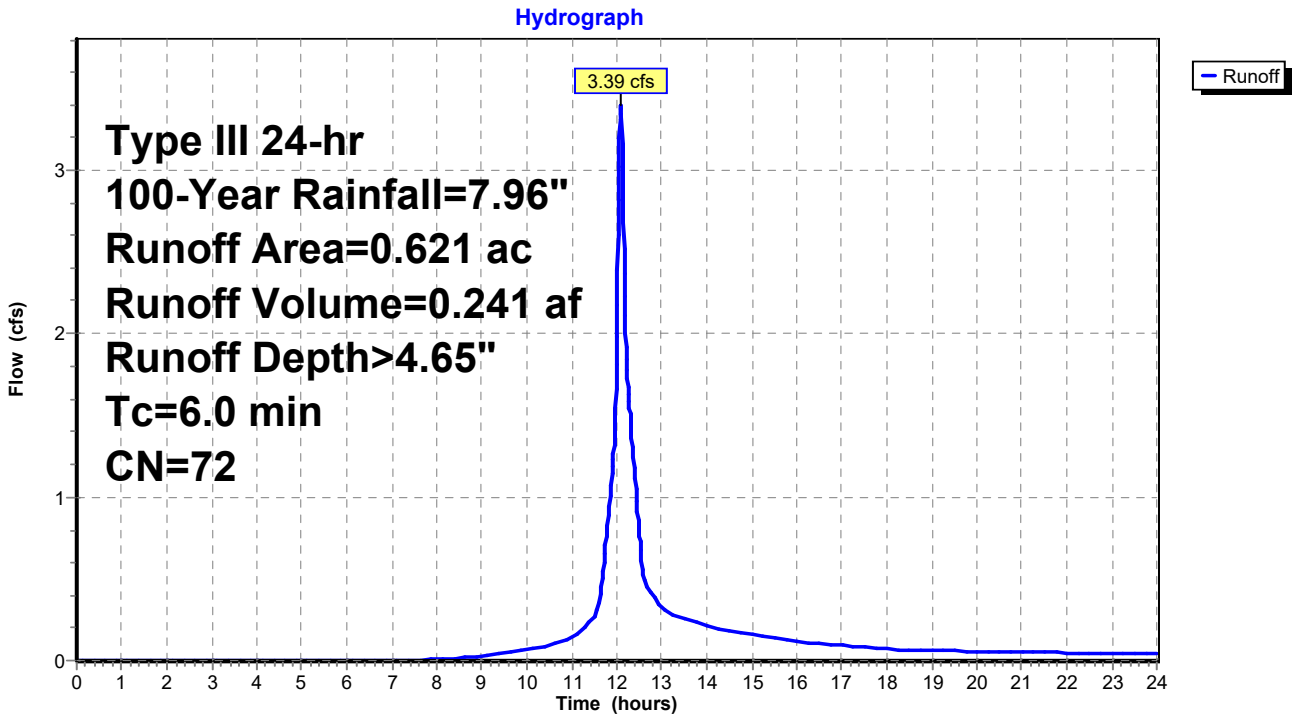
Runoff = 3.39 cfs @ 12.09 hrs, Volume= 0.241 af, Depth> 4.65"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.191 | 98 | Paved parking, HSG B |
| 0.356 | 61 | >75% Grass cover, Good, HSG B |
| 0.074 | 55 | Woods, Good, HSG B |
| 0.621 | 72 | Weighted Average |
| 0.430 | | 69.24% Pervious Area |
| 0.191 | | 30.76% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-2: PWS-2



## Summary for Subcatchment PWS-3: PWS-3

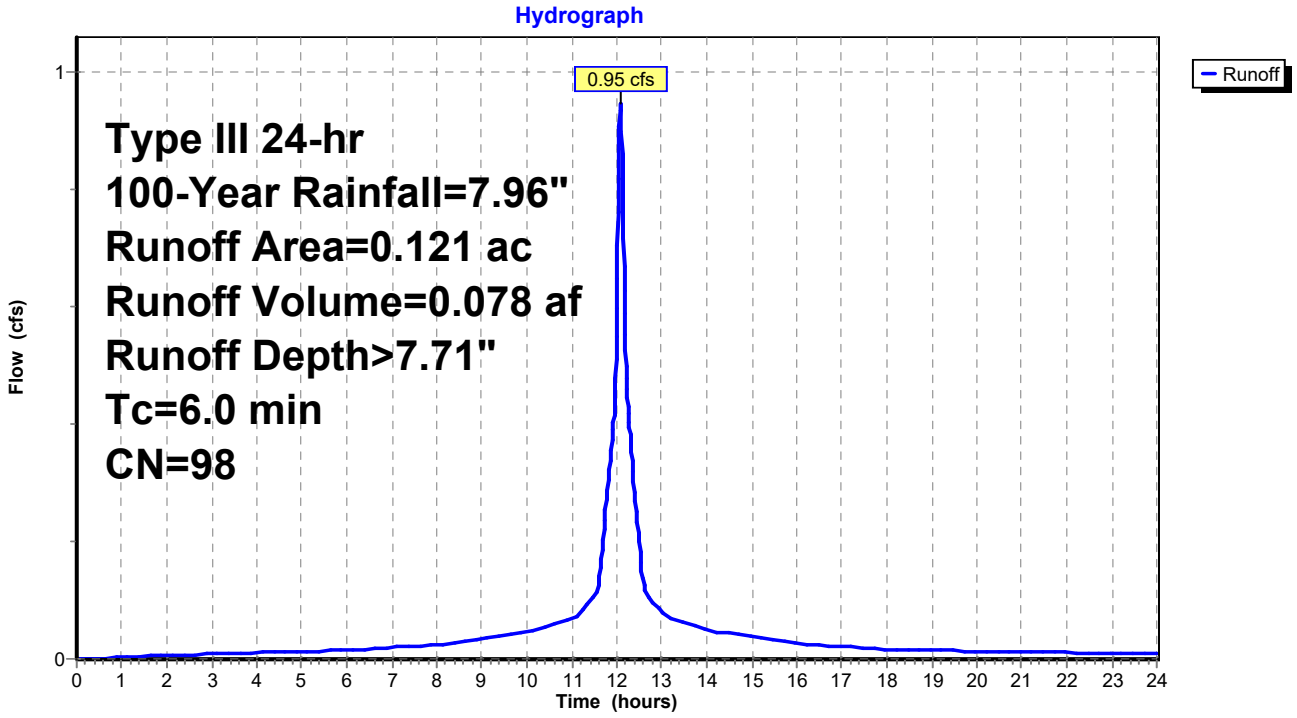
Runoff = 0.95 cfs @ 12.08 hrs, Volume= 0.078 af, Depth> 7.71"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.121 | 98 | Roofs, HSG B |
| 0.121 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-3: PWS-3



## Summary for Subcatchment PWS-4: PWS-4

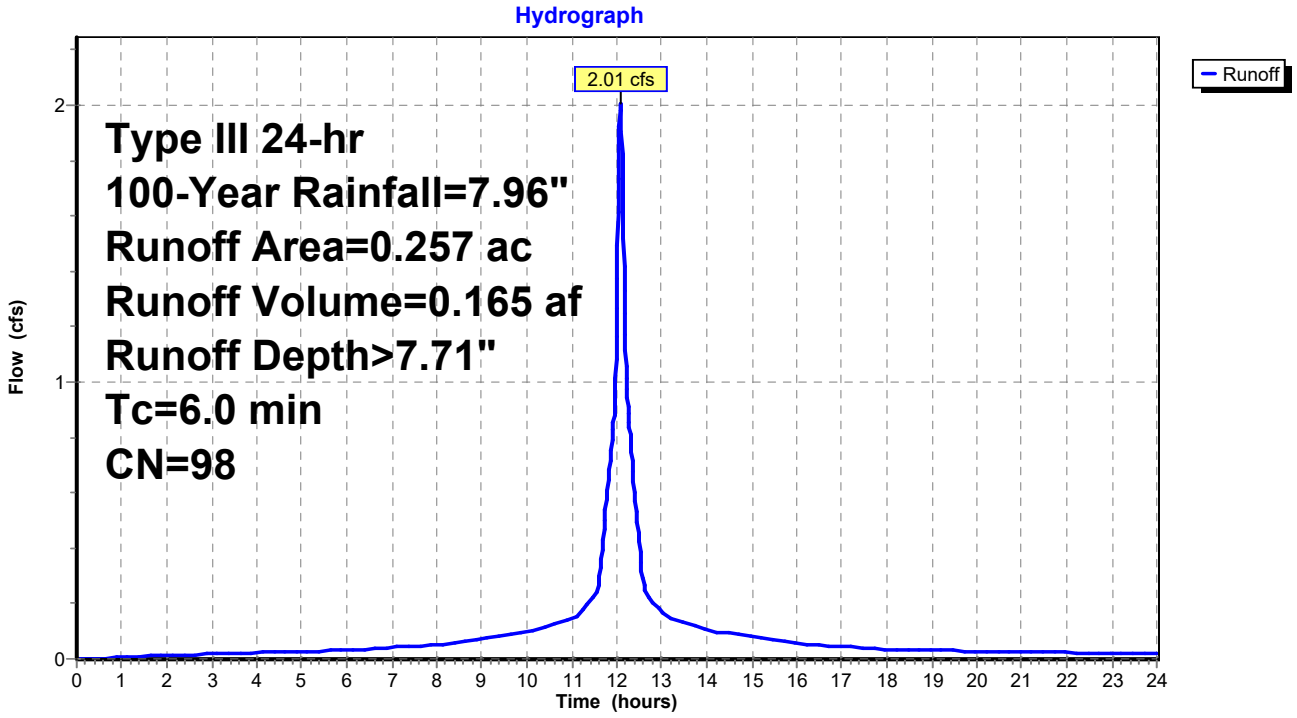
Runoff = 2.01 cfs @ 12.08 hrs, Volume= 0.165 af, Depth> 7.71"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.257 | 98 | Roofs, HSG B |
| 0.257 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-4: PWS-4



## Summary for Subcatchment PWS-5: PWS-5

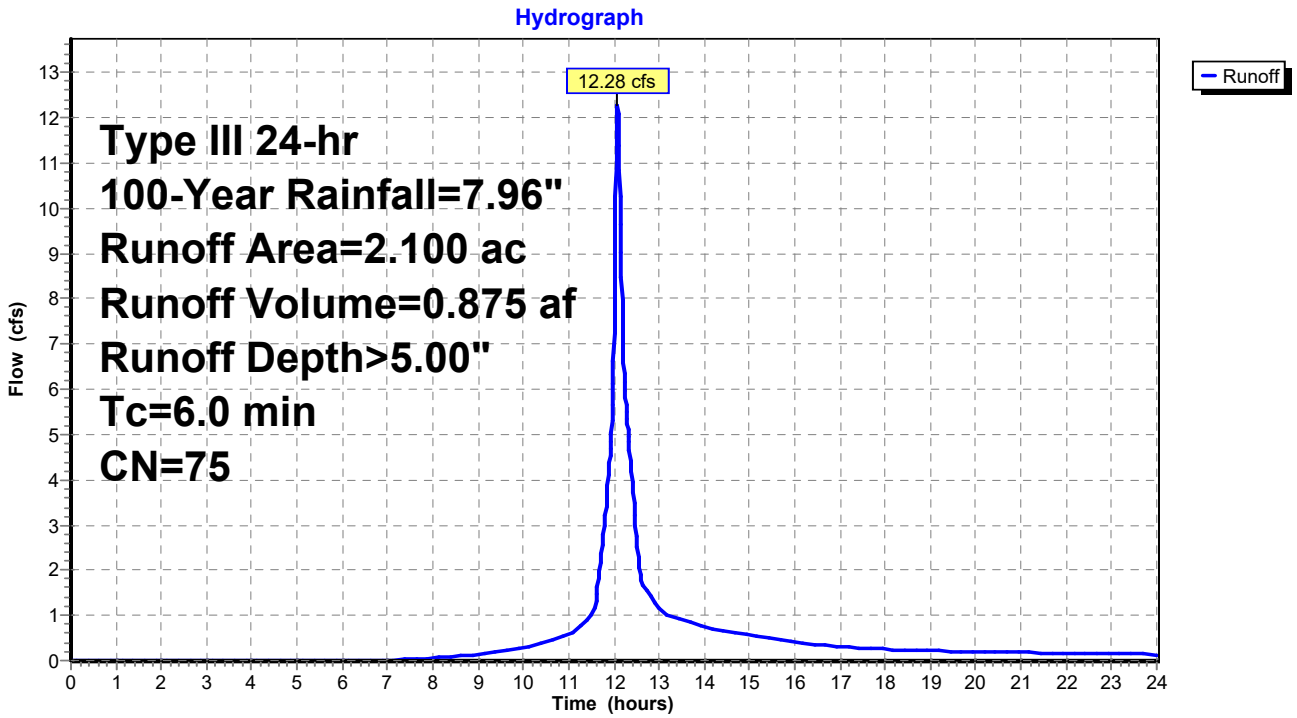
Runoff = 12.28 cfs @ 12.09 hrs, Volume= 0.875 af, Depth> 5.00"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.838 | 98 | Paved parking, HSG B |
| 0.993 | 61 | >75% Grass cover, Good, HSG B |
| 0.269 | 55 | Woods, Good, HSG B |
| 2.100 | 75 | Weighted Average |
| 1.262 | | 60.10% Pervious Area |
| 0.838 | | 39.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-5: PWS-5



## Summary for Subcatchment PWS-6: PWS-6

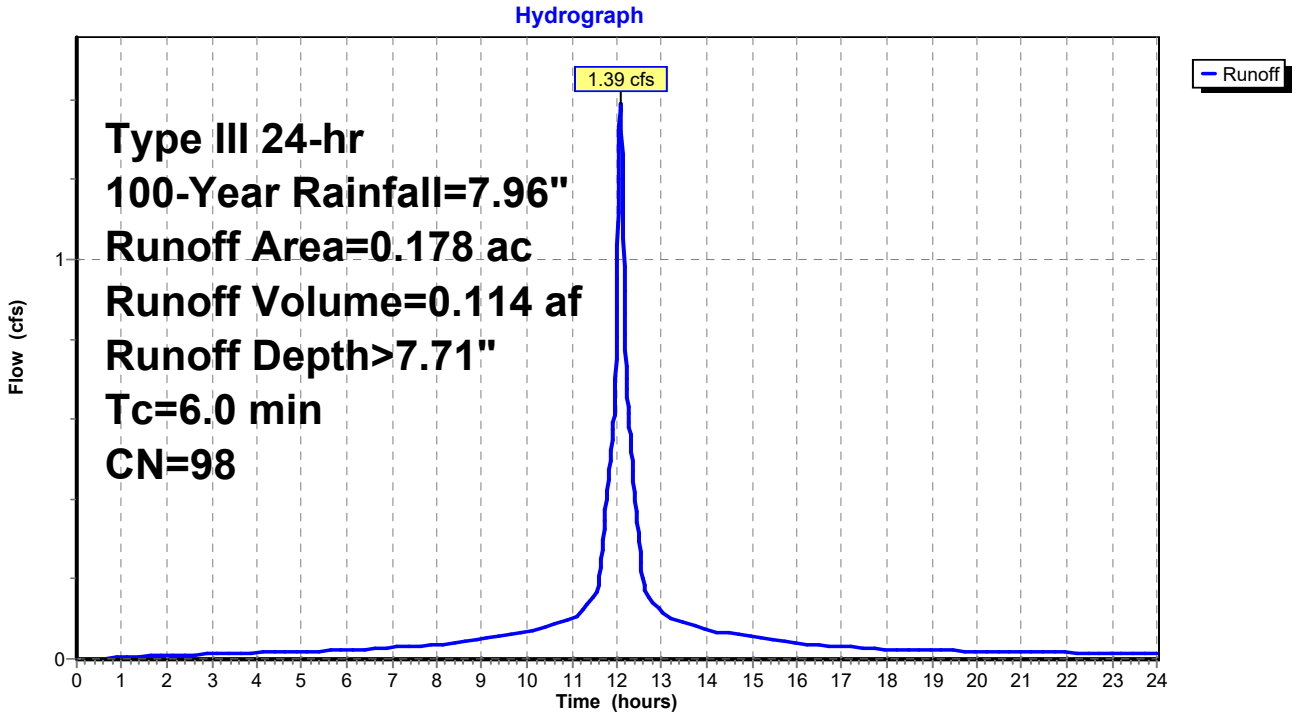
Runoff = 1.39 cfs @ 12.08 hrs, Volume= 0.114 af, Depth> 7.71"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.178 | 98 | Roofs, HSG B |
| 0.178 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-6: PWS-6



## Summary for Subcatchment PWS-7: PWS-7

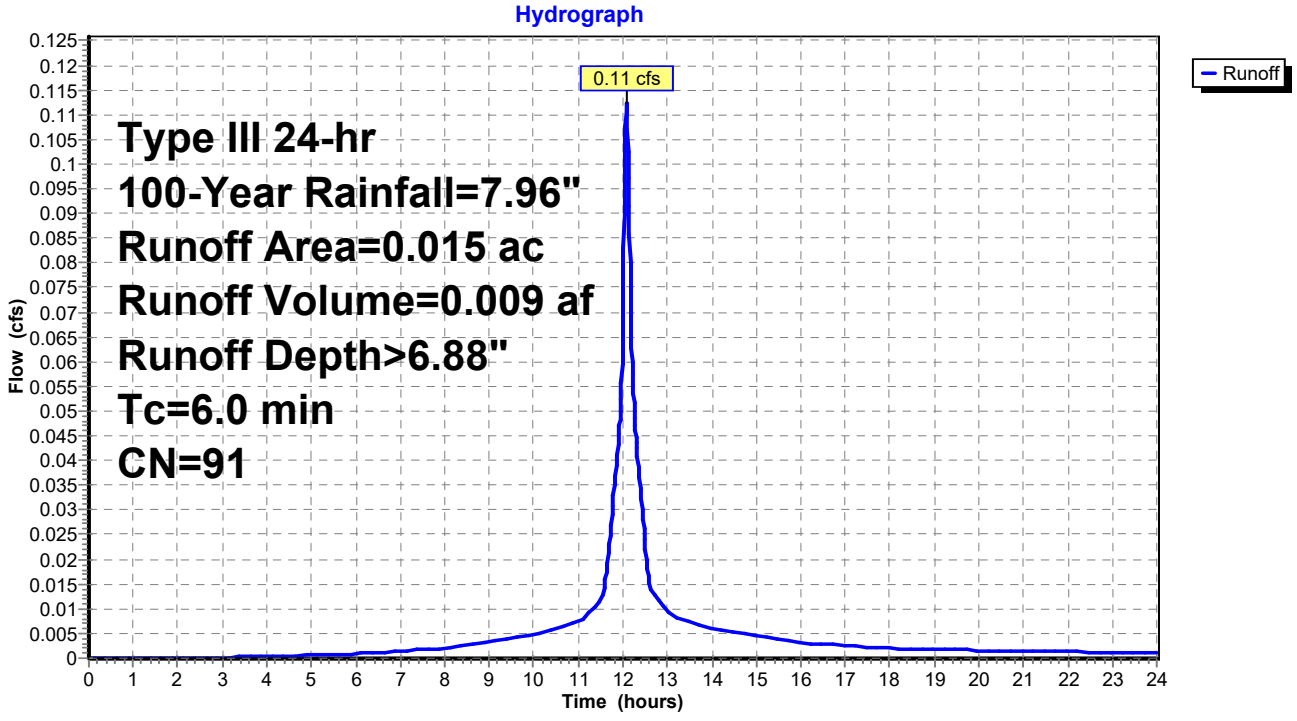
Runoff = 0.11 cfs @ 12.08 hrs, Volume= 0.009 af, Depth> 6.88"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.012 | 98 | Paved parking, HSG B |
| 0.003 | 61 | >75% Grass cover, Good, HSG B |
| 0.015 | 91 | Weighted Average |
| 0.003 | | 20.00% Pervious Area |
| 0.012 | | 80.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment PWS-7: PWS-7



## Summary for Subcatchment PWS-8: PWS-8

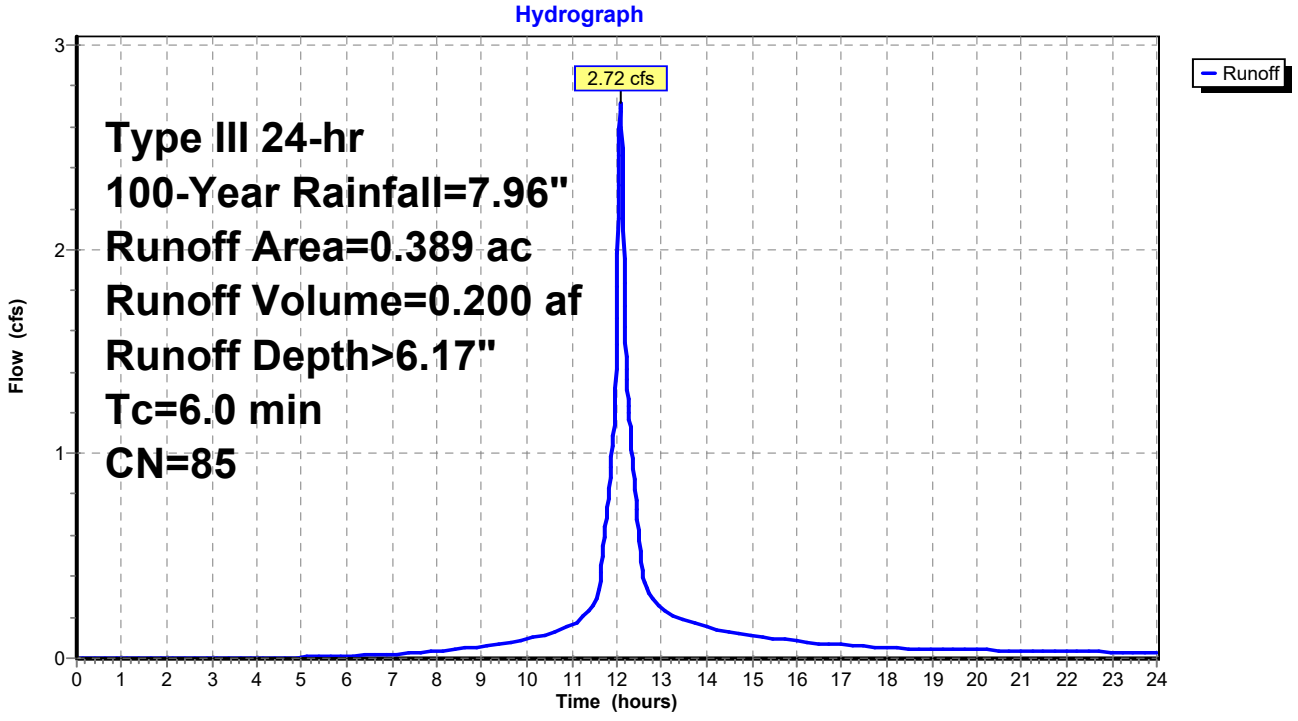
Runoff = 2.72 cfs @ 12.09 hrs, Volume= 0.200 af, Depth> 6.17"
Routed to Link PDP-1 : PDP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.252 | 98 | Paved parking, HSG B |
| 0.137 | 61 | >75% Grass cover, Good, HSG B |
| 0.389 | 85 | Weighted Average |
| 0.137 | | 35.22% Pervious Area |
| 0.252 | | 64.78% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment PWS-8: PWS-8



## Summary for Subcatchment PWS-9: PWS-9

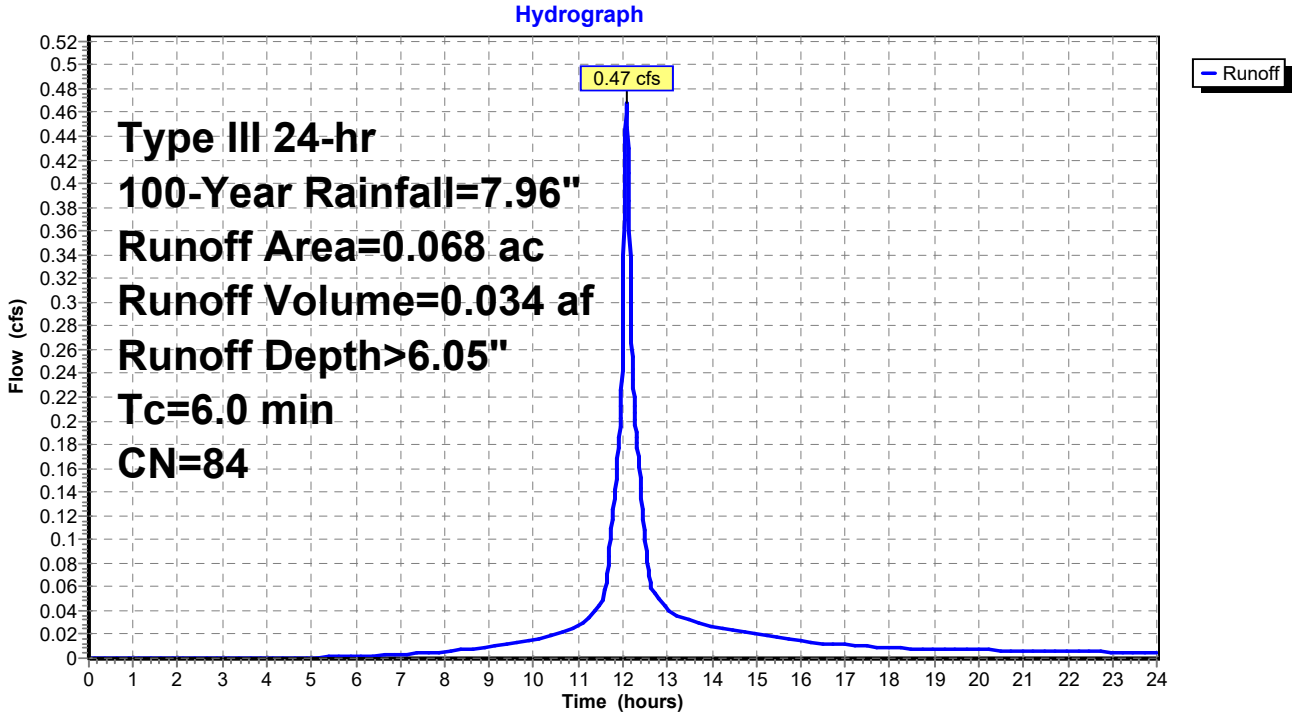
Runoff = 0.47 cfs @ 12.09 hrs, Volume= 0.034 af, Depth> 6.05"
Routed to Pond SC-1 : Swirl Chamber

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.96"

| Area (ac) | CN | Description |
|---|---|---|
| 0.043 | 98 | Paved parking, HSG B |
| 0.025 | 61 | >75% Grass cover, Good, HSG B |
| 0.068 | 84 | Weighted Average |
| 0.025 | | 36.76% Pervious Area |
| 0.043 | | 63.24% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment PWS-9: PWS-9



## Summary for Pond P-1: Bio P-1

Inflow Area = 0.601 ac, 51.91% Impervious, Inflow Depth > 5.58" for 100-Year event
Inflow = 3.88 cfs @ 12.09 hrs, Volume= 0.280 af
Outflow = 3.33 cfs @ 12.13 hrs, Volume= 0.251 af, Atten= 14%, Lag= 2.9 min
Primary = 3.33 cfs @ 12.13 hrs, Volume= 0.251 af
Routed to Pond P-3 : Detention P-3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 99.57' @ 12.13 hrs Surf.Area= 2,904 sf Storage= 2,673 cf

Plug-Flow detention time= 84.4 min calculated for 0.251 af (90% of inflow)
Center-of-Mass det. time= 35.7 min ( 838.2 - 802.4 )

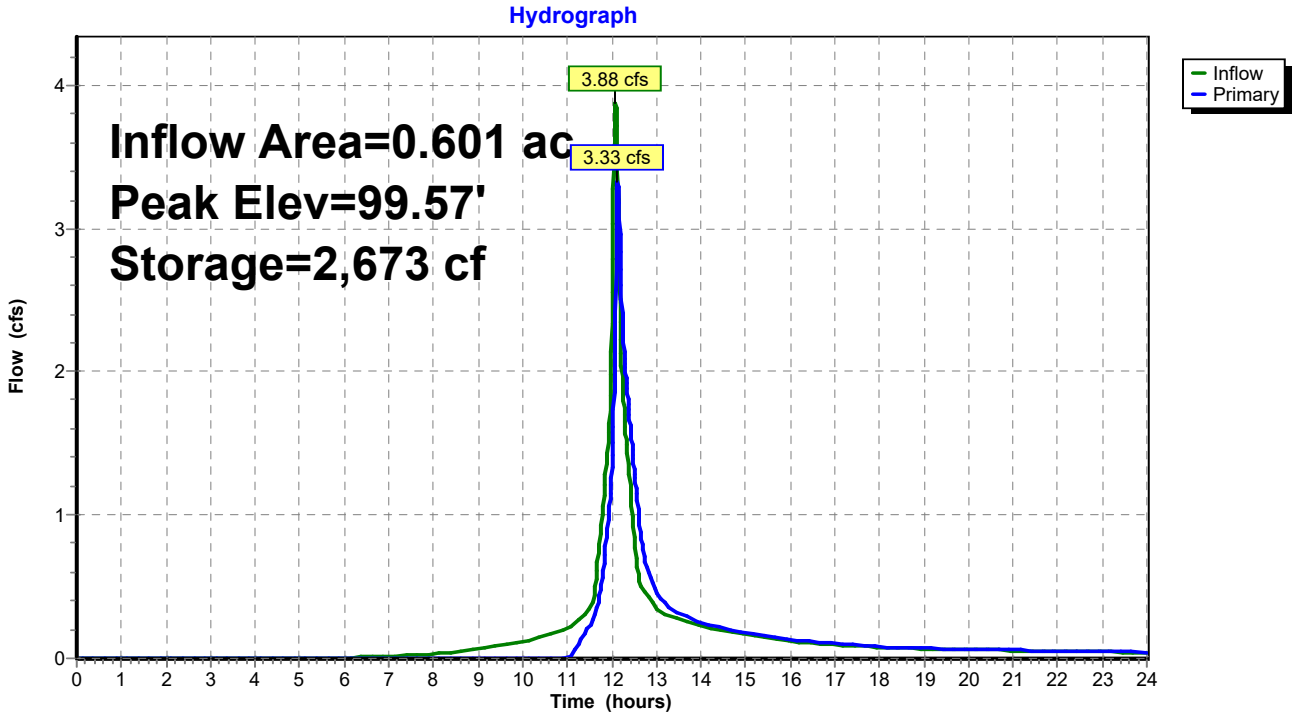
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 98.50' | 5,726 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 98.50 | 2,102 | 0 | 0 |
| 99.50 | 2,849 | 2,476 | 2,476 |
| 100.50 | 3,652 | 3,251 | 5,726 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Device 3 | 99.00' | **2.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |
| #2 | Device 3 | 99.50' | **14.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |
| #3 | Primary | 95.00' | **12.0" Round Culvert** L= 38.0' Ke= 0.500<br>Inlet / Outlet Invert= 95.00' / 94.61' S= 0.0103 '/' Cc= 0.900<br>n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.32 cfs @ 12.13 hrs HW=99.57' (Free Discharge)
└**3=Culvert** (Passes 3.32 cfs of 7.63 cfs potential flow)
├**1=Broad-Crested Rectangular Weir** (Weir Controls 2.62 cfs @ 2.30 fps)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 0.70 cfs @ 0.73 fps)

## Pond P-1: Bio P-1



## Summary for Pond P-3: Detention P-3

Inflow Area = 3.147 ac, 49.92% Impervious, Inflow Depth > 5.35" for 100-Year event
Inflow = 18.46 cfs @ 12.10 hrs, Volume= 1.403 af
Outflow = 13.90 cfs @ 12.17 hrs, Volume= 1.399 af, Atten= 25%, Lag= 4.4 min
Primary = 13.90 cfs @ 12.17 hrs, Volume= 1.399 af
Routed to Link PDP-1 : PDP-1

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 96.85' @ 12.17 hrs Surf.Area= 0.058 ac Storage= 0.169 af

Plug-Flow detention time= 12.2 min calculated for 1.399 af (100% of inflow)
Center-of-Mass det. time= 10.1 min ( 815.0 - 804.9 )

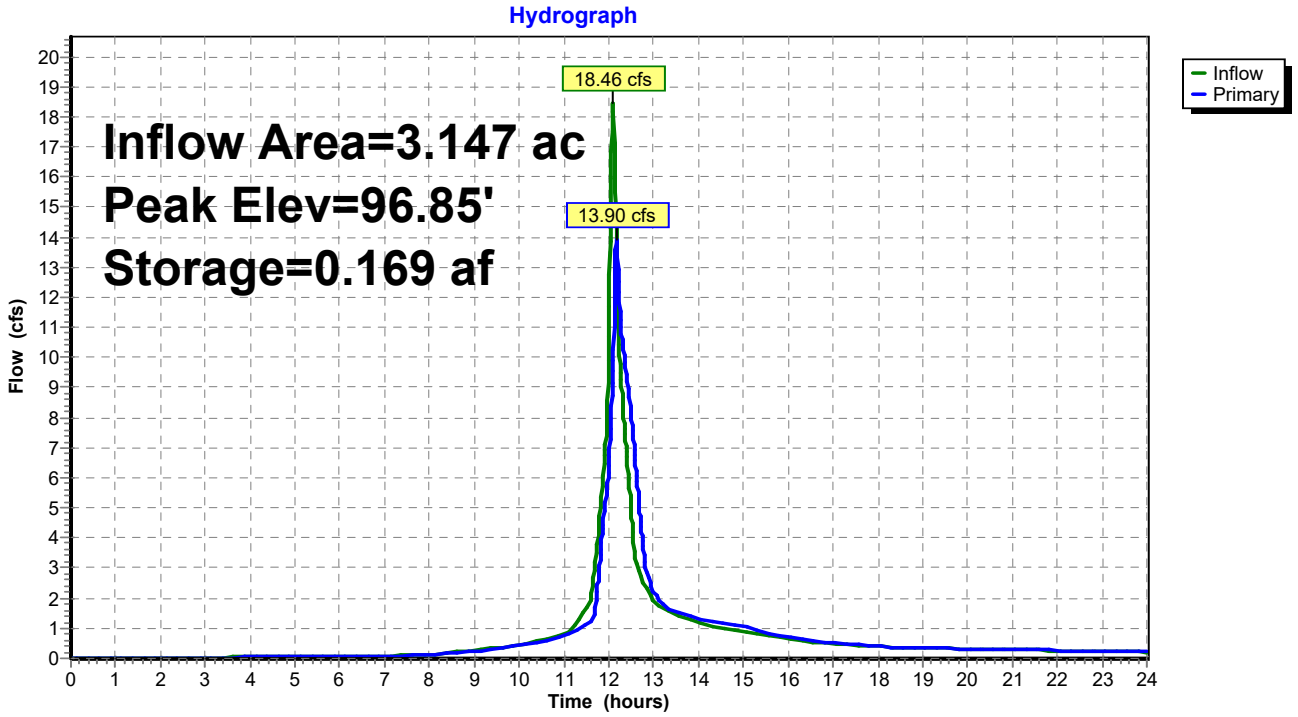
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1A | 92.50' | 0.082 af | **29.92'W x 84.57'L x 5.50'H Field A**<br>0.319 af Overall - 0.114 af Embedded = 0.206 af x 40.0% Voids |
| #2A | 93.25' | 0.114 af | **ADS_StormTech MC-3500 d +Cap**x 44 Inside #1<br>Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf<br>Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap<br>44 Chambers in 4 Rows<br>Cap Storage= 14.9 cf x 2 x 4 rows = 119.2 cf |
| | | 0.196 af | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 92.50' | **18.0" Round Culvert**<br>L= 45.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 92.50' / 92.00' S= 0.0111 '/' Cc= 0.900<br>n= 0.010 PVC, smooth interior, Flow Area= 1.77 sf |
| #2 | Device 1 | 92.50' | **5.2" Vert. Orifice/Grate X 2.00** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Device 1 | 93.50' | **24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 96.25' | **22.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #5 | Device 1 | 97.50' | **4.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |

**Primary OutFlow** Max=13.90 cfs @ 12.17 hrs HW=96.85' (Free Discharge)
└**1=Culvert** (Passes 13.90 cfs of 16.14 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 2.89 cfs @ 9.79 fps)
├**3=Orifice/Grate** (Orifice Controls 8.47 cfs @ 8.47 fps)
├**4=Orifice/Grate** (Orifice Controls 2.54 cfs @ 2.77 fps)
└**5=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

## Pond P-3: Detention P-3

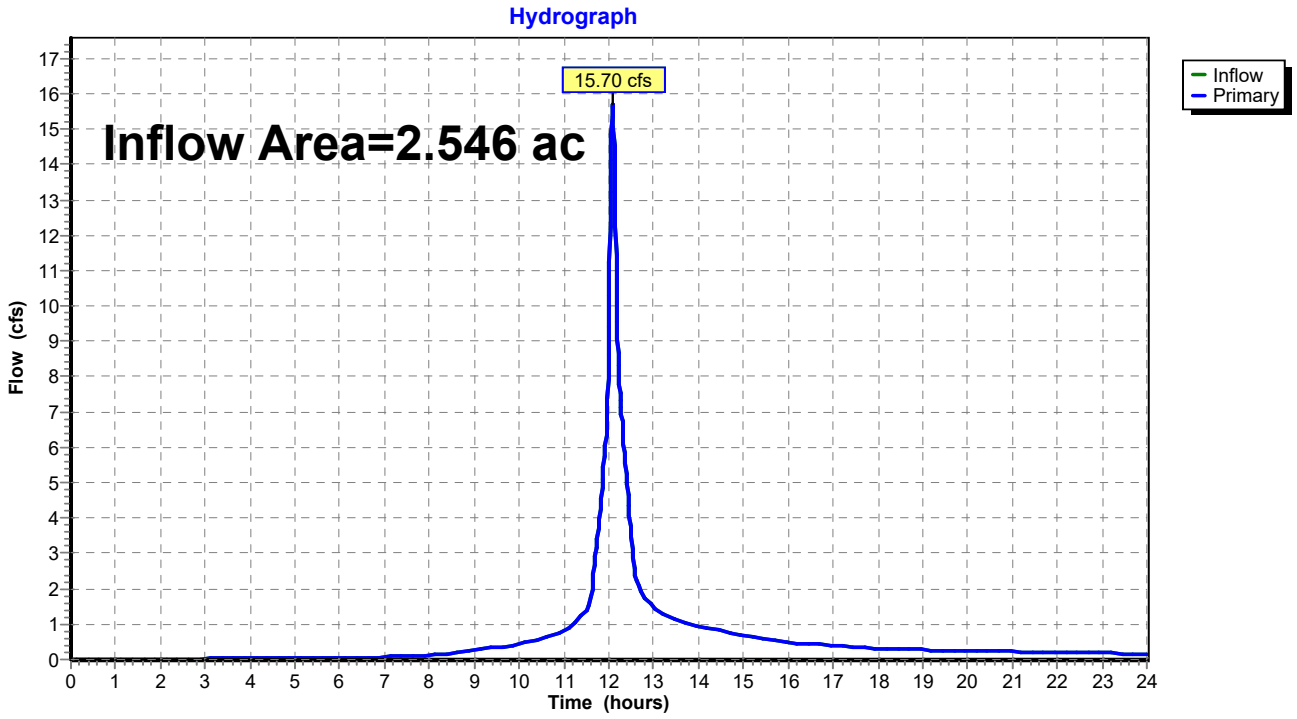


## Summary for Pond SC-1: Swirl Chamber

Inflow Area = 2.546 ac, 49.45% Impervious, Inflow Depth > 5.43" for 100-Year event
Inflow = 15.70 cfs @ 12.09 hrs, Volume= 1.152 af
Primary = 15.70 cfs @ 12.09 hrs, Volume= 1.152 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P-3 : Detention P-3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

### Pond SC-1: Swirl Chamber

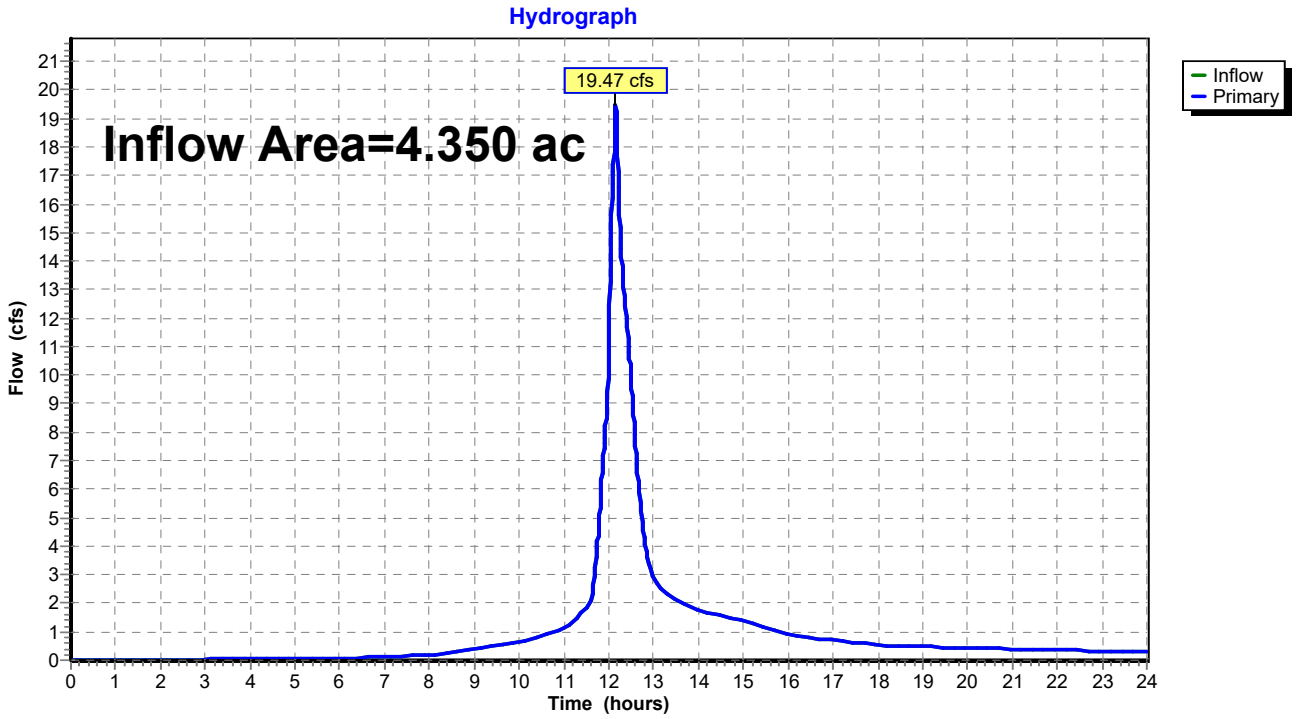


## Summary for Link PDP-1: PDP-1

Inflow Area = 4.350 ac, 50.67% Impervious, Inflow Depth > 5.41" for 100-Year event
Inflow = 19.47 cfs @ 12.15 hrs, Volume= 1.963 af
Primary = 19.47 cfs @ 12.15 hrs, Volume= 1.963 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

## Link PDP-1: PDP-1



# APPENDIX 3

## NYSDEC GREEN INFRASTRUCTURE WORKSHEETS

Version 1.8
Last Updated: 11/09/2015

Total Water Quality Volume Calculation
WQv(acre-feet) = [(P)(Rv)(A)] /12

| Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... | No |
|---|---|

| Design Point: | 1 | |
|---|---|---|
| P= | 1.40 | *inch* |

*Manually enter P, Total Area and Impervious Cover.*

**Breakdown of Subcatchments**

| Catchment Number | Total Area *(Acres)* | Impervious Area *(Acres)* | Percent Impervious *%* | Rv | WQv *($ft^3$)* | Description |
|---|---|---|---|---|---|---|
| 1 | 0.60 | 0.31 | 52% | 0.52 | 1,570 | Bio P-1 |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| Subtotal (1-30) | 0.60 | 0.31 | 52% | 0.52 | **1,570** | **Subtotal 1** |
| **Total** | 0.60 | 0.31 | 52% | 0.52 | **1,570** | **Initial WQv** | **0.04** | **af** |

**Identify Runoff Reduction Techniques By Area**

| Technique | Total Contributing Area *(Acre)* | Contributing Impervious Area *(Acre)* | Notes |
|---|---|---|---|
| Conservation of Natural Areas | 0.00 | 0.00 | *minimum 10,000 sf* |
| Riparian Buffers | 0.00 | 0.00 | *maximum contributing length 75 feet to 150 feet* |
| Filter Strips | 0.00 | 0.00 | |
| Tree Planting | 0.00 | 0.00 | *Up to 100 sf directly connected impervious area may be subtracted per* |
| **Total** | **0.00** | **0.00** | |

**Recalculate WQv after application of Area Reduction Techniques**

| | Total Area *(Acres)* | Impervious Area *(Acres)* | Percent Impervious *%* | Runoff Coefficient Rv | WQv *($ft^3$)* | | |
|---|---|---|---|---|---|---|---|
| "<<Initial WQv" | 0.60 | 0.31 | 52% | 0.52 | 1,570 | | |
| Subtract Area | 0.00 | 0.00 | | | | | |
| WQv adjusted after Area Reductions | **0.60** | **0.31** | 52% | 0.52 | 1,570 | | |
| Disconnection of Rooftops | | 0.00 | | | | | |
| Adjusted WQv after Area Reduction and Rooftop Disconnect | 0.60 | 0.31 | 52% | 0.52 | **1,570** | **0.04** | **af** |
| WQv reduced by Area Reduction techniques | | | | | 0 | **0.00** | **af** |

Version 1.8
Last Updated: 11/09/2015

Total Water Quality Volume Calculation
WQv(acre-feet) = [(P)(Rv)(A)] /12

***(For use on HSG C or D Soils with underdrains)***

**Af=WQv*(df)/[k*(hf+df)(tf)]**

| | |
|---|---|
| *Af* | Required Surface Area (ft2) |
| *WQv* | Water Quality Volume (ft3) |
| *df* | Depth of the Soil Medium (feet) |
| *hf* | Average height of water above the planter bed |
| *tf* | Volume Through the Filter Media (days) |

*k* — The hydraulic conductivity [ft/day], can be varied depending on the properties of the soil media. Some reported conductivity values are: ***Sand*** - 3.5 ft/day (City of Austin 1988); ***Peat*** - 2.0 ft/day (Galli 1990); ***Leaf Compost*** - 8.7 ft/day (Claytor and Schueler, 1996); ***Bioretention Soil*** (0.5 ft/day (Claytor & Schueler, 1996)

| **Design Point:** | **1** |
|---|---|

| **Enter Site Data For Drainage Area to be Treated by Practice** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Catchment Number** | **Total Area** *(Acres)* | **Impervious Area** *(Acres)* | **Percent Impervious** *%* | **Rv** | **WQv** *($ft^3$)* | **Precipitation** *(in)* | **Description** |
| 1 | 0.60 | 0.31 | 0.52 | 0.52 | 1570.34 | 1.40 | Bio P-1 |
| Enter Impervious Area Reduced by Disconnection of Rooftops | | | 52% | 0.52 | 1,570 | <<WQv after adjusting for Disconnected Rooftops | |
| Enter the portion of the WQv that is not reduced for all practices routed to this practice. | | | | | 0 | *$ft^3$* | |

| **Soil Information** | | | |
|---|---|---|---|
| Soil Group | B | | |
| Soil Infiltration Rate | 0.00 | *in/hour* | *Okay* |
| Using Underdrains? | Yes | *Okay* | |

| **Calculate the Minimum Filter Area** | | | | |
|---|---|---|---|---|
| | | Value | Units | Notes |
| WQv | | 1,570 | *$ft^3$* | |
| Enter Depth of Soil Media | *df* | 2.5 | *ft* | *2.5-4 ft* |
| Enter Hydraulic Conductivity | *k* | 0.5 | *ft/day* | |
| Enter Average Height of Ponding | *hf* | 0.25 | *ft* | *6 inches max.* |
| Enter Filter Time | *tf* | 2 | *days* | |
| **Required Filter Area** | ***Af*** | **1428** | ***$ft^2$*** | |

| **Determine Actual Bio-Retention Area** | | | |
|---|---|---|---|
| Filter Width | 1436 | *ft* | |
| Filter Length | 1 | *ft* | |
| Filter Area | 1436 | *$ft^2$* | Bio-retention pond is irregular shape with area of 1,436 SF. |
| Actual Volume Provided | 1580 | *$ft^3$* | |

| **Determine Runoff Reduction** | | | | |
|---|---|---|---|---|
| Is the Bioretention contributing flow to another practice? | | No | Select Practice | |
| RRv | 632 | | | |
| **RRv applied** | **632** | ***$ft^3$*** | ***This is 40% of the storage provided or WQv whichever is less.*** | |
| Volume Treated | 938 | *$ft^3$* | *This is the portion of the WQv that is not reduced in the practice.* | |
| Volume Directed | 0 | *$ft^3$* | This volume is directed another practice | |
| Sizing √ | OK | | *Check to be sure Area provided ≥ Af* | |

# APPENDIX 4

# DRAFT SPDES GENERAL PERMIT GP 0-25-001

*** DRAFT ***

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL
CONSERVATION (NYSDEC)

SPDES CONSTRUCTION GENERAL PERMIT (CGP)
FOR STORMWATER DISCHARGES

From

**CONSTRUCTION ACTIVITY**

Permit No. GP-0-25-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Anticipated
Effective Date: January 29, 2025

Anticipated
Expiration Date: January 28, 2030

Scott E. Sheeley

Chief Permit Administrator

---

Authorized Signature Date

Address: NYSDEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

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## PREFACE

Pursuant to Section 402 of the Clean Water Act (CWA), and 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), *stormwater discharges* from certain *construction activities* are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York State administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, and Article 70, as well as 6 NYCRR Parts 621 and 750.

C*onstruction activities* constitute construction of a *point source* and, therefore, pursuant to ECL sections 17-0505, 17-0701, and 17-0803, the *owner or operator* must have coverage under a SPDES permit prior to *commencement of construction activities*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

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**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
**SPDES CONSTRUCTION GENERAL PERMIT (CGP) GP-0-25-001**
**FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES**

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## Part I. How to Obtain Coverage and General Requirements

To be covered under this permit, the *owner or operator* must meet all eligibility requirements in Part I.A. and follow the requirements for obtaining permit coverage in Part I.D., F., or G.

### A. Eligibility Requirements

1. The *owner's or operator's construction activities* involve soil disturbances of:

    a. one or more acres; or

    b. less than one acre which are part of a *common plan of development or sale* that will ultimately disturb one or more acres; or

    c. less than one acre where NYSDEC has determined that a SPDES permit is required for *stormwater discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of pollutants to *surface waters of the State*.

        i. 5,000 square feet or more, but less than one acre, and are in the New York City Watershed located east of the Hudson River, Appendix C Figure 1; or

        ii. 20,000 square feet or more, but less than one acre, within the municipal boundaries of the City of New York (NYC); or

        iii. less than 20,000 square feet which are part of a *common plan of development or sale* that will ultimately disturb 20,000 square feet or more, but less than one acre, within the municipal boundaries of NYC; or

        iv. that creates 5,000 square feet or more of *impervious area* within the municipal boundaries of NYC.

2. *Discharges* from the *owner's or operator's construction activities* are/were not:

    a. already covered by a different SPDES permit; or

    b. covered under a different SPDES permit that was denied, terminated, or revoked; or

c. identified in an expired individual SPDES permit that was not renewed; or

d. required to obtain an individual SPDES permit or another general SPDES permit in accordance with Part VII.K.

3. If *construction activities* may adversely affect a species that is endangered, threatened, or of special concern, the *owner or operator* must obtain a:

   a. permit issued pursuant to 6 NYCRR Part 182 for the project; or

   b. letter issued by NYSDEC of non-jurisdiction pursuant to 6 NYCRR Part 182 for the project.

4. If *construction activities* have the potential to affect an *historic property*, the *owner or operator* must obtain:

   a. documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant:

      i. 1-5 acres of disturbance - 20 feet; or

      ii. 5-20 acres of disturbance - 50 feet; or

      iii. 20+ acres of disturbance - 100 feet; or

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b. NYSDEC consultation form sent to OPRHP,[1] and copied to NYSDEC's Agency Historic Preservation Officer (APO), and

    i. the State Environmental Quality Review Act (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or

    ii. documentation from OPRHP that the *construction activity* will result in No Impact; or

    iii. documentation from OPRHP providing a determination of No Adverse Impact; or

    iv. a Letter of Resolution signed by the *owner or operator*, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or

c. documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

    i. No Affect; or

    ii. No Adverse Affect; or

    iii. Executed Memorandum of Agreement; or

d. documentation that SHPA Section 14.09 has been completed by NYSDEC or another state agency.

5. If *construction activities* are subject to SEQR, the *owner or operator* must obtain documentation that SEQR has been satisfied.

6. If *construction activities* are not subject to SEQR, but subject to the equivalent environmental review from another New York State or federal agency, the *owner or operator* must obtain documentation that project review, pursuant to

[1] The consultation form can be submitted, along with other project information, through OPRHP's Cultural Resource Information System (CRIS) portal. If submitted through CRIS, paper copies of the consultation form need not be mailed.

a process equivalent to SEQR from another New York State or federal agency, has been satisfied.

7. If *construction activities* require Uniform Procedures Act (UPA) Permits (see 6 NYCRR Part 621) from NYSDEC, or the equivalent from another New York State or federal agency, the *owner or operator* must:

    a. obtain all such necessary permits; or

    b. receive notification from NYSDEC pursuant to 6 NYCRR 621.3(a)(4) excepting Part I.A.7.a.

8. *Construction activities* are not eligible if they meet the following criteria in Part I.A.8.a. or b.:

    a. For linear transportation and linear utility project types, the *construction activities*:

        i. are within the watershed of *surface waters of the State* classified as AA or AA-s identified utilizing the Stormwater Interactive Map on NYSDEC's website;

        ii. are undertaken on land with no existing *impervious cover*; and

        iii. disturb two or more acres of *steep slope*; or

    b. For all other project types, the *construction activities*:

        i. are within the watershed of *surface waters of the State* classified as AA or AA-s identified utilizing the Stormwater Interactive Map on NYSDEC's website;

        ii. are undertaken on land with no existing *impervious cover*; and

        iii. disturb one or more acres of *steep slope*.

## B. Types of *Discharges* Authorized

1. *Stormwater discharges*, including *stormwater* runoff, snowmelt runoff, and surface runoff and drainage, associated with *construction activity*, are



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authorized under this permit provided that appropriate *stormwater* controls are designed, installed, and maintained in accordance with Part III.

2. The following non-*stormwater discharges* associated with *construction activity* are authorized under this permit:

    a. Non-*stormwater discharges* listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "*Discharges* from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned";

    b. Non-*stormwater discharges* of waters to which other components have not been added that are used in accordance with the *SWPPP* to control dust or irrigate vegetation in stabilized areas; and

    c. Uncontaminated *discharges* from *dewatering* operations.

3. Authorized *discharges* of *stormwater* or authorized *discharges* of non-*stormwater*, commingled with a *discharge* authorized by a different SPDES permit and/or a *discharge* that does not require SPDES permit authorization, are also authorized under this permit.

## C. Prohibited *Discharges*

1. Non-*stormwater discharges* prohibited under this permit include but are not limited to:

    a. Wastewater from washout of concrete;

    b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;

    c. Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;

    d. Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown; and

    e. Toxic or hazardous substances from a spill or other release.

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## D. Electronic Notice of Intent (eNOI) Submittal

To receive authorization in accordance with Part I.D.3.b., the *owner or operator* must submit a complete eNOI in accordance with the requirements in Part I.D. The eNOI contains questions to: ensure eligibility requirements in Part I.A. have been met; obtain *owner or operator* contact information; obtain the total area to be disturbed and the existing/future *impervious areas* (rounded to the nearest tenth of an acre); confirm *Traditional Land Use Control MS4 Operator* jurisdiction over construction projects; satisfy the EPA eRule requirements; confirm that the Water Quality-Based Effluent Limitations in Part II. have been met; demonstrate consideration of the future risks due to climate change in accordance with Part III.A.2.; and confirm that the other *Stormwater Pollution Prevention Plan (SWPPP)* requirements in Part III. have been met.

1. An eNOI may be submitted for:

    a. *construction activities* that are not part of a *common plan of development or sale*; or

    b. an entire *common plan of development or sale*; or

    c. separate *phase(s)* of a *common plan of development or sale* if the following requirements are met:

        i. the *common plan of development or sale* meets the eligibility requirements of Part I.A.5. or 6.;

        ii. the *phase(s)* meet(s) all other eligibility requirements of Part I.A.; and

        iii. Part III.C. Required *SWPPP* Components by Project Type is based on the *common plan of development or sale*, not the *phase(s)*; or

    d. *tree clearing* if the following requirements are met:

        i. the *tree clearing* is associated with, or will support, a *renewable energy* generation, transmission, or storage project that meets Part I.A.5. and 6.

        ii. the *tree clearing*:

            1. meets all other eligibility requirements of Part I.A.;

2. will occur in NYSDEC's Regions 3-9;

3. is not within ¼ mile of a bat hibernaculum protected pursuant to 6 NYCRR Part 182; and

4. will occur between November 1st and March 31st.

2. As prerequisites for submitting an eNOI, the *owner or operator* must:

   a. prepare a *SWPPP* for Part I.D.1.a., b., c., or d. in accordance with Part III.;

   b. based on the following criteria, upload the following signature forms signed in accordance with Part VII.J. to the eNOI prior to submission:

      i. for all eNOIs:

         1. the SWPPP Preparer Certification Form, Appendix F, signed by the *SWPPP* preparer;

         2. the Owner/Operator Certification Form, Appendix J, signed by the *owner or operator*; and

      ii. if an eNOI includes *construction activities* within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)* that will *discharge* to the *MS4(s)*:

         1. determine if the *Traditional Land Use Control MS4 Operator(s)* have review authority. A *Traditional Land Use Control MS4 Operator* does not have review authority where:

            a. the *owner or operator* is the *Traditional Land Use Control MS4 Operator*; or

            b. there is a statute exempting the *owner or operator* from zoning review by the *Traditional Land Use Control MS4 Operator*; or

            c. there is no such statute per Part I.D.2.b.ii.1.c., the *Traditional Land Use Control MS4 Operator* concludes, after public hearing, that it does not



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have zoning review authority in accordance with Legal Memorandum LU14 Updated January 2020 “Governmental Immunity from Zoning and Other Legislation”; and

2. if the *Traditional Land Use Control MS4 Operator(s)* have review authority, submit the *SWPPP* to the *Traditional Land Use Control MS4 Operator(s)* for review and have:

    a. if outside the municipal boundaries of NYC: the MS4 SWPPP Acceptance Form, Appendix G, signed by the principal executive officer or ranking elected official from the *Traditional Land Use Control MS4 Operator,* or by a duly authorized representative of that person in accordance with Part VII.J.2.; or

    b. if within the municipal boundaries of NYC: The City of New York Department of Environmental Protection (NYCDEP) SWPPP Acceptance/Approval Form, Appendix H, signed by the principal executive officer or ranking elected official from the Traditional Land Use Control MS4 Operator, or by a duly authorized representative of that person in accordance with Part VII.J.2.; and

3. if the *Traditional Land Use Control MS4 Operator* does not have review authority, have the MS4 No Jurisdiction Form, Appendix I, signed by the principal executive officer or ranking elected official from the *Traditional Land Use Control MS4 Operator,* or by a duly authorized representative of that person in accordance with Part VII.J.2.

3. Submitting an eNOI:

    a. The *owner or operator* must submit a complete Notice of Intent

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electronically using a NYSDEC approved form.[2]

b. The *owner or operator* is authorized to *commence construction activity* as of the authorization date indicated in the Letter of Authorization (LOA), which is sent by NYSDEC after a complete eNOI is submitted.

i. If an eNOI is received for a *SWPPP* demonstrating *equivalence* in accordance with Part III.B.1. or 2., if the *SWPPP* includes *construction activities* that are not within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)*, and/or if the *SWPPP* includes *construction activities* within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)* that do not have review authority in accordance with Part I.D.2.b.ii.1., the authorization date indicated in the LOA will be 60 business days after the eNOI submission date.

4. Coverage under this permit authorizes *stormwater discharges* from only those areas of disturbance that are identified in the eNOI. Prior to disturbing soil not yet authorized, the *owner or operator* must:

a. amend the *SWPPP* and eNOI in accordance with Part I.D.2. (contact Stormwater_info@dec.ny.gov to receive access to amend the eNOI); and

b. receive an updated LOA per Part I.D.3.b.

5. If the *owner or operator* makes substantive revisions to the *SWPPP* (e.g. the scope of the project changes significantly, the type of SMP(s) changes, there is a reduction in the sizing of the SMP(s) that were not reflected in the original eNOI submitted to NYSDEC, they must amend the eNOI in accordance with Part I.D.2. prior to implementing such revisions (contact Stormwater_info@dec.ny.gov to receive access to amend the eNOI).

**E. General Requirements for *Owners or Operators* with Permit Coverage**

1. As of the date the LOA is received, the *owner or operator* must make the eNOI and *SWPPP* available for review and copying in accordance with the requirements in Part VII.H.

[2] Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to Stormwater_info@dec.ny.gov or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505.

2. The *owner or operator* must ensure compliance with all requirements of this permit and that the provisions of the *SWPPP*, including any changes made to the *SWPPP* in accordance with Part III.A.5., are properly implemented and maintained from the *commencement of construction activity* until:

    a. all areas of disturbance have achieved *final stabilization;* and

    b. the electronic Notice of Termination (eNOT) has been accepted by NYSDEC in accordance with Part V.A.5.

3. The *owner or operator* must maintain at the *construction site*, until Part I.E.2.a. and b. have been met, as of the date the LOA is received, a copy of:

    a. all documentation necessary to demonstrate eligibility with this permit;

    b. this permit;

    c. the *SWPPP*;

    d. the signed SWPPP Preparer Certification Form;

    e. the signed MS4 SWPPP Acceptance Form or signed NYCDEP SWPPP Acceptance/Approval Form or signed MS4 No Jurisdiction Form (when applicable);

    f. the signed Owner/Operator Certification Form;

    g. the eNOI; and

    h. the LOA.

4. The *owner or operator* must maintain at the *construction site*, until Part I.E.2.a. and b. have been met, as of the date the documents become final or are received, a copy of the:

    a. responsible contractor's or subcontractor's certification statement(s) in accordance with Part III.A.7.;

    b. inspection reports in accordance with Part IV.C.4. and 6.;

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c. Request to Disturb Greater Than Five Acres and the Authorization Letter to Disturb Greater Than Five Acres in accordance with Part I.E.6. (when applicable); and

d. Request to Continue Coverage and the Letter of Continued Coverage (LOCC) in accordance with Part I.F.2. and 4. (when applicable).

5. The *owner or operator* must maintain the documents in Part I.E.3. and 4. in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection. The documents must be paper documents unless electronic documents are accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be. If electronic documents are kept on site, the *owner or operator* must maintain functional equipment on site available to an inspector during normal hours of operation such that an inspector may view the electronic documents in a format that can be read in a similar manner as a paper record and in a legally dependable format with no less evidentiary value than their paper equivalent.

6. The *owner or operator* must meet the following requirements prior to disturbing greater than five acres of soil at any one time:

   a. The *owner or operator* must submit a written Request to Disturb Greater Than Five Acres to:

      i. NYSDEC's Regional Office Division of Water staff based on the project location, Appendix E, if a *Traditional Land Use Control MS4 Operator* does not have review authority in accordance with Part I.D.2.b.ii.1.; or

      ii. the *Traditional Land Use Control MS4 Operator*, if a *Traditional Land Use Control MS4 Operator* has review authority in accordance with Part I.D.2.b.ii.1.; or

      iii. NYSDEC's Regional Office Division of Water staff based on the project location, Appendix E, and each involved *Traditional Land Use Control MS4 Operator*, if the project spans multiple municipalities with more than one *Traditional Land Use Control MS4 Operator* involved with review authority in accordance with Part I.D.2.b.ii.1.

   b. The written Request to Disturb Greater Than Five Acres must include:

i. The SPDES permit identification number (Permit ID);

ii. Full technical justification demonstrating why alternative methods of construction that would result in five acres of soil disturbance or less at any one time are not feasible;

iii. The phasing plan for the project and sequencing plans for all *phases* from the *SWPPP* in accordance with Part III.B.1.d.;

iv. Plans with locations and details of standard and heightened erosion and sediment control practices;

v. Acknowledgment that "the *owner or operator* will comply with the requirements in Part IV.C.2.b."; and

vi. Acknowledgment that "the *owner or operator* will comply with the requirements in Part II.B.1.b."

c. The *owner or operator* must be in receipt of an Authorization Letter to Disturb Greater Than Five Acres, which will include a time limit indicating when the authorization ceases and indicate a maximum area (acres) of soil disturbance allowed at any one time, from:

i. NYSDEC, if Part I.E.5.a.i. or iii. apply; or

ii. the *Traditional Land Use Control MS4 Operator*, if Part I.E.5.a.ii. applies.

7. Upon a finding of significant non-compliance with the practices described in the *SWPPP* or violation of this permit, NYSDEC may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order must be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

8. If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE).[3] *Construction activity* shall not resume until written permission to do so has been received from the RWE.

[3] The Regional Water Manager where a DEC Region does not have a RWE.



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9. Where there are planned amendments or modifications to the post-construction *stormwater* management practice (SMP) component of the *SWPPP* required by Part III.A.5. and 6., the *owner or operator* must:

    a. notify NYSDEC via email at Stormwater_info@dec.ny.gov;

    b. prior to implementing the planned amendments or modifications to the SMPs, update the eNOI to reflect the planned amendments or modifications and resubmit the eNOI in accordance with Part I.D.; and

    c. implement the planned amendments or modifications to the SMPs after the eNOI updates submitted in accordance with Part I.E.8.b. have been accepted by NYSDEC.

10. The eNOI, *SWPPP*, and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

## F. Permit Coverage for *Discharges* Authorized Under GP-0-20-001

When applicable:

1. Upon the effective date of this permit, an *owner or operator* of *a construction activity*, with coverage under GP-0-20-001, will have interim coverage under GP-0-25-001 for 45 calendar days starting on the effective date of GP-0-25-001 so long as the *owner or operator* maintains compliance with all applicable requirements of this permit.

2. Within 30 calendar days of the effective date of this permit, the *owner or operator*, with coverage under GP-0-20-001, must submit a complete Request to Continue Coverage electronically using a NYSDEC approved form,[4] which contains the information identified in Part I.F.3. below, if:

    a. seeking to continue to implement the technical/design components of the SMPs that were acceptable under GP-0-20-001;

[4] Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to Stormwater_info@dec.ny.gov or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505.

b. such design was done in conformance with the technical standards in place at the time of initial permit coverage; and

c. the *owner or operator* will comply with all other requirements of GP-0-25-001.

3. The Request to Continue Coverage form contains questions to: ensure eligibility requirements in Part I.A. have been met; verify *owner or operator* contact information; verify the permit identification number; verify the original eNOI submission ID, if applicable; verify that the technical/design components of the SMPs have not changed; verify the version of the Design Manual that the technical/design components conform to; and receive an updated Owner/Operator Certification Form, Appendix I.

4. Upon receipt of the LOCC, which is sent by NYSDEC after a complete Request to Continue Coverage is submitted, *discharges* to *surface waters of the State* from the *construction activities* identified in the Request to Continue Coverage are authorized so long as the *owner or operator* maintains all requirements of this permit (excepting the technical/design components of the SMPs that were acceptable under GP-0-20-001).

5. Within 30 calendar days of the effective date of this permit, an *owner or operator* must submit a new eNOI in accordance with Part I.D. if an *owner or operator* of a *construction activity*, with coverage under GP-0-20-001, made or is making changes to the technical/design components of the SMPs.

## G. Change of *Owner or Operator*

When applicable:

1. When property ownership changes, or when there is a change in operational control over the construction plans and specifications, the following process applies:

   a. The new *owner or operator* must meet the applicable prerequisites for submitting an eNOI in accordance with Part I.D.2.

   b. The new *owner or operator* must submit an eNOI in accordance with Part I.D.3.

c. Permit coverage for the new *owner or operator* will be effective upon receipt of the LOA in accordance with Part I.D.3.b.

d. The new *owner or operator*, upon receipt of their LOA, must provide their Permit ID to the original *owner or operator*.

e. If the original *owner or operator* will no longer be the *owner or operator* of the *construction activity* identified in the original *owner's or operator's* eNOI, the original *owner or operator*, upon receipt of the new *owner's or operator's* Permit ID in accordance with Part I.G.1.d., must submit to NYSDEC a completed NOT in accordance with Part V. that includes the name and Permit ID of the new *owner or operator*.

f. If the original *owner or operator* maintains ownership of a portion of the *construction activity*, the original *owner or operator* must maintain their coverage under the permit by amending the original eNOI; amendments to the eNOI must include:

    i. the revised area of disturbance and/or *impervious area(s)*;

    ii. the revised SMP information, if applicable;

    iii. a narrative description of what has changed; and

    iv. the new *owner's or operator's* Permit ID for the portion of the project removed from the eNOI.

    To receive access to amend the original eNOI, contact: Stormwater_info@dec.ny.gov

## Part II. Water Quality-Based Effluent Limitations

### A. Maintaining Water Quality

NYSDEC expects that compliance with the requirements of this permit will control *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any *discharge* to either cause or contribute to a violation of the following *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York:

1. There must be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

2. There must be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There must be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the *stormwater discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standard,* the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this permit and document in accordance with Part IV.C.4. of this permit. To address the *water quality standard* violation the *owner or operator* must include and implement appropriate controls in the *SWPPP* to correct the problem or obtain an individual SPDES permit.

If, despite compliance with the requirements of this permit, it is demonstrated that the *stormwater discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or if NYSDEC determines that a modification of this permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s will no longer be eligible for coverage under this permit, and the *owner or operator* must obtain an individual SPDES permit prior to further *discharges* from the *construction site*.

**B. Effluent Limitations Applicable to *Discharges* from *Construction Activities***

*Discharge*s authorized by this permit must achieve, at a minimum, the effluent limitations in Part II.B.1.a., b., c., d., and e. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement, and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part II.B.1.a., b., c., d., and e. and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (BB), dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in *SWPPP* the reason(s) for the deviation, or alternative design, and provide

information in the *SWPPP* demonstrating that the deviation or alternative design is *equivalent* to the technical standard.

a. **Erosion and Sediment Controls.** At a minimum, erosion and sediment controls must be selected, designed, installed, implemented, and maintained to:

   (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharge*s;

   (ii) Control *stormwater discharge*s, including both peak flowrates and total *stormwater* volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;

   (iii) *Minimize* the amount of soil exposed during *construction activity*;

   (iv) *Minimize* the disturbance of *steep slope*;

   (v) *Minimize* sediment *discharge*s from the site;

   (vi) Provide and maintain *natural buffers* around surface waters, direct *stormwater* to vegetated areas and maximize *stormwater* infiltration to reduce *pollutant discharge*s, unless *infeasible*;

   (vii) *Minimize* soil compaction. *Minimizing* soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;

   (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

   (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of *pollutants* that could be discharged from the site.

b. **Soil Stabilization**. In areas where soil disturbance activity has ceased, whether permanently or *temporarily ceased*, the application of soil stabilization measures must be initiated by the end of the next business day and completed within 14 calendar days from the date the current soil disturbance activity ceased. For *construction sites* that *directly discharge* to one of the 303(d) segments listed in Appendix D, or are located in one

of the watersheds listed in Appendix C, or are authorized to disturb greater than five acres in accordance with Part I.E.5.a.viii., the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven calendar days from the date the soil disturbance activity ceased.

c. **Dewatering**. *Discharge*s from *dewatering* activities, including *discharge*s from *dewatering* of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures**. Select, design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be selected, designed, installed, implemented, and maintained to:

   (i) *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. Soaps, detergents and solvents cannot be used;

   (ii) *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to *stormwater*. *Minimization* of exposure is not required in cases where the exposure to precipitation and to *stormwater* will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of *stormwater* contamination (such as final products and materials intended for outdoor use); and

   (iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Surface Outlets.** When discharging from basins and impoundments, the surface outlets must be designed, constructed, and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

**C. Post-Construction Stormwater Management Practice (SMP) Requirements**



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1. The *owner or operator* of a *construction activity* that requires post-construction SMPs, in accordance with Part III.C., must select, design, install, implement, and maintain the SMPs to meet the *performance criteria* in the New York State Stormwater Management Design Manual, dated July 31, 2024 (DM), using sound engineering judgment. Where SMPs are not designed in conformance with the *performance criteria* in the DM, the *owner or operator* must include in the *SWPPP* the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. The *owner or operator* of a *construction activity*, that requires SMPs in accordance with Part III.C., must design the practices to meet the applicable *sizing criteria* in Part II.C.2.a., b., c., or d.

**a. Sizing Criteria for *New Development***

i. Runoff Reduction Volume (RRv) and Water Quality Volume (WQv):

1. Reduce the total WQv by application of RR techniques and standard SMPs with RRv capacity. The total WQv must be calculated in accordance with the criteria in Section 4.2 of the DM; or

2. Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the requirements in Part II.C.2.a.i.1. due to *site limitations* must direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv must be documented in the *SWPPP*. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the *SWPPP* must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

**In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.4 of the DM.** The remaining portion of the total WQv that cannot be reduced must be treated by application of standard SMPs.



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ii. Channel Protection Volume (CPv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The CPv requirement does not apply when:

1. Reduction of the entire CPv is achieved by application of runoff reduction techniques or infiltration systems; or

2. The 1-year post-development peak *discharge* is less than or equal to 2.0 cfs without detention or velocity controls; or

3. The site *directly discharges* into a fifth order or larger water body (stream, river, or lake), or tidal waters, where the increase in smaller flows will not impact the stream bank or channel integrity. However, the point of *discharge* must be adequately protected against scour and erosion by the increased peak *discharge*.

iii. *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams, or

2. A downstream analysis reveals that *overbank* control is not required.

iv. Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams, or

2. A downstream analysis reveals that *overbank* control is not required.

**b. *Sizing Criteria* for *New Development* in Enhanced Phosphorus Removal Watershed**



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i. Runoff Reduction Volume (RRv) and Water Quality Volume (WQv):

1. Reduce the WQv by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24-hour design storm over the post-developed watershed and must be calculated in accordance with the criteria in Section 4.3 of the DM; or

2. Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part II.C.2.b.i.1. due to *site limitations* must direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv must be documented in the *SWPPP*. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the *SWPPP* must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible.*

   **In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.5 of the DM.** The remaining portion of the total WQv that cannot be reduced must be treated by application of standard SMPs.

ii. Channel Protection Volume (CPv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The CPv requirement does not apply when:

1. Reduction of the entire CPv is achieved by application of runoff reduction techniques or infiltration systems; or

2. The 1-year post-development peak *discharge* is less than or equal to 2.0 cfs; or

3. A CPv control orifice is provided, with a minimum orifice size of 3 inches, with acceptable external rack or internal orifice protection; or

4. The site *directly discharges* to tidal waters, or a fifth order or larger water body (stream, river, or lake) where the increase in smaller flows will not impact the stream bank or channel integrity. However, the point of *discharge* must be adequately protected against scour and erosion by the increased peak *discharge*.

iii. *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams; or

2. A downstream analysis reveals that *overbank* control is not required.

iv. Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams; or

2. A downstream analysis reveals that *overbank* control is not required.

**c. *Sizing Criteria* for *Redevelopment Activity***

i. Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* must be addressed by one of the following options, as outlined in Section 9.2.1. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C) must calculate the WQv in accordance with Section 4.3 of the DM. All other *redevelopment activities* must calculate the WQv in accordance with Section 4.2 of the DM.

1. Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the DM must be applied to all newly created pervious areas; or

2. Capture and treat 100% of the required WQv, for a minimum of 25% of the disturbed redevelopment *impervious area*, by implementation of standard SMPs or reduced by application of runoff reduction techniques; or

3. Capture and treat 100% of the required WQv, for a minimum of 75% of the disturbed redevelopment *impervious area*, by implementation of a volume-based alternative SMP, as defined in Section 9.4 of the DM; or

4. Capture and treat 100% of the required WQv, for a minimum of 75% of the disturbed redevelopment *impervious area*, by implementation of a flow-through alternative SMP sized to treat the peak rate of runoff from the WQv design storm; or

5. Application of a combination of 1 through 4 above that provide a weighted average of at least two of the above methods. Application of this method must be in accordance with the criteria in Section 9.2.1(A)(V) of the DM; or

6. If there is an existing SMP located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 through 5 above.

ii. Channel Protection Volume (CPv) is not required if there is 0% change to hydrology that increases the *discharge* rate and volume from the project site.

iii. *Overbank* Flood Control (Qp) is not required if there is 0% change to hydrology that increases the *discharge* rate from the project site.

iv. Extreme Flood Control (Qf) is not required if there is 0% change to hydrology that increases the *discharge* rate from the project site.

**d. *Sizing Criteria* for Combination of *Redevelopment Activity* and *New Development***

Construction projects, that include both *new development* and *redevelopment activity*, must use SMPs that meet the *sizing criteria* calculated as an aggregate of the *sizing criteria* in Part II.C.2.a. or b. for the *new development* portion of the project and Part II.C.2.c. for the *redevelopment activity* portion of the project.

## Part III. Stormwater Pollution Prevention Plan (SWPPP)

### A. General *SWPPP* Requirements

1. A *SWPPP* must be prepared and implemented by the *owner or operator* of all *construction activity* covered by this permit. All authorized *discharges* must be identified in the *SWPPP*. The *SWPPP* must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part II.B. and, where applicable, the SMP requirements in Part II.C.

2. The *SWPPP* must demonstrate consideration of the future physical risks due to climate change pursuant to the Community Risk and Resiliency Act (CRRA), 6 NYCRR Part 490, and associated guidance (e.g., “Using Natural Measures to Reduce the Risk of Flooding and Erosion,” “State Flood Risk Management Guidance,” “Estimating Guideline Elevations,” and “Tidal Wetlands Guidance: Living Shoreline Techniques in the Marine District of New York State”).

    a. The consideration must be in narrative format and meet Part III.A.2.a.i. and ii.

        i. The consideration must address, at minimum, the following physical risks due to climate change:

            (i) increasing temperature;

            (ii) increasing precipitation;

(iii) increasing variability in precipitation, including chance of drought;

(iv) increasing frequency and severity of flooding;

(v) rising sea level;

(vi) increasing storm surge; and

(vii) shifting ecology.

ii. The risks in Part III.A.2.a.i. must be addressed for each of the following:

(i) overall site planning; and

(ii) location, elevation, and sizing of:

a. control measures and practices;

b. conveyance system(s); and

c. detention system(s).

3. The *SWPPP* must describe the erosion and sediment control practices and where required, SMPs that will be used and/or constructed to reduce the *pollutants* in *stormwater discharges* and to assure compliance with the requirements of this permit. In addition, the *SWPPP* must identify potential sources of pollution which may reasonably be expected to affect the quality of *stormwater discharges*.

4. All *SWPPPs*, that require the SMP component in accordance with Part III.B.2., must be prepared by a *qualified professional*.

5. The *owner or operator* must keep the *SWPPP* current so that, at all times, it accurately documents the erosion and sediment control practices that are being used or will be used during construction, and all SMPs that will be constructed on the site. At a minimum, the *owner or operator* must amend the *SWPPP*, including construction drawings:

a. whenever the current provisions prove to be ineffective in *minimizing pollutants* in *stormwater discharges* from the site;



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b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*;

c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* NYSDEC, or other regulatory authority; and

d. to document the final construction conditions in an as-built drawing.

6. NYSDEC may notify the *owner or operator* at any time that the *SWPPP* does not meet one or more of the minimum requirements of this permit. The notification must be in writing and identify the provisions of the *SWPPP* that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by NYSDEC, the *owner or operator* must make the required changes to the *SWPPP* and submit written notification to NYSDEC that the changes have been made. If the *owner or operator* does not respond to NYSDEC's comments in the specified time frame, NYSDEC may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4.

7. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting, and maintaining the erosion and sediment control practices included in the *SWPPP* and the contractor(s) and subcontractor(s) that will be responsible for constructing the SMPs included in the *SWPPP*. The *owner or operator* must have each of the contractors and subcontractors identify at least one person from their company to be *trained contractor* that will be responsible for implementation of the *SWPPP*. The *owner or operator* must ensure that at least one *trained contractor* is on site daily when soil disturbance activities are being performed.

   The *owner or operator* must have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before the *commencement of construction activities*:

   "I hereby certify under penalty of law that I understand and agree to comply with the requirements of the *SWPPP* and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

the requirements of the most current version of the New York State Pollutant Discharge Elimination System (SPDES) Construction General Permit (CGP) for Stormwater Discharges from Construction Activities and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the *SWPPP* that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for *SWPPP* implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* must attach the certification statement(s) to the copy of the *SWPPP* that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the *SWPPP* after the *commencement of construction activities*, they must also sign the certification statement and provide the information listed above prior to performing *construction activities*.

## B. Required *SWPPP* Contents

1. Erosion and sediment control component - The *owner or operator* must prepare a *SWPPP* that includes erosion and sediment control practices.

   a. Erosion and sediment control practices must be designed:

      i. in conformance with the BB; or

      ii. *equivalent* to the BB if deviating from Part III.B.1.a.i.

   b. If the erosion and sediment control practices are designed in conformance with Part III.B.1.a.ii., the *SWPPP* must include a demonstration of *equivalence* to the BB.

   c. At a minimum, the erosion and sediment control component of the *SWPPP* must include the following:

i. Background information about the scope of the project, including the location, type and size of project;

ii. A site map/construction drawing(s) with north arrows for the project, including a general location map. At a minimum, the site map must show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the *stormwater discharge*(s) and receiving surface water(s);

iii. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);

iv. A phasing plan for the project and sequencing plans for all *phases*, both of which must address clearing and grubbing, excavation and grading, utility and infrastructure installation, *final stabilization*, and any other *construction activity* at the site that will result in soil disturbance.

1. The phasing plan must include:

    a. a map delineating and labeling the limits of soil disturbance for all *phases* of a project; and

    b. a table identifying the order and intended schedule of when each *phase* will begin and end its sequencing plan. The table must identify the total disturbed area for each *phase* at any one time and the total disturbed area for the overall project at any one time all on one timeline showing all overlapping quantities of disturbed area at any one time.

2. A sequencing plan for a specific *phase* must include:

    a. a table indicating the order and intended schedule of *construction activities* within a *phase*, and

corresponding construction drawings with a description of the work to be performed;

b. all proposed cuts and fills delineated in plan view and quantified numerically; and

c. all permanent and *temporary stabilization* measures.

v. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;

vi. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;

vii. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

viii. A maintenance inspection schedule for the contractor(s) and subcontractor(s) identified in Part III.A.7. to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule must be in accordance with the requirements in the BB technical standard;

ix. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the *stormwater discharges*;

x. A description and location of any *stormwater discharges* associated with industrial activity other than construction at the site, including, but not limited to, *stormwater discharges* from asphalt plants and concrete plants located on the *construction site*; and

xi. Identification of any elements of the design that are not in conformance with the design criteria in the BB technical standard. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. SMP component – The *owner or operator* of *construction activity* identified in Table 2 of Appendix B must prepare a *SWPPP* that includes SMPs.

   a. SMPs must be designed in conformance with the applicable *sizing criteria* in Part II.C.2.a., c., or d.

   b. SMPs must be designed in conformance with the *performance criteria*:

      i. in the DM; or

      ii. *equivalent* to the DM if deviating from Part III.B.2.a.i.; or

      iii. in the New York State Stormwater Management Design Manual, dated January 2015 (2015 Design Manual), or *equivalent* to it, if the following criteria are met:

         1. The construction activities are subject to governmental review and approval, where the *owner or operator* made any application to that governmental entity prior to the effective date of this permit;

         2. Such application included a *SWPPP* developed using the 2015 Design Manual or *equivalent* to it; and

         3. The eNOI is submitted in accordance with Part I.D. before January 29, 2027.

   c. If SMPs are designed in conformance with Part III.B.2.b.ii., the *SWPPP* must include the reason(s) for the deviation or alternative design and a demonstration of *equivalence* to the DM.

   d. If SMPs are designed in conformance with Part III.B.2.b.iii., the *SWPPP* must include supporting information or documentation demonstrating that Part III.B.2.b.iii.1., 2., and 3. apply.

e. The SMP component of the *SWPPP* must include the following:

i. Identification of all SMPs to be constructed as part of the project. Include the dimensions, material specifications and installation details for each SMP;

ii. A site map/construction drawing(s) showing the specific location and size of each SMP;

iii. A Stormwater Modeling and Analysis Report that includes:

(i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;

(ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and SMPs;

(iii) Results of *stormwater* modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre- and post-development runoff rates and volumes for the different storm events;

(iv) Summary table, with supporting calculations, which demonstrates that each SMP has been designed in conformance with the *sizing criteria* included in the DM;

(v) Identification of any *sizing criteria* that is not required based on the requirements included in Part II.C.; and

(vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the DM. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the DM.

iv. Soil testing results and locations (test pits, borings);

v. Infiltration test results, when required in accordance with Part III.B.2.a.; and

vi. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each SMP. The plan must identify the entity that will be responsible for the long-term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - The *owner or operator* of *construction activity* identified in Table 2 of Appendix B that is located in a watershed identified in Appendix C must prepare a *SWPPP* that includes SMPs designed in conformance with the applicable *sizing criteria* in Part II.C.2.b., c., or d. and the *performance criteria* Enhanced Phosphorus Removal Standards included in the DM. At a minimum, the SMP component of the *SWPPP* must meet the requirements of Part III.B.2.

### C. Required *SWPPP* Components by Project Type

*Owners or operators* of *construction activities*, identified in Table 1 of Appendix B, are required to prepare a *SWPPP* that only includes erosion and sediment control practices designed in accordance with Part III.B.1. *Owners or operators* of the *construction activities*, identified in Table 2 of Appendix B, must prepare a *SWPPP* that also includes SMPs designed in accordance with Part III.B.2 or 3.

## Part IV. Inspection and Maintenance Requirements

### A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures), and all SMPs identified in the *SWPPP*, are inspected and maintained in accordance with Part IV.B. and C.

### B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity*, identified in Tables 1 and 2 of Appendix B, must have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being

maintained in effective operating condition at all times. If deficiencies are identified, the contractor must:

a. begin implementing corrective actions within one business day; and

b. complete the corrective actions within five business days or, if the corrective action requires engineering design, within 15 business days.

2. For *construction sites* where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections in accordance with Part IV.B.1. The *trained contractor* must begin conducting the maintenance inspections in accordance with Part IV.B.1. as soon as soil disturbance activities resume.

3. For *construction sites* where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections in accordance with Part IV.B.1. if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational.

**C. *Qualified Inspector* Inspection Requirements**

1. With the exception of the following *construction activities* identified in Tables 1 and 2 of Appendix B, a *qualified inspector* must conduct site inspections for all other *construction activities* identified in Tables 1 and 2 of Appendix B:

a. the construction of a single-family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than or equal to five (5) acres and is not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D;

b. the construction of a single-family home that involves soil disturbances of one (1) or more acres but less than or equal to five (5) acres and is not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D;

c. construction on *agricultural property* that involves soil disturbances of one (1) or more acres but less than five (5) acres; and

d. *construction activities* located in the New York City Watershed located east of the Hudson River, see Appendix C Figure 1, that involve soil disturbances of 5,000 square feet or more, but less than one acre.

2. The *qualified inspector* must conduct site inspections in accordance with the following timetable:

   a. For *construction sites* where soil disturbance activities are on-going, the *qualified inspector* must conduct a site inspection at least once every seven (7) calendar days.

   b. For *construction sites* where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* must conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections must be separated by a minimum of two (2) full calendar days.

   c. For *construction sites* where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* must conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* must notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix E) or, in areas under the jurisdiction of a *Traditional Land Use Control MS4 Operator,* the *Traditional Land Use Control MS4 Operator* (provided the *Traditional Land Use Control MS4 Operator* is not the *owner or operator* of the *construction activity*) by hard copy or email prior to reducing the inspections to this frequency and again by hard copy or email prior to re-commencing construction.

   d. For *construction sites* where soil disturbance activities have been shut down with partial project completion, the requirement to have the *qualified inspector* conduct inspections ceases if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational. The *owner or operator* must notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix E) or, in areas subject to the review authority of *Traditional Land Use Control MS4 Operator(s)* in accordance with Part I.D.2.b.ii.1., the *Traditional Land Use Control MS4 Operator(s)* (provided the *Traditional Land Use Control MS4 Operator(s)*

are not the *owners or operators* of the *construction activity*) in writing prior to the shutdown and again in writing prior to resuming *construction activity*. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* must terminate coverage by meeting the requirements of Part V.

e. For *construction sites* involving soil disturbance of one (1) or more acres that *directly discharge* to one of the 303(d) segments listed in Appendix D or is located in one of the watersheds listed in Appendix C, the *qualified inspector* must conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections must be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* must inspect:

   a. all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness;

   b. all SMPs under construction to ensure that they are constructed in conformance with the *SWPPP*;

   c. all areas of disturbance that have not achieved *final stabilization*;

   d. all points of *discharge* to *surface waters of the State* located within, or immediately adjacent to, the property boundaries of the *construction site*; and

   e. all points of *discharge* from the *construction site*.

4. The *qualified inspector* must prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report must include and/or address all of the following, for all *construction activities* except those listed in Part IV.C.1.:

   a. Permit identification number;

   b. Date and time of inspection;

   c. Name and title of person(s) performing inspection;

d. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection, including the temperature at the time of the inspection;

e. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This must include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;

f. A description of the condition of all *surface waters of the State* located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This must include identification of any *discharges* of sediment to the *surface waters of the State*;

g. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;

h. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

i. Description and sketch (map) of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

j. Total area of soil disturbance (acres) at the time of the inspection;

k. Current stage of construction of all SMPs and identification of all *construction activity* on site that is not in conformance with the *SWPPP* and technical standards;

l. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the SMP(s);

m. Identification and status of all corrective actions that were required by previous inspection; and

n. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* must attach color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* must also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* must attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* must notify the *owner or operator*, and appropriate contractor or subcontractor identified in Part III.A.7., of any corrective actions that need to be taken. The contractor or subcontractor must:

    a. begin implementing corrective actions within one business day; and

    b. complete the corrective actions within five business days or, if the corrective action requires engineering design, within 15 business days.

6. All inspection reports must be signed by the *qualified inspector.* In accordance with Part I.E.3., the inspection reports must be maintained on site with the *SWPPP*.

## Part V. How to Terminate CGP Coverage

### A. Electronic Notice of Termination (eNOT) Submittal

1. An *owner or operator* must terminate coverage when one or more of the following requirements have been met:

    a. Total project completion:

        i. all *construction activity* identified in the *SWPPP* has been completed;

        ii. all areas of disturbance have achieved *final stabilization*;

        iii. all temporary, structural erosion and sediment control measures have been removed;

iv. all SMPs have been constructed in conformance with the *SWPPP* and are operational; and

v. an as-built drawing has been prepared; or

b. Planned shutdown with partial project completion:

i. all soil disturbance activities have ceased;

ii. all areas disturbed as of the project shutdown date have achieved *final stabilization*;

iii. all temporary, structural erosion and sediment control measures have been removed;

iv. all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational; and

v. an as-built drawing has been prepared; or

c. In accordance with Part I.G. Change of Owner or Operator; or

d. The *owner or operator* has obtained coverage under an alternative general SPDES permit or an individual SPDES permit.

2. For *construction activities* that require *qualified inspector* inspections in accordance with Part IV.C.1. and have met Part V.A.1.a. or b., the *owner or operator* must have the *qualified inspector* perform a final site inspection prior to submitting the eNOT. The *qualified inspector* must, by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice(s)" certification statements on the eNOT, certify that all the requirements in Part V.A.1.a. or b. have been achieved.

3. For *construction activities* that are subject to the review authority of *Traditional Land Use Control MS4 Operator(s)* in accordance with Part I.D.2.b.ii.1. and meet Part V.A.1.a. or b., the *owner or operator* must have the *Traditional Land Use Control MS4 Operator(s)* sign the "MS4 Acceptance" statement on the eNOT in accordance with the requirements in Part VII.J. A *Traditional Land Use Control MS4 Operator* official, by signing this statement, determined that it is acceptable for the *owner or operator* to submit the eNOT

in accordance with the requirements of this Part. A *Traditional Land Use Control MS4 Operator* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) when required in Part V.A.2.

4. For *construction activities* that require SMPs and meet Part V.A.1.a., the *owner or operator* must, prior to submitting the eNOT, ensure one of the following:

    a. for SMP(s) that were constructed by a private entity, but will be owned, operated, and maintained by a public entity, the SMP(s) and any right-of-way(s) needed to operate and maintain such practice(s) have been deeded to the municipality in which the practice(s) is located; or

    b. for SMP(s) that are privately owned, but will be operated and maintained by a public entity, an executed operation and maintenance agreement is in place with the municipality that will operate and maintain the SMP(s); or

    c. for SMP(s) that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record; or

    d. for SMP(s) that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility, the *owner or operator* has policies and procedures in place that ensure operation and maintenance of the practices in accordance with the operation and maintenance plan.

5. An *owner or operator* that has met the requirements of Part V.A.1., 2., 3., and 4. must request termination of coverage under this permit by submitting a complete Notice of Termination form electronically using a NYSDEC approved form.[5]

## Part VI. Record Retention and Reporting

### A. Record Retention

[5] Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to Stormwater_info@dec.ny.gov or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505.

The *owner or operator* must retain a copy of the documents listed in Part I.E.3. for a period of at least five years from the date that NYSDEC accepts a complete NOT submitted in accordance with Part V.

### B. Reporting

Except for the eNOI, the signature forms associated with the eNOI, and the NOT, all other written correspondence requested by NYSDEC, including individual permit applications, must be sent to the address of the appropriate DOW (SPDES) Program contact at the Regional Office listed in Appendix E.

## Part VII. Standard Permit Requirements

For the purposes of this permit, examples of contractors and subcontractors include: third-party maintenance and construction contractors.

### A. Duty to Comply

The *owner or operator*, and all contractors or subcontractors, must comply with all requirements of this permit. Any non-compliance with the requirements of this permit constitutes a violation of the New York State Environmental Conservation Law (ECL), and its implementing regulations, and is grounds for enforcement action. Filing of a request for termination of coverage under this permit, or a notification of planned changes or anticipated non-compliance, does not limit, diminish or stay compliance with any requirements of this permit.

### B. Need to Halt or Reduce Activity Not a Defense

The necessity to halt or reduce the *construction activity* regulated by this permit, in order to maintain compliance with the requirements of this permit, must not be a defense in an enforcement action.

### C. Penalties

There are substantial criminal, civil, and administrative penalties associated with violating the requirements of this permit. Fines of up to $37,500 per day for each violation and imprisonment for up to 15 years may be assessed depending upon the nature and degree of the offense.

### D. False Statements

Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance must, upon conviction, be punished in accordance with ECL §71-1933 and or New York State Penal Law Articles 175 and 210.

**E. Re-Opener Clause**

Upon issuance of this permit, a determination has been made on the basis of a submitted Notice of Intent, plans, or other available information, that compliance with the specified permit requirements will reasonably protect classified water use and assure compliance with applicable *water quality standards*. Satisfaction of the requirements of this permit notwithstanding, if operation pursuant to this permit causes or contributes to a condition in contravention of State *water quality standards* or guidance values, or if NYSDEC determines that a modification is necessary to prevent impairment of the best use of the waters or to assure maintenance of *water quality standards* or compliance with other provisions of ECL Article 17 or the Clean Water Act (CWA), or any regulations adopted pursuant thereto, NYSDEC may require such modification and the Commissioner may require abatement action to be taken by the *owner or operator* and may also prohibit such operation until the modification has been implemented.

**F. Duty to Mitigate**

The *owner or operator*, and its contractors and subcontractors, must take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

**G. Requiring Another General Permit or Individual SPDES Permit**

NYSDEC may require any *owner or operator* authorized to *discharge* in accordance with this permit to apply for and obtain an individual SPDES permit or apply for authorization to *discharge* in accordance with another general SPDES permit.

1. Cases where an individual SPDES permit or authorization to discharge in accordance with another general SPDES permit may be required include, but is not limited to the following:

    a. the *owner or operator* is not in compliance with the conditions of this permit or does not meet the requirements for coverage under this permit;

b. a change has occurred in the availability of demonstrated technology or practices for the control or abatement of *pollutants* applicable to the *point source*;

c. new effluent limitation guidelines or new source performance standards are promulgated that are applicable to *point sources* authorized to *discharge* in accordance with this permit;

d. existing effluent limitation guidelines or new source performance standards that are applicable to *point sources* authorized to *discharge* in accordance with this permit are modified;

e. a water quality management plan containing requirements applicable to such *point sources* is approved by NYSDEC;

f. circumstances have changed since the time of the request to be covered so that the *owner or operator* is no longer appropriately controlled under this permit, or either a temporary or permanent reduction or elimination of the authorized *discharge* is necessary;

g. the *discharge* is in violation of section 17-0501 of the ECL; and

h. the *discharge(s)* is a significant contributor of *pollutants*. In making this determination, NYSDEC may consider the following factors:

i. the location of the *discharge(s)* with respect to *surface waters of the State*;

ii. the size of the *discharge(s)*;

iii. the quantity and nature of the *pollutants discharged* to *surface waters of the State*; and

iv. other relevant factors including compliance with other provisions of ECL Article 17, or the CWA.

2. When NYSDEC requires any *owner or operator* authorized by this permit to apply for an individual SPDES permit as provided for in this subdivision, it must notify the *owner or operator* in writing that a permit application is required. This notice must include a brief statement of the reasons for this decision, an application form, a statement setting a time for the *owner or operator* to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from the *owner's or operator's* receipt of the notification letter, whereby the authorization to *discharge* under this permit must be terminated. NYSDEC may

grant additional time upon demonstration, to the satisfaction of the RWE,[6] that additional time to apply for an alternative authorization is necessary or where NYSDEC has not provided a permit determination in accordance with 6 NYCRR Part 621.

3. When an individual SPDES permit is issued to an *owner or operator* authorized to *discharge* under this permit for the same *discharge(s)*, this permit authorization for *construction activities* authorized under the individual SPDES permit is automatically terminated on the effective date of the individual SPDES permit unless termination is earlier in accordance with 6 NYCRR Part 750.

## H. Duty to Provide Information

The *owner or operator* must furnish to NYSDEC, within five business days, unless otherwise set forth by NYSDEC, any information that NYSDEC may request to determine whether cause exists to determine compliance with this permit or to determine whether cause exists for requiring an individual SPDES permit in accordance with 6 NYCRR 750-1.21(e) (see Part VII.G. Requiring Another General Permit or Individual Permit).

The *owner or operator* must make available to NYSDEC, for inspection and copying, or furnish to NYSDEC within 25 business days of receipt of a NYSDEC request for such information, any information retained in accordance with this permit.

Except for Part I.D.4. and 5. and Part I.G., the following applies: where the *owner or operator* becomes aware that it failed to submit any relevant facts on the Notice of Intent, or submitted incorrect information in a Notice of Intent or in any report to NYSDEC, the *owner or operator* must submit such facts or corrected information to NYSDEC within five business days.

## I. Extension

In the event a new permit is not issued and effective prior to the expiration of this permit, and this permit is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, then the *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the requirements of this permit until a new permit is issued and effective.

## J. Signatories and Certification

The Notice of Intent, Notice of Termination, and reports required by this permit must be signed as provided in 40 CFR §122.22.

[6] The Regional Water Manager where a DEC Region does not have a RWE.

1. All Notices of Intent and Notices of Termination must be signed as follows:

   a. For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

      (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

      (ii) the manager of one or more manufacturing, production or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for Notice of Intent or Notice of Termination requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

   Note: NYSDEC does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR §122.22(a)(1)(i). NYSDEC will presume that these responsible corporate officers have the requisite authority to sign the Notice of Intent or Notice of Termination unless the corporation has notified NYSDEC to the contrary. Corporate procedures governing authority to sign a Notice of Intent or Notice of Termination may provide for assignment or delegation to applicable corporate positions under 40 CFR §122.22(a)(1)(ii) rather than to specific individuals.

   b. For a partnership or sole proprietorship. By a general partner or the proprietor, respectively.

   c. For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

      1. the chief executive officer of the agency; or

2. a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. All reports required by this permit, and other information requested by NYSDEC, must be signed by a person described in Part VII.J.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Part VII.J.1. or using the Duly Authorized Form, Appendix J;

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

   c. The written authorization is submitted to NYSDEC.

3. Changes to authorization. If an authorization under Part VII.J.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the *construction activity*, a new authorization satisfying the requirements of Part VII.J.2. must be submitted to NYSDEC prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under Part VII.J.1. or 2. must make the following certification:

   *I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

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5. Electronic reporting. If documents described in Part VII.J.1. or 2. are submitted electronically by or on behalf of the *construction activity* with coverage under this permit, any person providing the electronic signature for such documents must meet all relevant requirements of this section, and must ensure that all of the relevant requirements of 40 CFR Part 3 (including, in all cases, subpart D to Part 3) (Cross-Media Electronic Reporting) and 40 CFR Part 127 (NPDES Electronic Reporting Requirements) are met for that submission.

## K. Inspection and Entry

The *owner or operator* must allow NYSDEC, the USEPA Regional Administrator, the applicable county health department, or any authorized representatives of those entities, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the *discharge*, upon the presentation of credentials and other documents as may be required by law, to:

1. enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the requirements of this permit;

2. have access to and copy at reasonable times, any records that must be kept under the requirements of this permit, including records required to be maintained for purposes of operation and maintenance;

3. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit;

4. sample or monitor at reasonable times, for the purposes of assuring general SPDES permit compliance or as otherwise authorized by the CWA or ECL, any substances or parameters at any location; and

5. enter upon the property of any contributor to the regulated facility or activity under authority of the *owner or operator*.

## L. Confidentiality of Information

The following must not be held confidential: this permit, the fact sheet for this permit, the name and address of any *owner or operator*, effluent data, the Notice of Intent, and information regarding the need to obtain an individual permit or an alternative general SPDES permit. This includes information submitted on forms themselves and any attachments used to supply information required by the forms (except

information submitted on usage of substances). Upon the request of the *owner or operator*, NYSDEC must make determinations of confidentiality in accordance with 6 NYCRR Part 616, except as set forth in the previous sentence. Any information accorded confidential status must be disclosed to the Regional Administrator upon his or her written request. Prior to disclosing such information to the Regional Administrator, NYSDEC will notify the Regional Administrator of the confidential status of such information.

**M. Other Permits May Be Required**

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

**N. NYSDEC Orders or Civil Decrees/Judgments**

The issuance of this permit by the NYSDEC, and the coverage under this permit by the *owner or operator*, does not supersede, revoke, or rescind any existing order on consent or civil Decree/Judgment, or modification to any such documents or to any order issued by the Commissioner, or any of the terms, conditions, or requirements contained in such order or modification therefore, unless expressly noted.

**O. Property Rights**

Coverage under this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations, nor does it obviate the necessity of obtaining the assent of any other jurisdiction as required by law for the *discharge* authorized.

**P. Compliance with Interstate Standards**

If the *construction activity* covered by this permit originates within the jurisdiction of an interstate water pollution control agency, then the *construction activity* must also comply with any applicable effluent standards or *water quality standards* promulgated by that interstate agency and as set forth in this permit for such *construction activities*.

**Q. Oil and Hazardous Substance Liability**

Coverage under this permit does not affect the imposition of responsibilities upon, or the institution of any legal action against, the *owner or operator* under section 311 of the CWA, which must be in conformance with regulations promulgated pursuant to section 311 governing the applicability of section 311 of the CWA to *discharges* from

facilities with *NPDES* permits, nor must such issuance preclude the institution of any legal action or relieve the *owner or operator* from any responsibilities, liabilities, or penalties to which the *owner or operator* is or may be subject pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. section 9601 et seq. (CERCLA).

**R. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, must not be affected thereby.

**S. NYSDEC Approved Forms**

The *owner or operator* must provide all relevant information that is requested by NYSDEC, and required by this permit, on all NYSDEC approved forms.

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## APPENDIX A – Abbreviations and Definitions

### Abbreviations

APO – Agency Preservation Officer
BB – New York State Standards and Specifications for Erosion and Sediment Control (Blue Book), dated November 2016
BMP – Best Management Practice
DM – New York State Stormwater Management Design Manual (Design Manual), dated July 31, 2024
CPESC – Certified Professional in Erosion and Sediment Control
CPv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DOW – Division of Water
EAF – Environmental Assessment Form
ECL – chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law
EPA – U.S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
NYCDEP – The City of New York Department of Environmental Protection
NYSDEC – The New York State Department of Environmental Conservation
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RR – Runoff Reduction
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SMP – Post-Construction Stormwater Management Practice
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

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**Definitions**

All definitions in this section are solely for the purposes of this permit. If a word is not italicized in the permit, use its common definition.

**Agricultural Building** – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

**Agricultural Property** – the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Best Management Practice Systems Catalogue" (dated June 2023).

**Alter Hydrology from Pre- to Post-Development Conditions** – the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

**Combined Sewer System** – a sewer system which conveys sewage and *stormwater* through a single pipe system to a publicly owned treatment works.

**Commence (Commencement of) Construction Activities** – the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the *SWPPP*. See definition for "*Construction Activity(ies)*" also.

**Common Plan of Development or Sale** – a contiguous area where multiple separate and distinct *construction activities* are occurring, or may occur, under one plan. The "common plan" of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQR) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating *construction activities* may occur on a specific plot. A *common plan of development or sale* is comprised of two or more *phases*.

*Common plan of development or sale* does not include separate and distinct *construction activities* that are occurring, or may occur, under one plan that are at least 1/4 mile apart provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

**Construction Activity(ies)** – identified within 40 CFR 122.26(b)(14)(x), 122.26(b)(15)(i), and 122.26(b)(15)(ii), any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, mechanized logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal.

*Construction activity* does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, which is excluded from the calculation of the soil disturbance for a project. Routine maintenance includes, but is not limited to:

- Re-grading of gravel roads or parking lots,
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and maintains or improves the hydraulic capacity of the ditch,
- Replacement of existing culverts that maintains the approximate original line and grade, and maintains or improves the hydraulic capacity of a ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.
- Maintenance of ski trails including brush hog use and mowing
- Above ground snowmaking pipe replacement

**Construction Site** – the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities"* and "*Larger Common Plan of Development or Sale" also.*

**Dewatering** – the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

**Directly Discharge(s)(ing) (to a specific surface waterbody)** – runoff flows from a *construction site* by overland flow and the first point of *discharge* is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system and the first point of *discharge* from the separate storm sewer system is the specific surface waterbody.

**Discharge(s)(d)** – any addition of any *pollutant* to waters of the State through an outlet or *point source*.

**Embankment** – an earthen or rock slope that supports a road/highway.

**Equivalent (Equivalence)** – the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

**Final Stabilization** – all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other *equivalent* stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

**Historic Property** – any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

**Impervious Area (Cover)** – all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and compacted gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

**Infeasible** – not technologically possible, or not economically practicable and achievable considering best industry practices.

**Minimize(ing)(ation)** – reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

**Municipal Separate Storm Sewer System (MS4)** - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

1. owned or operated by a State, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, *stormwater*, or other wastes, including special districts under State law such

as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA, that *discharges* to *surface waters of the State*;

2. designed or used for collecting or conveying *stormwater*;

3. which is not a *combined sewer system*; and

4. which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**Natural Buffer(s)** – an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

**New Development** – any land disturbance that does not meet the definition of *Redevelopment Activity* included in this appendix.

**New York State Erosion and Sediment Control Certificate Program** – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

**Nonpoint Source(s)** – any source of water pollution or *pollutants* which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

**Overbank** – flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

**Owner or Operator** – the person, persons, or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit requirements.

**Performance Criteria** – the six performance criteria for each group of SMPs in Chapters 5 and 6 of the technical standard, New York State Stormwater Management Design Manual (DM), dated July 31, 2024. These include feasibility, conveyance, pretreatment, treatment, landscaping, and maintenance. It does not include the *Sizing Criteria* (i.e. WQv, RRv, CPv, Qp and Qf) in Part I.C.2. of the permit.

**Phase** – a defined area in which *construction activities* are occurring or will occur separate from other defined area(s).

**Point Source** – any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be *discharged*.

**Pollutant(s)** – dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast *discharged* into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq.

**Qualified Inspector** – a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, *New York State Erosion and Sediment Control Certificate Program* holder or other NYSDEC endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any SMPs that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

**Qualified Professional** – a person that is knowledgeable in the principles and practices of *stormwater* management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other NYSDEC endorsed individual(s). Individuals preparing *SWPPPs* that require the SMP component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the

*SWPPP* that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

**Redevelopment Activity(ies)** – the disturbance and reconstruction of existing *impervious area*, including *impervious areas* that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

**Renewable Energy** – electricity or thermal energy generated by renewable energy systems through use of the following technologies: solar thermal, photovoltaics, on land and offshore wind, hydroelectric, geothermal electric, geothermal ground source heat, tidal energy, wave energy, ocean thermal, and fuel cells which do not utilize a fossil fuel resource in the process of generating electricity.

**Site Limitations** – site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical *site limitations* include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of *site limitations* shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

**Sizing Criteria** – the criteria included in Part I.C.2 of the permit that are used to size SMPs. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank* Flood (Qp), and Extreme Flood (Qf).

**Steep Slope** – land area designated on the current United States Department of Agriculture (USDA) Soil Survey as Soil Slope Phase D, (provided the map unit name or description is inclusive of slopes greater than 25%), or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

**Stormwater** – that portion of precipitation that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, or the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the State.

**Streambank** – the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

**Stormwater Pollution Prevention Plan (SWPPP)** – a project specific report, including construction drawings, that among other things: describes the *construction activity(ies)*, identifies the potential sources of pollution at the *construction site*; describes and shows the *stormwater* controls that will be used to control the *pollutants* (i.e. erosion and

sediment controls; for many projects, includes SMPs); and identifies procedures the *owner or operator* will implement to comply with the requirements of the permit. See Part III of the permit for a complete description of the information that must be included in the *SWPPP*.

**Surface Waters of the State** – shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

**Temporarily Ceased** – an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

**Temporary Stabilization** – exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

**Total Maximum Daily Load** (TMDL) – the sum of the allowable loads of a single *pollutant* from all contributing point and *nonpoint source*s. It is a calculation of the maximum amount of a *pollutant* that a waterbody can receive and still meet *water quality standards*, and an allocation of that amount to the *pollutant's* sources. A TMDL stipulates Waste Load Allocations (WLA) for *point source discharges*, Load Allocations (LA) for *nonpoint source*s, and a margin of safety (MOS).

**Traditional Land Use Control MS4 Operator** – a city, town, or village with land use control authority that is authorized to *discharge* under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

**Trained Contractor** – an employee from the contracting (construction) company, identified in Part III.A.7., that has received four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.7., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered

Landscape Architect, *New York State Erosion and Sediment Control Certificate Program* holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity).

The *trained contractor* is responsible for the day-to-day implementation of the *SWPPP*.

**Tree Clearing** – *construction activities* limited to felling and removal of trees.

*Tree clearing* does not include hand felling and leaving the trees in place with no support from mechanized equipment, which is not considered *construction activity* requiring coverage under this permit.

**Water Quality Standard** – such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

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## APPENDIX B – Required SWPPP Components by Project Type

### Table 1
### *CONSTRUCTION ACTIVITIES* THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

| |
|---|
| **The following *construction activities* that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:**<br><br>• Single-family home not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D<br>• Single-family residential subdivisions with 25% or less *impervious cover* at total site build-out and not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D<br>• Construction of a barn or other *agricultural building*, silo, stock yard or pen. |
| **The following *construction activities* that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:**<br><br>All *construction activities* located in the New York City Watershed located east of the Hudson River, see Appendix C Figure 1, that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land. |
| **All other *construction activities*:**<br><br>• Installation of underground linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains<br>• Environmental enhancement projects, such as wetland mitigation, *stormwater* retrofits, and stream restoration<br>• Pond construction<br>• Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an *impervious cover*<br>• Cross-country ski trails and walking/hiking trails<br>• Dam rehabilitation (the structure of the dam itself)<br>• Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are not part of residential, commercial, or institutional development;<br>• Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path, or walking path.<br>• Golf cart path construction or reconstruction, surfaced with an *impervious cover*, at an existing golf course. |

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## Table 1 (Continued)
### *CONSTRUCTION ACTIVITIES* THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

**All other *construction activities*:**

- Slope stabilization
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics
- Spoil areas that will be covered with vegetation
- Vegetated open space (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) that do not *alter hydrology from pre- to post-development* conditions
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre- to post-development* conditions
- Demolition where vegetation will be established, and no *redevelopment activity* is planned[1]
- Overhead electric transmission line and ski lift tower installation or replacement that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Solar array field areas that have tables elevated off the ground, spaced one table width apart, do not *alter hydrology from pre- to post-development conditions*, and address water quality volume and runoff reduction volume by maintaining sheet flow on slopes less than 8%.
- Structural agricultural conservation practices as identified in Table II in the "Agricultural Best Management Practice Systems Catalogue" (dated June 2023), excluding those that involve soil disturbances of greater than five acres that include construction or reconstruction of *impervious area* or *alter hydrology from pre- to post-development* conditions.
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary *impervious areas* that will be restored to pre-construction conditions once the *construction activity* is complete (in this context, "temporary" means the *impervious area* will be in place for one year or less)
- Other *construction activities* that do not include the construction or reconstruction of *impervious area*, and do not *alter hydrology from pre- to post-development* conditions, and are not listed in Table 2.

1. If the site is redeveloped in the future, a new eNOI must be submitted.

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## Table 2
## *CONSTRUCTION ACTIVITIES* THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES (SMPS)

**The following *construction activities*:**

- Single-family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix D
- Single-family home that disturbs five (5) or more acres of land
- Single-family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix D
- Single-family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% *impervious cover* at total site build-out
- Single-family residential subdivisions that involve soil disturbances of between 20,000 square feet and one (1) acre of land within the municipal boundaries of NYC with greater than 25% *impervious cover* at total site build-out
- Single-family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single-family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a *common plan of development or sale* that will ultimately disturb five (5) or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks (in this context, a multi-family residence will be one that meets the definition of a “multi-family residence” or the equivalent in the local building code)
- Creation of 5,000 square feet or more of *impervious area* in the municipal boundaries of NYC
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of *impervious area* (>5% of disturbed area) or *alter the hydrology from pre- to post-development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) that involves soil disturbance greater than five acres.
- Structural agricultural conservation practices as identified in Table II in the “Agricultural Best Management Practice Systems Catalogue” (dated June 2023) that involves soil disturbance greater than five acres and include the construction or reconstruction of *impervious area* or *alter hydrology from pre- to post-development* conditions.
- Facility buildings, including ski lodges, restroom buildings, pumphouses, ski lift terminals, and maintenance and groomer garages
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills; including creation of landfills or capping landfills.
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTWs, water treatment plants, and water storage tanks
- New golf courses
- Office complexes

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## Table 2 (Continued)

### *CONSTRUCTION ACTIVITIES* THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES (SMPS)

**The following *construction activities*:**

- Permanent laydown yards and equipment storage lots
- Playgrounds that include the construction or reconstruction of *impervious area*
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surfaces
- Road construction or reconstruction, including roads constructed as part of the *construction activities* listed in Table 1
- Parking lot construction or reconstruction, including parking lots constructed as part of the *construction activities* listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of *impervious area* (>5% of disturbed area) or *alter the hydrology from pre- to post-development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations, and well drilling pads, surfaced with *impervious cover,* and constructed as part of an overhead electric transmission line, wind-power, cell tower, oil or gas well drilling, sewer or water main, ski lift, or other linear utility project
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are part of a residential, commercial or institutional development
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are part of highway construction or reconstruction
- Solar array field areas on slopes greater than 8% that cannot maintain sheet flow using management practices identified in the BB or the DM
- Solar array field areas on slopes less than 8% that will *alter the hydrology from pre- to post-development* conditions
- Solar array field areas with ground-mounted tables
- Traditional *impervious areas* associated with solar development (e.g. roads, buildings, transformers)
- Utility pads surfaced with *impervious cover*, including electric vehicle charging stations
- All other *construction activities* that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre- to post-development* conditions, and are not listed in Table 1

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## APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

**Watersheds where *owners or operators* of *construction activities* identified in Table 2 of Appendix B must prepare a *SWPPP* that includes SMPs designed in conformance with the Enhanced Phosphorus Removal Standards included in the DM technical standard.**

- Entire New York City Watershed located east of the Hudson River – Figure 1
- Onondaga Lake Watershed – Figure 2
- Greenwood Lake Watershed – Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

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**Figure 1 - New York City Watershed East of the Hudson**

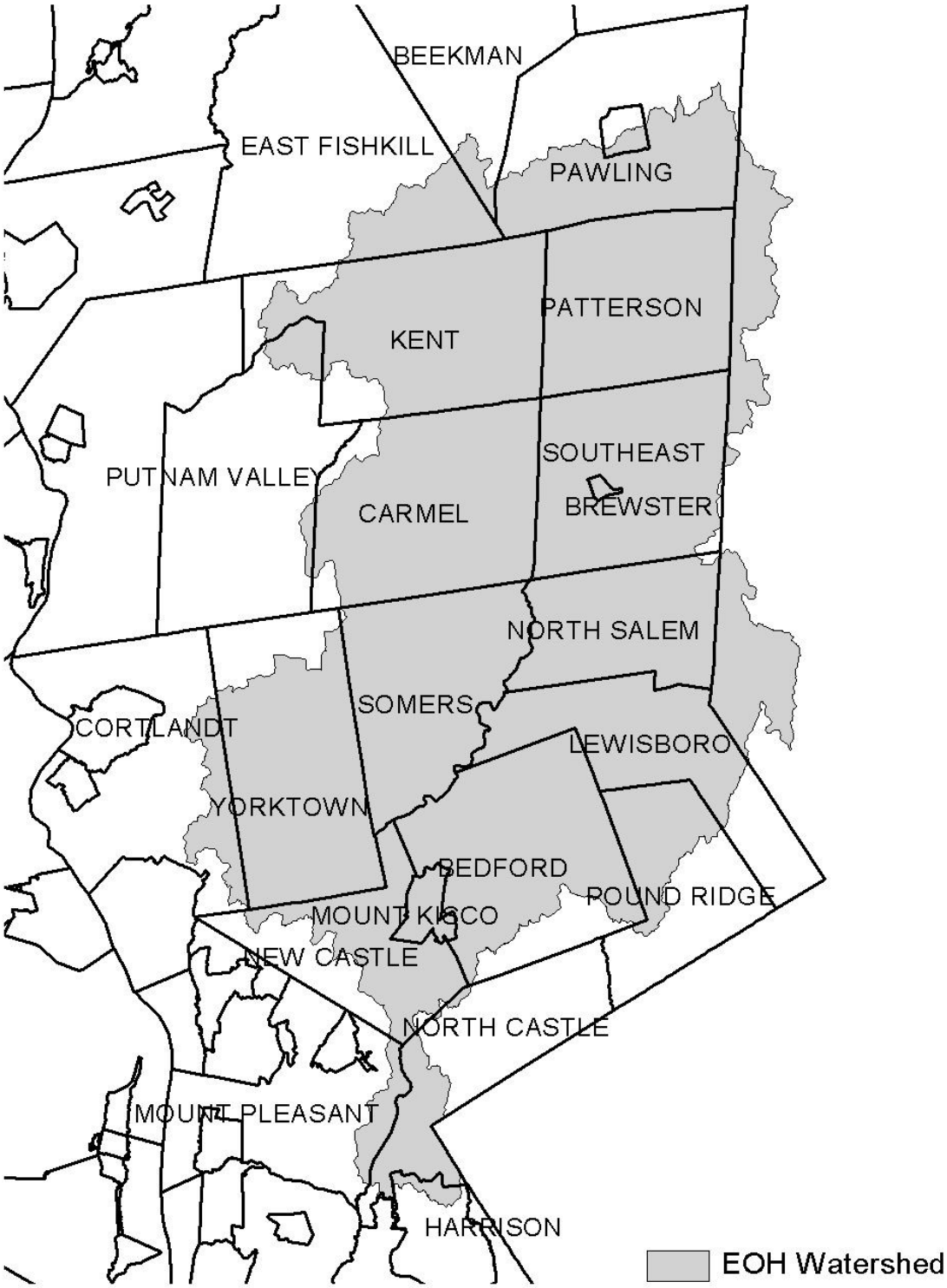


**Figure 2 - Onondaga Lake Watershed**



**Figure 3 - Greenwood Lake Watershed**

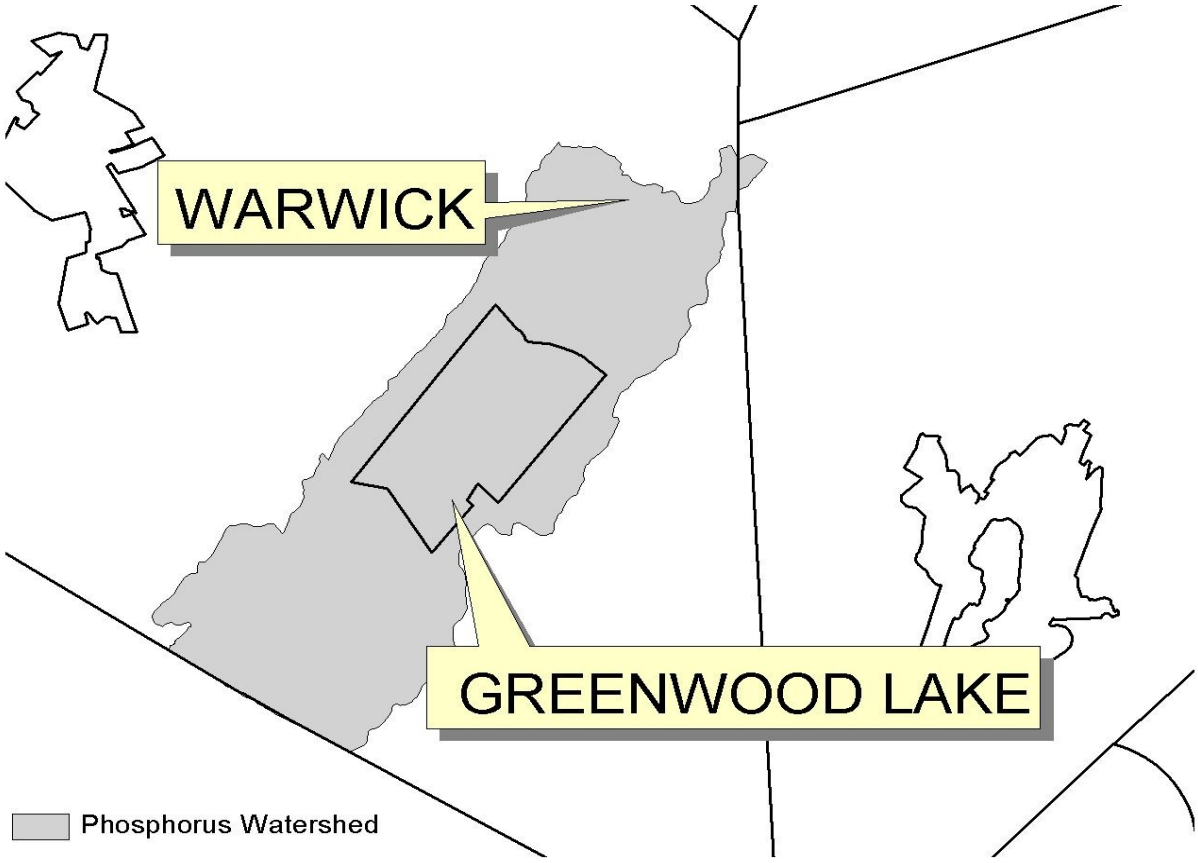


**Figure 4 - Oscawana Lake Watershed**

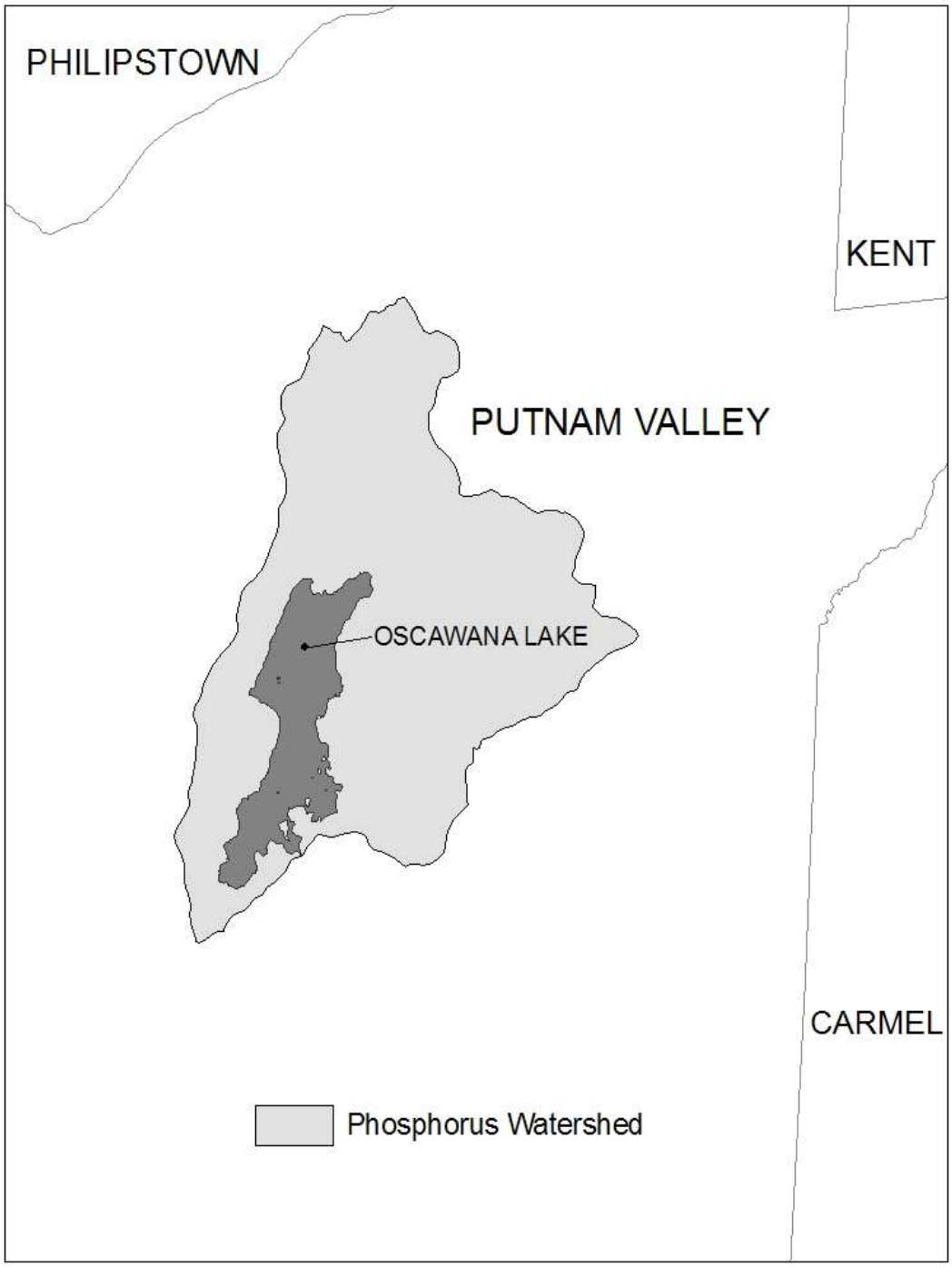
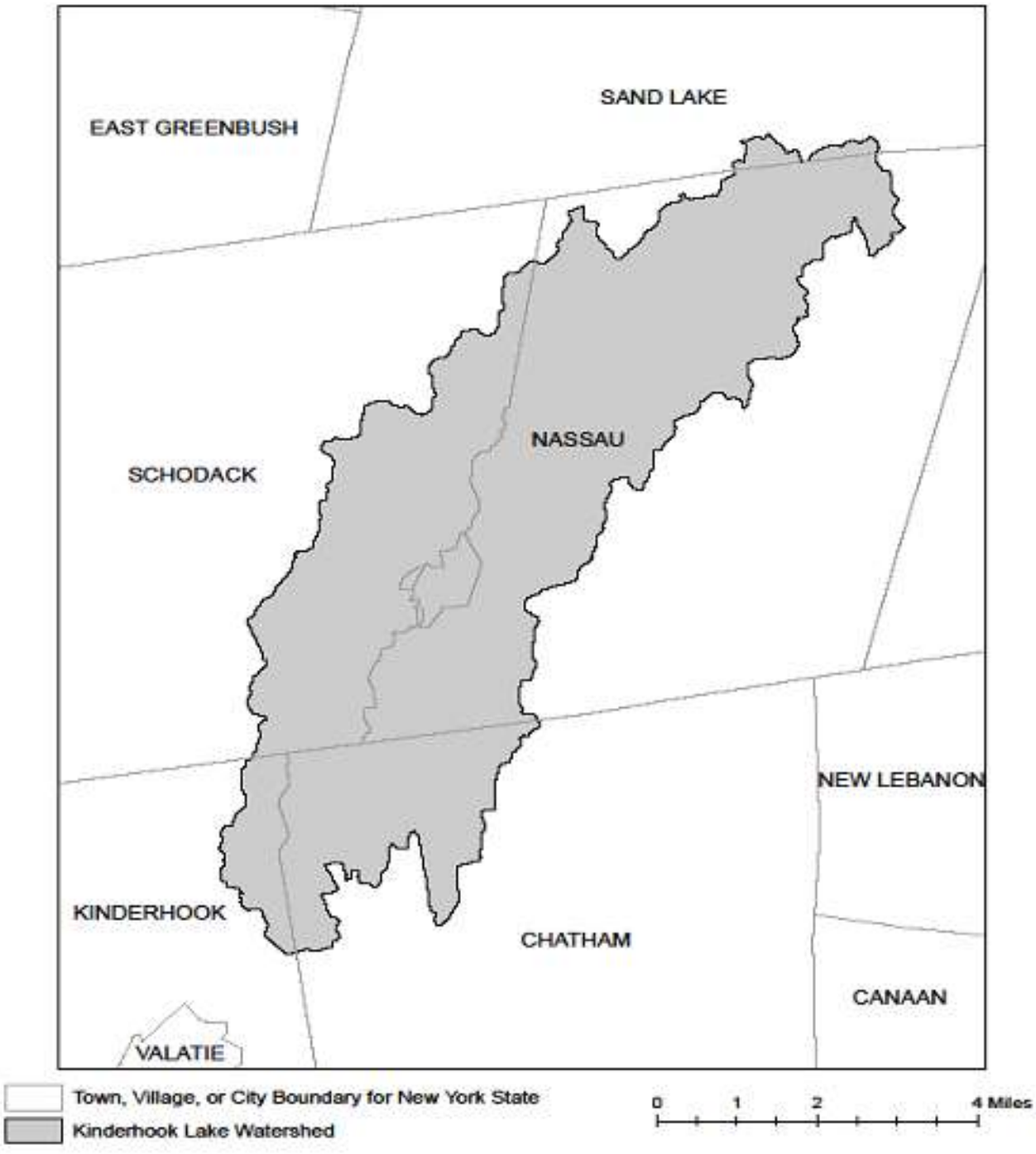


**Figure 5 - Kinderhook Lake Watershed**



## APPENDIX D – Impaired Waterbodies (by Construction Related Pollutants)

List of waterbodies impaired by *pollutants* related to *construction activity*, including turbidity, silt/sediment, and nutrients (e.g. nitrogen, phosphorus). This list is a subset of "The Final New York State 2018 Section 303(d) List of Impaired Waters Requiring a TMDL" dated June 2020.

| County | Waterbody | Pollutant |
|---|---|---|
| Albany | Ann Lee (Shakers) Pond, Stump Pond (1201-0096) | Phosphorus |
| Albany | Lawsons Lake (1301-0235) | Phosphorus |
| Allegany | Amity Lake, Saunders Pond (0403-0054) | Phosphorus |
| Allegany | Andover Pond (0403-0056) | Phosphorus |
| Bronx | Reservoir No.1/Lake Isle (1702-0075) | Phosphorus |
| Bronx | Van Cortlandt Lake (1702-0008) | Phosphorus |
| Broome | Blueberry, Laurel Lakes (1404-0033) | Phosphorus |
| Broome | Fly Pond, Deer Lake (1404-0038) | Phosphorus |
| Broome | Minor Tribs to Lower Susquehanna (0603-0044) | Phosphorus |
| Broome | Whitney Point Lake/Reservoir (0602-0004) | Phosphorus |
| Cattaraugus | Allegheny River/Reservoir (0201-0023) | Phosphorus |
| Cattaraugus | Beaver Lake/Alma Pond (0201-0073) | Phosphorus |
| Cattaraugus | Case Lake (0201-0020) | Phosphorus |
| Cattaraugus | Linlyco/Club Pond (0201-0035) | Phosphorus |
| Cayuga | Duck Lake (0704-0025) | Phosphorus |
| Cayuga | Owasco Inlet, Upper, and tribs (0706-0014) | Nutrients |
| Chautauqua | Chadakoin River and tribs (0202-0018) | Phosphorus |
| Chautauqua | Hulburt/Clymer Pond (0202-0079) | Phosphorus |
| Chautauqua | Middle Cassadaga Lake (0202-0002) | Phosphorus |
| Clinton | Great Chazy River, Lower, Main Stem (1002-0001) | Silt/Sediment |
| Columbia | Robinson Pond (1308-0003) | Phosphorus |
| Cortland | Dean Pond (0602-0077) | Phosphorus |
| Dutchess | Fallkill Creek (1301-0087) | Phosphorus |
| Dutchess | Hillside Lake (1304-0001) | Phosphorus |
| Dutchess | Wappingers Lake (1305-0001) | Phosphorus |
| Dutchess | Wappingers Lake (1305-0001) | Silt/Sediment |
| Erie | Beeman Creek and tribs (0102-0030) | Phosphorus |
| Erie | Delaware Park Pond (0101-0026) | Phosphorus |
| Erie | Ellicott Creek, Lower, and tribs (0102-0018) | Phosphorus |
| Erie | Ellicott Creek, Lower, and tribs (0102-0018) | Silt/Sediment |
| Erie | Green Lake (0101-0038) | Phosphorus |
| Erie | Little Sister Creek, Lower, and tribs (0104-0045) | Phosphorus |
| Erie | Murder Creek, Lower, and tribs (0102-0031) | Phosphorus |
| Erie | Rush Creek and tribs (0104-0018) | Phosphorus |

| | | |
|---|---|---|
| Erie | Scajaquada Creek, Lower, and tribs (0101-0023) | Phosphorus |
| Erie | Scajaquada Creek, Middle, and tribs (0101-0033) | Phosphorus |
| Erie | Scajaquada Creek, Upper, and tribs (0101-0034) | Phosphorus |
| Erie | South Branch Smoke Cr, Lower, and tribs (0101-0036) | Phosphorus |
| Erie | South Branch Smoke Cr, Lower, and tribs (0101-0036) | Silt/Sediment |
| Genesee | Bigelow Creek and tribs (0402-0016) | Phosphorus |
| Genesee | Black Creek, Middle, and minor tribs (0402 0028) | Phosphorus |
| Genesee | Black Creek, Upper, and minor tribs (0402-0048) | Phosphorus |
| Genesee | Bowen Brook and tribs (0102-0036) | Phosphorus |
| Genesee | LeRoy Reservoir (0402-0003) | Phosphorus |
| Genesee | Mill Pond (0402-0050) | Phosphorus |
| Genesee | Oak Orchard Cr, Upper, and tribs (0301-0014) | Phosphorus |
| Genesee | Oatka Creek, Middle, and minor tribs (0402-0031) | Phosphorus |
| Genessee | Tonawanda Cr, Middle, Main Stem (0102-0002) | Phosphorus |
| Greene | Schoharie Reservoir (1202-0012) | Silt/Sediment |
| Greene | Sleepy Hollow Lake (1301-0059) | Silt/Sediment |
| Herkimer | Steele Creek tribs (1201-0197) | Phosphorus |
| Herkimer | Steele Creek tribs (1201-0197) | Silt/Sediment |
| Kings | Hendrix Creek (1701-0006) 18 | Nitrogen |
| Kings | Prospect Park Lake (1701-0196) | Phosphorus |
| Lewis | Mill Creek/South Branch, and tribs (0801-0200) | Nutrients |
| Livingston | Christie Creek and tribs (0402-0060) | Phosphorus |
| Livingston | Conesus Lake (0402-0004) | Phosphorus |
| Livingston | Mill Creek and minor tribs (0404-0011) | Silt/Sediment |
| Monroe | Black Creek, Lower, and minor tribs (0402-0033) | Phosphorus |
| Monroe | Buck Pond (0301-0017) | Phosphorus |
| Monroe | Cranberry Pond (0301-0016) | Phosphorus |
| Monroe | Durand, Eastman Lakes (0302-0037) | Phosphorus |
| Monroe | Lake Ontario Shoreline, Western (0301-0069) 9 | Phosphorus |
| Monroe | Long Pond (0301-0015) | Phosphorus |
| Monroe | Mill Creek and tribs (0302-0025) | Phosphorus 2 |
| Monroe | Mill Creek/Blue Pond Outlet and tribs (0402-0049) | Phosphorus |
| Monroe | Minor Tribs to Irondequoit Bay (0302-0038) | Phosphorus |
| Monroe | Rochester Embayment - East (0302-0002) [9] | Phosphorus |
| Monroe | Rochester Embayment - West (0301-0068) 9 | Phosphorus |
| Monroe | Shipbuilders Creek and tribs (0302-0026) | Phosphorus 2 |
| Monroe | Thomas Creek/White Brook and tribs (0302-0023) | Phosphorus |
| Nassau | Bannister Creek/Bay (1701-0380) | Nitrogen |

| | | |
|---|---|---|
| Nassau | Beaver Lake (1702-0152) | Phosphorus |
| Nassau | Browswere Bay (1701-0383) | Nitrogen |
| Nassau | Camaans Pond (1701-0052) | Phosphorus |
| Nassau | East Meadow Brook, Upper, and tribs (1701-0211) | Silt/Sediment |
| Nassau | East Rockaway Channel (1701-0381) | Nitrogen |
| Nassau | Glen Cove Creek, Lower, and tribs (1702-0146) | Silt/Sediment |
| Nassau | Grant Park Pond (1701-0054) | Phosphorus |
| Nassau | Hempstead Bay, Broad Channel (1701-0032) | Nitrogen |
| Nassau | Hempstead Lake (1701-0015) | Phosphorus |
| Nassau | Hewlett Bay (1701-0382) | Nitrogen |
| Nassau | Hog Island Channel (1701-0220) | Nitrogen |
| Nassau | Massapequa Creek, Upper, and tribs (1701-0174) | Phosphorus |
| Nassau | Milburn/Parsonage Creeks, Upp, and tribs (1701-0212) | Phosphorus |
| Nassau | Reynolds Channel, East (1701-0215) [12] | Nitrogen |
| Nassau | Reynolds Channel, West (1701-0216) 12 | Nitrogen |
| Nassau | Tidal Tribs to Hempstead Bay (1701-0218) | Nitrogen |
| Nassau | Tribs (fresh) to East Bay (1701-0204) | Silt/Sediment |
| Nassau | Tribs (fresh) to East Bay (1701-0204) | Phosphorus |
| Nassau | Tribs to Smith Pond/Halls Pond (1701-0221) | Phosphorus |
| Nassau | Woodmere Channel (1701-0219) | Nitrogen |
| New York | Harlem Meer (1702-0103) | Phosphorus |
| New York | The Lake in Central Park (1702-0105) | Phosphorus |
| Niagara | Bergholtz Creek and tribs (0101-0004) | Phosphorus |
| Niagara | Hyde Park Lake (0101-0030) | Phosphorus |
| Niagara | Lake Ontario Shoreline, Western (0301-0053) 9 | Phosphorus |
| Niagara | Lake Ontario Shoreline, Western (0301-0072) 9 | Phosphorus |
| Oneida | Ballou, Nail Creeks (1201-0203) | Phosphorus |
| Onondaga | Ley Creek and tribs (0702-0001) 10 | Nutrients (phosphorus) |
| Onondaga | Minor Tribs to Onondaga Lake (0702-0022) 10 | Nutrients (phosphorus) |
| Onondaga | Minor Tribs to Onondaga Lake (0702-0022) 10 | Nitrogen (NH3, NO2) |
| Onondaga | Onondaga Creek, Lower (0702-0023) 10 | Nutrients (phosphorus) |
| Onondaga | Onondaga Creek, Lower, and tribs (0702-0023) | Turbidity |
| Onondaga | Onondaga Creek, Middle, and tribs (0702-0004) | Turbidity |
| Onondaga | Onondaga Creek, Upper, and tribs (0702-0024) | Turbidity |
| Ontario | Great Brook and minor tribs (0704-0034) | Phosphorus 2 |
| Ontario | Great Brook and minor tribs (0704-0034) | Silt/Sediment |
| Ontario | Hemlock Lake Outlet and minor tribs (0402-0013) | Phosphorus |

| | | |
|---|---|---|
| Ontario | Honeoye Lake (0402-0032) | Phosphorus |
| Orange | Brown Pond Reservoir (1303-0013) | Phosphorus |
| Orange | Lake Washington (1303-0012) | Phosphorus |
| Orange | Minor Tribs to Middle Wallkill (1306-0061) | Phosphorus |
| Orange | Monhagen Brook and tribs (1306-0074) | Phosphorus |
| Orange | Orange Lake (1301-0008) [16] | Phosphorus |
| Orange | Quaker Creek and tribs (1306-0025) | Phosphorus |
| Orange | Wallkill River, Middle, Main Stem (1306-0038) | Phosphorus |
| Orange | Wallkill River, Upper, and Minor tribs (1306-0017) | Phosphorus |
| Orleans | Glenvwood Lake (0301-0041) | Phosphorus |
| Orleans | Lake Ontario Shoreline, Western (0301-0070) 9 | Phosphorus |
| Orleans | Lake Ontario Shoreline, Western (0301-0071) 9 | Phosphorus |
| Oswego | Lake Neatahwanta (0701-0018) | Nutrients (phosphorus) |
| Oswego | Pleasant Lake (0703-0047) | Phosphorus |
| Putnam | Lost Lake, Putnam Lake (1302-0053) | Phosphorus |
| Putnam | Minor Tribs to Croton Falls Reservoir (1302-0001) | Phosphorus |
| Queens | Bergen Basin (1701-0009) 18 | Nitrogen |
| Queens | Jamaica Bay, Eastern, and tribs, Queens (1701-0005) 18 | Nitrogen |
| Queens | Kissena Lake (1702-0258) | Phosphorus |
| Queens | Meadow Lake (1702-0030) | Phosphorus |
| Queens | Shellbank Basin (1701-0001) 18 | Nitrogen |
| Queens | Willow Lake (1702-0031) | Phosphorus |
| Rensselaer | Nassau Lake (1310-0001) | Phosphorus |
| Rensselaer | Snyders Lake (1301-0043) | Phosphorus |
| Richmond | Grassmere Lake/Bradys Pond (1701-0357) | Phosphorus |
| Rockland | Congers Lake, Swartout Lake (1501-0019) | Phosphorus |
| Rockland | Rockland Lake (1501-0021) | Phosphorus |
| Saratoga | Ballston Lake (1101-0036) | Phosphorus |
| Saratoga | Dwaas Kill and tribs (1101-0007) | Phosphorus |
| Saratoga | Dwaas Kill and tribs (1101-0007) | Silt/Sediment |
| Saratoga | Lake Lonely (1101-0034) | Phosphorus |
| Saratoga | Round Lake (1101-0060) | Phosphorus |
| Saratoga | Tribs to Lake Lonely (1101-0001) | Phosphorus |
| Schenectady | Collins Lake (1201-0077) | Phosphorus |
| Schenectady | Duane Lake (1311-0006) | Phosphorus |
| Schenectady Lake | Mariaville Lake (1201-0113) | Phosphorus |
| Schuyler | Cayuta Lake (0603-0005) | Phosphorus |
| Seneca | Reeder Creek and tribs (0705-0074) | Phosphorus |

| | | |
|---|---|---|
| St.Lawrence | Black Lake Outlet, Black Lake (0906-0001) | Phosphorus |
| St.Lawrence | Fish Creek and minor tribs (0906-0026) | Phosphorus |
| Steuben | Smith Pond (0502-0012) | Phosphorus |
| Suffolk | Agawam Lake (1701-0117) | Phosphorus |
| Suffolk | Big/Little Fresh Ponds (1701-0125) | Phosphorus |
| Suffolk | Canaan Lake (1701-0018) | Phosphorus |
| Suffolk | Canaan Lake (1701-0018) | Silt/Sediment |
| Suffolk | Fresh Pond (1701-0241) | Phosphorus |
| Suffolk | Great South Bay, East (1701-0039) | Nitrogen |
| Suffolk | Great South Bay, Middle (1701-0040) | Nitrogen |
| Suffolk | Great South Bay, West (1701-0173) | Nitrogen |
| Suffolk | Lake Ronkonkoma (1701-0020) | Phosphorus |
| Suffolk | Mattituck/Marratooka Pond (1701-0129) | Phosphorus |
| Suffolk | Mill and Seven Ponds (1701-0113) | Phosphorus |
| Suffolk | Millers Pond (1702-0013) | Phosphorus |
| Suffolk | Moriches Bay, East (1701-0305) | Nitrogen |
| Suffolk | Moriches Bay, West (1701-0038) | Nitrogen |
| Suffolk | Quantuck Bay (1701-0042) | Nitrogen |
| Suffolk | Shinnecock Bay and Inlet (1701-0033) | Nitrogen |
| Suffolk | Tidal Tribs to West Moriches Bay (1701-0312) | Nitrogen |
| Sullivan | Bodine, Mongomery Lakes (1401-0091) | Phosphorus |
| Sullivan | Davies Lake (1402-0047) | Phosphorus |
| Sullivan | Evens Lake (1402-0004) | Phosphorus |
| Sullivan | Pleasure Lake (1402-0055) | Phosphorus |
| Sullivan | Swan Lake (1401-0063) | Phosphorus |
| Tompkins | Cayuga Lake, Southern End (0705-0040) | Phosphorus |
| Tompkins | Cayuga Lake, Southern End (0705-0040) | Silt/Sediment |
| Ulster | Ashokan Reservoir (1307-0004) | Silt/Sediment |
| Ulster | Esopus Creek, Lower, Main Stem (1307-0010) [17] | Turbidity |
| Ulster | Esopus Creek, Middle, Main Stem (1307-0003) 17 | Turbidity |
| Ulster | Esopus Creek, Upper, and minor tribs (1307-0007)[3] | Silt/Sediment |
| Ulster | Wallkill River, Lower, Main Stem (1306-0027) | Phosphorus |
| Warren | Hague Brook and tribs (1006-0006) | Silt/Sediment |
| Warren | Huddle/Finkle Brooks and tribs (1006-0003) | Silt/Sediment |
| Warren | Indian Brook and tribs (1006-0002) | Silt/Sediment |
| Warren | Lake George (1006-0016) and tribs | Silt/Sediment |
| Warren | Tribs to Lake George, East Shore (1006-0020) | Silt/Sediment |
| Warren | Tribs to Lake George, Lk.George Village (1006-0008) | Silt/Sediment |
| Washington | Wood Cr/Champlain Canal and tribs (1005-0036) | Phosphorus |

| | | |
|---|---|---|
| Westchester | Lake Katonah (1302-0136) | Phosphorus |
| Westchester | Lake Lincolndale (1302-0089) | Phosphorus |
| Westchester | Lake Meahagh (1301-0053) | Phosphorus |
| Westchester | Lake Mohegan (1301-0149) | Phosphorus |
| Westchester | Lake Shenorock (1302-0083) | Phosphorus |
| Westchester | Mamaroneck River, Lower (1702-0071) | Silt/Sediment |
| Westchester | Mamaroneck River, Upp, & minor tribs (1702-0123) | Silt/Sediment |
| Westchester | Saw Mill River (1301-0007) | Phosphorus |
| Westchester | Saw Mill River, Middle, and tribs (1301-0100) | Phosphorus |
| Westchester | Sheldrake River (1702-0069) | Phosphorus |
| Westchester | Sheldrake River (1702-0069) | Silt/Sedimnt |
| Westchester | Silver Lake (1702-0040) | Phosphorus |
| Westchester | Teatown Lake (1302-0150) | Phosphorus |
| Westchester | Truesdale Lake (1302-0054) | Phosphorus |
| Westchester | Wallace Pond (1301-0140) | Phosphorus |

## APPENDIX E – List of NYSDEC Regional Offices

| Region | Covering the following counties: | DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators | DIVISION OF WATER (DOW) Water (SPDES) Program |
|---|---|---|---|
| 1 | Nassau and Suffolk | 50 Circle Road<br>Stony Brook, NY 11790<br>Tel. (631) 444-0365 | 50 Circle Road<br>Stony Brook, NY 11790-3409<br>Tel. (631) 444-0405 |
| 2 | Bronx, Kings, New York, Queens and Richmond | 1 Hunters Point Plaza,<br>47-40 21st St.<br>Long Island City, NY 11101-5407<br>Tel. (718) 482-4997 | 1 Hunters Point Plaza,<br>47-40 21st St.<br>Long Island City, NY 11101-5407<br>Tel. (718) 482-4933 |
| 3 | Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester | 21 South Putt Corners Road<br>New Paltz, NY 12561-1696<br>Tel. (845) 256-3059 | 220 White Plains Road, Suite 110<br>Tel. (914) 428 - 2505 |
| 4 | Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie | 1130 North Westcott Road<br>Schenectady, NY 12306-2014<br>Tel. (518) 357-2069 | 1130 North Westcott Road<br>Schenectady, NY 12306-2014<br>Tel. (518) 357-2045 |
| 5 | Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington | 1115 State Route 86, Po Box 296<br>Ray Brook, NY 12977-0296<br>Tel. (518) 897-1234 | 232 Golf Course Road<br>Warrensburg, NY 12885-1172<br>Tel. (518) 623-1200 |
| 6 | HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE | STATE OFFICE BUILDING<br>317 WASHINGTON STREET<br>WATERTOWN, NY 13601-3787<br>TEL. (315) 785-2245 | STATE OFFICE BUILDING<br>207 GENESEE STREET<br>UTICA, NY 13501-2885<br>TEL. (315) 793-2554 |
| 7 | BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS | 5786 WIDEWATERS PARKWAY<br>SYRACUSE, NY 13214-1867<br>TEL. (315) 426-7438 | 5786 WIDEWATERS PARKWAY<br>SYRACUSE, NY 13214-1867<br>TEL. (315) 426-7500 |
| 8 | CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES | 6274 EAST AVON-LIMA<br>ROADAVON, NY 14414-9519<br>TEL. (585) 226-2466 | 6274 EAST AVON-LIMA RD.<br>AVON, NY 14414-9519<br>TEL. (585) 226-2466 |
| 9 | ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING | 700 DELAWARE AVENUE<br>BUFFALO, NY 14209-2999<br>TEL. (716) 851-7165 | 700 DELAWARE AVENUE<br>BUFFALO, NY 14209-2999<br>TEL. (716) 851-7070 |

## APPENDIX F – SWPPP Preparer Certification Form

The SWPPP Preparer Certification Form required by this permit begins on the following page.

# SWPPP Preparer Certification Form

**SPDES Construction General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)**

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC via nForm.)

**Project/Site Name:**

**eNOI Submission ID:**

**Owner/Operator Name:**

## Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) has been prepared in accordance with the requirements of GP-0-25-001. I certify under penalty of law that the SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SWPPP Preparer First Name | MI | SWPPP Preparer Last Name

Signature | Date

Revised: May 2024

## APPENDIX G – MS4 SWPPP Acceptance Form

The MS4 SWPPP Acceptance Form required by this permit begins on the following page.

# MS4 SWPPP Acceptance Form

for construction activities seeking authorization under the

**SPDES Construction General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)**

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC via nForm.)

| |
|---|
| **I. Project Owner/Operator Information** |
| 1. Owner/Operator Name: |
| 2. Contact Person: |
| 3. Street Address: |
| 4. City/State/Zip: |
| **II. Project Site Information** |
| 5. Project/Site Name: |
| 6. Street Address: |
| 7. City/State/Zip: |
| **III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information** |
| 8. SWPPP Reviewed by: |
| 9. Title/Position: |
| 10. Date Final SWPPP Reviewed and Accepted: |
| **IV. Regulated MS4 Information** |
| 11. Name of MS4 Operator: |
| 12. MS4 SPDES Permit Identification Number: NYR20A |
| 13. Street Address: |
| 14. City/State/Zip: |
| 15. Telephone Number: |
| |

## MS4 SWPPP Acceptance Form - continued

**V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative**

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in section II. of this form has been reviewed and meets the substantive requirements in the SPDES Construction General Permit (CGP) for Stormwater Discharges from Construction Activity, GP-0-25-001. Note: The MS4 Operator, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 Operator does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name[1]:

Title/Position:

Signature:

Date:

**VI. Additional Information**

[1] Printed name of the principal executive officer or ranking elected official for the MS4 Operator or their duly authorized representative in accordance with CGP Part VII.J.2.

## APPENDIX H – NYCDEP SWPPP Acceptance/Approval Form

The City of New York Department of Environmental Protection (NYCDEP) SWPPP Acceptance/Approval form required by this permit begins on the following page.

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis
*59-17 Junction Blvd., 9th Floor; Flushing, NY 11373*

# SWPPP Acceptance/Approval

Application Number:

## I. Project Owner/Operator Information

1. Owner/Operator Name:
2. Contact Person:
3. Street Address:
4. City/State/Zip:

## II. Project Site Information

5. Project/Site Name:
6. Street Address:
7. City/State/Zip:

## III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance/Approval

8. SWPPP Reviewed by:
9. Title/Position: /
10. Date Final SWPPP Reviewed and Accepted:
11. Acceptance/Approval Expiration Date:

## IV. Regulated MS4 Information for projects that require coverage under the NY State Pollution Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity

12. Name of MS4: *CITY OF NEW YORK*
13. MS4 SPDES Permit Identification Number: *NY-0287890*
14. Contact Person:
15. Street Address: *59-17 Junction Blvd. 9th Floor*
16. City/State/Zip: *Flushing, NY 11373*
17. Telephone Number:

Projects in the MS4 area must submit a copy of this SWPPP Acceptance with a Notice of Intent for coverage under the NY SPDES General Permit for Stormwater Discharges from Construction Activity to: NYS Department of Environmental Conservation, Division of Water; 625 Broadway, 4th Floor; Albany, New York 12233-3505.

## V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s).

Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

## VI. Conditions of Acceptance/Approval and Additional Information

Projects in the MS4 area must submit a copy of this SWPPP Acceptance with a Notice of Intent for coverage under the NY SPDES General Permit for Stormwater Discharges from Construction Activity to: NYS Department of Environmental Conservation, Division of Water; 625 Broadway, 4th Floor; Albany, New York 12233-3505.

## APPENDIX I – MS4 No Jurisdiction Form

The MS4 No Jurisdiction Form required by this permit begins on the following page.

# MS4 No Jurisdiction Form

for Construction Activities seeking authorization under the

**SPDES Construction General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)**

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC via nForm.)

**I. Project Owner/Operator Information**

a. Owner/Operator Name:

b. Contact Person:

c. Street Address:

d. City/State/Zip:

**II. Project Site Information**

a. Project/Site Name:

b. Street Address:

c. City/State/Zip:

d. eNOI Submission ID:

**III. Traditional Land Use Control MS4 Operator Information**

a. Name of MS4 Operator:

b. MS4 SPDES Permit ID Number: NYR20A

c. Street Address:

d. City/State/Zip:

e. Telephone Number:

**IV. Certification Statement**

In accordance with CGP Part I.D.2.b.ii.3., I hereby certify that the Traditional Land Use Control MS4 Operator identified in section III. of this form does not have review authority over the construction project identified in section II. of this form, which is owned/operated by the entity identified in section I. of this form. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

a. Printed name of the principal executive officer or ranking elected official for the MS4 Operator or their duly authorized representative in accordance with CGP Part VII.J.2.:

b. Title/Position:

c. Signature:

d. Date:

## APPENDIX J – Owner/Operator Certification Form

The Owner/Operator Certification Form required by this permit begins on the following page.

# Owner/Operator Certification Form

***SPDES Construction General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)***

(In accordance with CGP Part I.D.2.b. or Part I.F.2. and 3., the completed form must be attached to the eNOI or the Request to Continue Coverage, and submitted to NYSDEC via nForm.

**Project/Site Name:** _____

**eNOI Submission ID:** _____

**eNOI Submitted by:** ☐ **Owner/Operator** ☐ **SWPPP Preparer** ☐ **Other**

## Certification Statement - Owner/Operator

I hereby certify that I read, and will comply with, the GP-0-25-001 permit requirements. I understand that authorization to discharge under the permit for the project/site named above is dependent on receipt of a Letter of Authorization or a Letter of Continued Coverage from the New York State Department of Environmental Conservation (NYSDEC) in accordance with CGP Part I.D.3.b. or Part I.F.4. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Operator First Name MI Owner/Operator Last Name

_____

Signature

_____

Date

Revised: May 2024

# APPENDIX 5

## DRAFT NOTICE OF INTENT (NOI)

0644089821

# NOTICE OF INTENT

**New York State Department of Environmental Conservation**
**Division of Water**
**625 Broadway, 4th Floor**
**Albany, New York 12233-3505**

**NYR** _____ (for DEC use only)

**Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-15-002**

**All sections must be completed unless otherwise noted**. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

## -IMPORTANT-
## RETURN THIS FORM TO THE ADDRESS ABOVE

**OWNER/OPERATOR MUST SIGN FORM**

**Owner/Operator Information**

Owner/Operator (Company Name/Private Owner Name/Municipality Name)
Beekman Arts Center, LLC & Bay Ridge Studios, LLC

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Hassen

Owner/Operator Contact Person First Name
Nidal

Owner/Operator Mailing Address
268 Main Street

City
Beacon

State
NY

Zip
12508-

Phone (Owner/Operator)
845-838-0984

Fax (Owner/Operator)
---

Email (Owner/Operator)
nidalhassen7@gmail.com

FED TAX ID
-- (not required for individuals)

## Project Site Information

Project/Site Name
45 Beekman Street Mixed-Use Development

Street Address (NOT P.O. BOX)
45 Beekman Street

Side of Street
● **North** ○ **South** ○ **East** ○ **West**

City/Town/Village (THAT ISSUES BUILDING PERMIT)
City of Beacon

State: NY
Zip: 12508 -
County: Dutchess
DEC Region: 3

Name of Nearest Cross Street
North Avenue

Distance to Nearest Cross Street (Feet)
0

Project In Relation to Cross Street
○ **North** ○ **South** ○ **East** ● **West**

Tax Map Numbers
Section-Block-Parcel
5955-19-706012

Tax Map Numbers
5954-26-689900
& 5954-26-781983

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

**www.dec.ny.gov/imsmaps/stormwater/viewer.htm**

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

**X Coordinates (Easting)**: 73° 58' 43" W

**Y Coordinates (Northing)**: 41° 30' 34" N

2. What is the nature of this construction project?

○ **New Construction**

● **Redevelopment with increase in impervious area**

○ **Redevelopment with no increase in impervious area**

3. Select the predominant land use for both pre and post development conditions.
**SELECT ONLY ONE CHOICE FOR EACH**

**Pre-Development Existing Land Use**

- ○ FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ● COMMERCIAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ○ OTHER

**Post-Development Future Land Use**

- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION — Number of Lots
- ○ TOWN HOME RESIDENTIAL
- ● MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ○ OTHER

***Note**: for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

| Total Site Area | Total Area To Be Disturbed | Existing Impervious Area To Be Disturbed | Future Impervious Area Within Disturbed Area |
|---|---|---|---|
| 2.6 | 2.6 | 1.9 | 2.2 |

5. Do you plan to disturb more than 5 acres of soil at any one time? ○ **Yes** ● **No**

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

| A | B | C | D |
|---|---|---|---|
| 0 % | 100 % | 0 % | 0 % |

7. Is this a phased project? ○ **Yes** ● **No**

8. Enter the planned start and end dates of the disturbance activities.

**Start Date** 6/1/25 - **End Date** 6/1/26

TBD

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Name

Hudson River via municipal storm sewer

9a. Type of waterbody identified in Question 9?

- ○ Wetland / State Jurisdiction On Site (Answer 9b)
- ○ Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 9b)
- ○ Wetland / Federal Jurisdiction Off Site
- ○ Stream / Creek On Site
- ○ Stream / Creek Off Site
- ○ River On Site
- ● River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

9b. How was the wetland identified?

- ○ Regulatory Map
- ○ Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ○ Other (identify)

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-15-002? ○ **Yes** ● **No**

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-15-002? ○ **Yes** ● **No**

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? ○ **Yes** ● **No**
**If no, skip question 13.**

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? ○ **Yes** ● **No**
**If Yes, what is the acreage to be disturbed?**

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ○ **Yes** ● **No**

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ◉ **Yes** ○ **No** ○ **Unknown**

16. What is the name of the municipality/entity that owns the separate storm sewer system?

City of Beacon

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ **Yes** ◉ **No** ○ **Unknown**

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ○ **Yes** ◉ **No**

19. Is this property owned by a state authority, state agency, federal government or local government? ○ **Yes** ◉ **No**

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ○ **Yes** ◉ **No**

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ◉ **Yes** ○ **No**

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ◉ **Yes** ○ **No**
**If No, skip questions 23 and 27-39.**

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ◉ **Yes** ○ **No**

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ● **Professional Engineer (P.E.)**
- ○ **Soil and Water Conservation District (SWCD)**
- ○ **Registered Landscape Architect (R.L.A)**
- ○ **Certified Professional in Erosion and Sediment Control (CPESC)**
- ○ **Owner/Operator**
- ○ **Other**

SWPPP Preparer
Colliers Engineering & Design

Contact Name (Last, Space, First)
McCormack Connor

Mailing Address
555 Hudson Valley Avenue

City
New Windsor

State Zip
NY 12553-

Phone
845-875-4949

Fax
- -

Email
connor.mccormack@collierseng.com

**SWPPP Preparer Certification**

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-15-002. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

**First Name**
Connor

**MI**
P

**Last Name**
McCormack

**Signature**

**Date**
12/31/2024

25. Has a construction sequence schedule for the planned management practices been prepared? ● Yes ○ No

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

## Temporary Structural

- ○ Check Dams
- ○ Construction Road Stabilization
- ○ Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ○ Sediment Basin
- ○ Sediment Traps
- ● Silt Fence
- ● Stabilized Construction Entrance
- ● Storm Drain Inlet Protection
- ○ Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ● Temporary Swale
- ○ Turbidity Curtain
- ○ Water bars

## Biotechnical

- ○ Brush Matting
- ○ Wattling

## Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ● Grassed Waterway
- ○ Mulching
- ○ Protecting Vegetation
- ○ Recreation Area Improvement
- ● Seeding
- ● Sodding
- ○ Straw/Hay Bale Dike
- ○ Streambank Protection
- ● Temporary Swale
- ● Topsoiling
- ○ Vegetating Waterways

## Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ● Grade Stabilization Structure
- ● Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ○ Retaining Wall
- ○ Riprap Slope Protection
- ● Rock Outlet Protection
- ○ Streambank Protection

**Other**

**Post-construction Stormwater Management Practice (SMP) Requirements**

**Important: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- ● **Preservation of Undisturbed Areas**
- ○ **Preservation of Buffers**
- ● **Reduction of Clearing and Grading**
- ○ **Locating Development in Less Sensitive Areas**
- ● **Roadway Reduction**
- ● **Sidewalk Reduction**
- ● **Driveway Reduction**
- ○ **Cul-de-sac Reduction**
- ○ **Building Footprint Reduction**
- ● **Parking Reduction**

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

- ● All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- ○ Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

**Total WQv Required**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 0 | . | 0 | 3 | 6 |

**acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

**Note:** Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

**Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)**

| | Total Contributing Area (acres) | | Total Contributing Impervious Area(acres) |
|---|---|---|---|
| **RR Techniques (Area Reduction)** | | | |
| ○ Conservation of Natural Areas (RR-1) | | and/or | |
| ○ Sheetflow to Riparian Buffers/Filters Strips (RR-2) | | and/or | |
| ○ Tree Planting/Tree Pit (RR-3) | | and/or | |
| ○ Disconnection of Rooftop Runoff (RR-4) | | and/or | |
| **RR Techniques (Volume Reduction)** | | | |
| ○ Vegetated Swale (RR-5) | | | |
| ○ Rain Garden (RR-6) | | | |
| ○ Stormwater Planter (RR-7) | | | |
| ○ Rain Barrel/Cistern (RR-8) | | | |
| ○ Porous Pavement (RR-9) | | | |
| ○ Green Roof (RR-10) | | | |
| **Standard SMPs with RRv Capacity** | | | |
| ○ Infiltration Trench (I-1) | | | |
| ○ Infiltration Basin (I-2) | | | |
| ○ Dry Well (I-3) | | | |
| ○ Underground Infiltration System (I-4) | | | |
| ● Bioretention (F-5) | | | 0.31 |
| ○ Dry Swale (O-1) | | | |
| **Standard SMPs** | | | |
| ○ Micropool Extended Detention (P-1) | | | |
| ○ Wet Pond (P-2) | | | |
| ○ Wet Extended Detention (P-3) | | | |
| ○ Multiple Pond System (P-4) | | | |
| ○ Pocket Pond (P-5) | | | |
| ○ Surface Sand Filter (F-1) | | | |
| ○ Underground Sand Filter (F-2) | | | |
| ○ Perimeter Sand Filter (F-3) | | | |
| ○ Organic Filter (F-4) | | | |
| ○ Shallow Wetland (W-1) | | | |
| ○ Extended Detention Wetland (W-2) | | | |
| ○ Pond/Wetland System (W-3) | | | |
| ○ Pocket Wetland (W-4) | | | |
| ○ Wet Swale (O-2) | | | |

**Table 2 - Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)**

| Alternative SMP | Total Contributing Impervious Area(acres) |
|---|---|
| ● Hydrodynamic ..... | 1.26 |
| ○ Wet Vault ..... | |
| ○ Media Filter ..... | |
| ○ Other _____ ..... | |

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name: First Defense Hydro International

Manufacturer:

**Note**: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

**Total RRv provided**

0.015 **acre-feet**

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

○ **Yes** ● **No**

**If Yes, go to question 36.**
**If No, go to question 32.**

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]

**Minimum RRv Required**

0.014 **acre-feet**

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

● **Yes** ○ **No**

**If Yes, go to question 33.**
**Note**: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.
**If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.**

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

**Note**: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

**WQv Provided**

0.022 **acre-feet**

**Note**: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). 0.036

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ● **Yes** ○ **No**

**If Yes, go to question 36.**
**If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.**

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

**CPv Required** . **acre-feet**

**CPv Provided** . **acre-feet**

36a. The need to provide channel protection has been waived because:

● Site discharges directly to tidal waters or a fifth order or larger stream.

○ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

**Total Overbank Flood Control Criteria (Qp)**

**Pre-Development** . **CFS**

**Post-development** . **CFS**

**Total Extreme Flood Control Criteria (Qf)**

**Pre-Development** . **CFS**

**Post-development** . **CFS**

37a. The need to meet the Qp and Qf criteria has been waived because:

- (●) Site discharges directly to tidal waters or a fifth order or larger stream.
- ( ) Downstream analysis reveals that the Qp and Qf controls are not required

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? (●) **Yes** ( ) **No**

If Yes, Identify the entity responsible for the long term Operation and Maintenance

Beekman Arts Center, LLC &
Bay Ridge Studios, LLC

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required(#28). (See question 32a) This space can also be used for other pertinent project information.

40. Identify other DEC permits, existing and new, that are required for this project/facility.

- ○ Air Pollution Control
- ○ Coastal Erosion
- ○ Hazardous Waste
- ○ Long Island Wells
- ○ Mined Land Reclamation
- ○ Solid Waste
- ○ Navigable Waters Protection / Article 15
- ○ Water Quality Certificate
- ○ Dam Safety
- ○ Water Supply
- ○ Freshwater Wetlands/Article 24
- ○ Tidal Wetlands
- ○ Wild, Scenic and Recreational Rivers
- ○ Stream Bed or Bank Protection / Article 15
- ○ Endangered or Threatened Species(Incidental Take Permit)
- ○ Individual SPDES
- ○ SPDES Multi-Sector GP
- ○ Other
- ● None

41. Does this project require a US Army Corps of Engineers Wetland Permit? ○ **Yes** ● **No**
**If Yes, Indicate Size of Impact.** . 

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? ● **Yes** ○ **No**
**(If No, skip question 43)**

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ○ **Yes** ○ **No**
TBD

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.

## Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

**Print First Name**: Nidal

**MI**:

**Print Last Name**: Hassen

**Owner/Operator Signature**:

**Date**: / /

# APPENDIX 6

# DRAFT NOTICE OF TERMINATION (NOT)

**New York State Department of Environmental Conservation**
**Division of Water**
**625 Broadway, 4th Floor**
**Albany, New York 12233-3505**
***(NOTE: Submit completed form to address above)***

# NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

**Please indicate your permit identification number:** NYR ____ ____ ____ ____ ____ ____

**I. Owner or Operator Information**

1. Owner/Operator Name: Beekman Arts Center, LLC & Bay Ridge Studios, LLC

2. Street Address: 268 Main Street

3. City/State/Zip: Beacon, NY 12508

4. Contact Person: Nidal Hassen | 4a. Telephone: 845 838 0984

4b. Contact Person E-Mail: nidalhassen7@gmail.com

**II. Project Site Information**

5. Project/Site Name: 45 Beekman Street Mixed-Use Development

6. Street Address: 45 Beekman Street

7. City/Zip Beacon, NY 12508

8. County: Dutchess

**III. Reason for Termination**

9a. □ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ____ ____ ____ ____ ____ ____
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. □ Other (Explain on Page 2)

**IV. Final Site Information**:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? □ yes □ no ( If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

## NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

□ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

**V. Additional Information/Explanation:**

(Use this section to answer questions 9c. and 10b., if applicable)

**VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative** (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

| Signature: | Date: |
|---|---|

## NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

**VII. Qualified Inspector Certification - Final Stabilization**:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

| | |
|---|---|
| Printed Name: | |
| Title/Position: | |
| Signature: | Date: |

**VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):**

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

| | |
|---|---|
| Printed Name: | |
| Title/Position: | |
| Signature: | Date: |

**IX. Owner or Operator Certification**

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

| | |
|---|---|
| Printed Name: | |
| Title/Position: | |
| Signature: | Date: |

(NYS DEC Notice of Termination - January 2015)

# APPENDIX 7

# MS4 ACCEPTANCE FORM

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

**NYS Department of Environmental Conservation**
**Division of Water**
**625 Broadway, 4th Floor**
**Albany, New York 12233-3505**

# MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

**for**

**Construction Activities Seeking Authorization Under SPDES General Permit**

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

| | |
|---|---|
| **I. Project Owner/Operator Information** | |
| 1. Owner/Operator Name: | Beekman Arts Center, LLC & Bay Ridge Studios, LLC |
| 2. Contact Person: | Nidal Hassen |
| 3. Street Address: | 268 Main Street |
| 4. City/State/Zip: | Beacon, NY 12508 |
| **II. Project Site Information** | |
| 5. Project/Site Name: | 45 Beekman Street Mixed-Use Development |
| 6. Street Address: | 45 Beekman Street |
| 7. City/State/Zip: | Beacon, NY 12508 |
| **III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information** | |
| 8. SWPPP Reviewed by: | |
| 9. Title/Position: | |
| 10. Date Final SWPPP Reviewed and Accepted: | |
| **IV. Regulated MS4 Information** | |
| 11. Name of MS4: | |
| 12. MS4 SPDES Permit Identification Number: NYR20A | |
| 13. Contact Person: | |
| 14. Street Address: | |
| 15. City/State/Zip: | |
| 16. Telephone Number: | |

## MS4 SWPPP Acceptance Form - continued

**V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative**

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

**VI. Additional Information**

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

# APPENDIX 8

## NRCS HYDROLOGIC SOIL MAPPING




Map Scale: 1:1,110 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Soil Rating Lines**

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Soil Rating Points**

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**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 1:24,000.

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: Dutchess County, New York
Survey Area Data: Version 20, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 21, 2022—Oct 27, 2022

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.

# Hydrologic Soil Group

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| DwB | Dutchess-Cardigan complex, undulating, rocky | B | 1.9 | 100.0% |
| **Totals for Area of Interest** | | | **1.9** | **100.0%** |

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Higher

# APPENDIX 9

# APPENDIX H – CONSTRUCTION SITE LOG BOOK

**STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES**

# CONSTRUCTION SITE LOG BOOK

## Table of Contents

I. Pre-Construction Meeting Documents
   a. Preamble to Site Assessment and Inspections
   b. Operator's Certification
   c. Qualified Professional's Credentials & Certification
   d. Pre-Construction Site Assessment Checklist

II. Construction Duration Inspections
   a. Directions
   b. Modification to the SWPPP

III. Monthly Summary Reports

IV. Monitoring, Reporting, and Three-Month Status Reports
   a. Operator's Compliance Response Form

Properly completing forms such as those contained in Appendix H meet the inspection requirement of NYS-DEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

## I. PRE-CONSTRUCTION MEETING DOCUMENTS

**Project Name** _____

**Permit No.** _____ **Date of Authorization** _____

**Name of Operator** _____

**Prime Contractor** _____

### a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified professional[1] conduct an assessment of the site prior to the commencement of construction[2] and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).

2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

**b. Operators Certification**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law.

**Name (please print):** _____

**Title** _____ **Date:** _____

**Address:** _____

**Phone:** _____ **Email:** _____

**Signature:** _____

**c. Qualified Professional's Credentials & Certification**

"I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

**Name (please print):** _____

**Title** _____ **Date:** _____

**Address:** _____

**Phone:** _____ **Email:** _____

**Signature:** _____

**d. Pre-construction Site Assessment Checklist**
**(NOTE: Provide comments below as necessary)**

1. Notice of Intent, SWPPP, and Contractors Certification:

**Yes No NA**

[ ] [ ] [ ] Has a Notice of Intent been filed with the NYS Department of Conservation?
[ ] [ ] [ ] Is the SWPPP on-site? Where?_____
[ ] [ ] [ ] Is the Plan current? What is the latest revision date?_____
[ ] [ ] [ ] Is a copy of the NOI (with brief description) onsite? Where?_____
[ ] [ ] [ ] Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

**Yes No NA**

[ ] [ ] [ ] Are construction limits clearly flagged or fenced?
[ ] [ ] [ ] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
[ ] [ ] [ ] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

**Yes No NA**

[ ] [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed.
[ ] [ ] [ ] Bodies of water located either on site or in the vicinity of the site have been identified and protected.
[ ] [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed.
[ ] [ ] [ ] Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Entrance

**Yes No NA**

[ ] [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
[ ] [ ] [ ] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
[ ] [ ] [ ] Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Perimeter Sediment Controls

**Yes No NA**

[ ] [ ] [ ] Silt fence material and installation comply with the standard drawing and specifications.
[ ] [ ] [ ] Silt fences are installed at appropriate spacing intervals
[ ] [ ] [ ] Sediment/detention basin was installed as first land disturbing activity.
[ ] [ ] [ ] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

**Yes No NA**

[ ] [ ] [ ] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
[ ] [ ] [ ] The plan is contained in the SWPPP on page _____
[ ] [ ] [ ] Appropriate materials to control spills are onsite. Where? _____

## II. CONSTRUCTION DURATION INSPECTIONS

**a. Directions:**
**Inspection Forms will be filled out during the entire construction phase of the project.**
Required Elements:

(1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

(2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

(3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

(4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

(5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

(6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

**SITE PLAN/SKETCH**

| | |
|---|---|
| **Inspector (print name)** | **Date of Inspection** |
| **Qualified Professional (print name)** | **Qualified Professional Signature** |

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

**Maintaining Water Quality**

Yes No NA
[ ] [ ] [ ] Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
[ ] [ ] [ ] Is there residue from oil and floating substances, visible oil film, or globules or grease?
[ ] [ ] [ ] All disturbance is within the limits of the approved plans.
[ ] [ ] [ ] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

**Housekeeping**

1. General Site Conditions
Yes No NA
[ ] [ ] [ ] Is construction site litter and debris appropriately managed?
[ ] [ ] [ ] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
[ ] [ ] [ ] Is construction impacting the adjacent property?
[ ] [ ] [ ] Is dust adequately controlled?

2. Temporary Stream Crossing
Yes No NA
[ ] [ ] [ ] Maximum diameter pipes necessary to span creek without dredging are installed.
[ ] [ ] [ ] Installed non-woven geotextile fabric beneath approaches.
[ ] [ ] [ ] Is fill composed of aggregate (no earth or soil)?
[ ] [ ] [ ] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

**Runoff Control Practices**

1. Excavation Dewatering
Yes No NA
[ ] [ ] [ ] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
[ ] [ ] [ ] Clean water from upstream pool is being pumped to the downstream pool.
[ ] [ ] [ ] Sediment laden water from work area is being discharged to a silt-trapping device.
[ ] [ ] [ ] Constructed upstream berm with one-foot minimum freeboard.

2. Level Spreader
Yes No NA
[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
[ ] [ ] [ ] Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales
Yes No NA
[ ] [ ] [ ] Installed per plan with minimum side slopes 2H:1V or flatter.
[ ] [ ] [ ] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
[ ] [ ] [ ] Sediment-laden runoff directed to sediment trapping structure

4. Stone Check Dam

Yes No NA

[ ] [ ] [ ] Is channel stable? (flow is not eroding soil underneath or around the structure).
[ ] [ ] [ ] Check is in good condition (rocks in place and no permanent pools behind the structure).
[ ] [ ] [ ] Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Installed concurrently with pipe installation.

**Soil Stabilization**

1. Topsoil and Spoil Stockpiles

Yes No NA

[ ] [ ] [ ] Stockpiles are stabilized with vegetation and/or mulch.
[ ] [ ] [ ] Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

[ ] [ ] [ ] Temporary seedings and mulch have been applied to idle areas.
[ ] [ ] [ ] 4 inches minimum of topsoil has been applied under permanent seedings

**Sediment Control Practices**

1. Stabilized Construction Entrance

Yes No NA

[ ] [ ] [ ] Stone is clean enough to effectively remove mud from vehicles.
[ ] [ ] [ ] Installed per standards and specifications?
[ ] [ ] [ ] Does all traffic use the stabilized entrance to enter and leave site?
[ ] [ ] [ ] Is adequate drainage provided to prevent ponding at entrance?

2. Silt Fence

Yes No NA

[ ] [ ] [ ] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
[ ] [ ] [ ] Joints constructed by wrapping the two ends together for continuous support.
[ ] [ ] [ ] Fabric buried 6 inches minimum.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
Sediment accumulation is ___% of design capacity.

**Sediment Control Practices (continued)**

3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)

**Yes No NA**

[ ] [ ] [ ] Installed concrete blocks lengthwise so open ends face outward, not upward.
[ ] [ ] [ ] Placed wire screen between No. 3 crushed stone and concrete blocks.
[ ] [ ] [ ] Drainage area is 1acre or less.
[ ] [ ] [ ] Excavated area is 900 cubic feet.
[ ] [ ] [ ] Excavated side slopes should be 2:1.
[ ] [ ] [ ] 2" x 4" frame is constructed and structurally sound.
[ ] [ ] [ ] Posts 3-foot maximum spacing between posts.
[ ] [ ] [ ] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation ___% of design capacity.

4. Temporary Sediment Trap

**Yes No NA**

[ ] [ ] [ ] Outlet structure is constructed per the approved plan or drawing.
[ ] [ ] [ ] Geotextile fabric has been placed beneath rock fill.

Sediment accumulation is ___% of design capacity.

5. Temporary Sediment Basin

**Yes No NA**

[ ] [ ] [ ] Basin and outlet structure constructed per the approved plan.
[ ] [ ] [ ] Basin side slopes are stabilized with seed/mulch.
[ ] [ ] [ ] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.

Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.
Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

**b. Modifications to the SWPPP (To be completed as described below)**

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
   a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
   b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

**Modification & Reason:**

# APPENDIX 10

# NYSDEC CONSTRUCTION STORMWATER INSPECTION MANUAL

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# Construction Stormwater Inspection Manual

**Primarily for Government Inspectors Evaluating Compliance with Construction Stormwater Control Requirements**

**New York State**
**Department of Environmental Conservation**

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Version 1.05 (8/27/07)


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## ATTACHMENTS


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Attachment 3 - Example Inspection Letter 15

# 1.0 INTRODUCTION AND PURPOSE

The New York State Department of Environmental Conservation Division of Water (DOW) considers there to be two types of inspections germane to construction stormwater; compliance inspections and self-inspections.

This manual is for use by DOW and other regulatory oversight construction stormwater inspectors in performing compliance inspections, as well as for site operators in performing self inspections. The manual should be used in conjunction with the *New York State Standards and Specifications for Erosion and Sediment Control,* August 2005.

## 1.1 Compliance Inspections

Regulatory compliance inspections are performed by regulatory oversight authorities such as DOW staff, or representatives of DOW and local municipal construction stormwater inspectors. These inspections are intended to determine compliance with the state or local requirements for control of construction stormwater through erosion and sediment control and post construction practices. Compliance inspections focus on determinations of compliance with legal and water quality standards. Typically, compliance inspections can be further sub-categorized to include comprehensive inspections, and follow-up or reconnaissance inspections.

Compliance inspectors will focus on determining whether:

- the project is causing water quality standard violations;
- the required Stormwater Pollution Prevention Plan (SWPPP) includes appropriate erosion and sediment controls and, to some extent, post construction controls;
- the owner/operator is complying with the SWPPP;
- where required, self-inspections are being properly performed; and
- where self-inspections are required, the owner/operator responds appropriately to the self-inspector's reports.

### 1.1.1 Comprehensive Inspection

Comprehensive inspections are designed to verify permittee compliance with all applicable regulatory requirements, effluent controls, and compliance schedules. This inspection involves records reviews, visual observations, and evaluations of management practices, effluents, and receiving waters.

Comprehensive inspections should be conducted according to a neutral or random inspection scheme, or in accordance with established priorities. A neutral monitoring scheme provides some objective basis for scheduling inspections and sampling visits by establishing a system (whether complex factor-based, alphabetic, or geographic) for setting prioritiesto ensure that a particular facility is not unfairly selected for inspection or sampling. The selection of which

facility to inspect must be made without bias to ensure that the regulatory oversight authority, if challenged for being arbitrary and capricious manner, can reasonably defend itself.

A neutral inspection scheme should set the criteria the inspector uses to choose which facilities to inspect, but the schedule for the actual inspection should remain confidential, and may be kept separate from the neutral plan.

A routine comprehensive compliance inspection is most effective when it is unannounced or conducted with very little advance warning.

1.1.2 Reconnaissance Inspection

A reconnaissance inspection is performed in lieu of, or following a comprehensive inspection to obtain a preliminary overview of an owner/operator's compliance program, to respond to a citizen complaint, or to assess a non-permitted site. The inspector performs a brief (generally about an hour) visual inspection of the site, discharges and receiving waters. A reconnaissance inspection uses the inspector's experience and judgement to summarize potential compliance problems, without conducting a full comprehensive inspection. The objective of a reconnaissance inspection is to expand inspection coverage without increasing inspection resource expenditures. The reconnaissance inspection is the shortest and least resource intensive of all inspections.

Reconnaissance inspections may be initiated in response to known or suspected violations, a public complaint, a violation of regulatory requirements, or as follow-up to verify that necessary actions were taken in response to a previous inspection.

**1.2 Self-inspections**

For some projects, the site owner/operator is required by their State Pollutant Discharge Elimination System (SPDES) Permit and/or local requirements to have a qualified professional[1] perform a "self-inspection" at the site. In self-inspections, the qualified professional determines whether the site is being managed in accordance with the SWPPP, and whether the SWPPP's recommended erosion and sediment controls are effective. If activities are not in accordance with the SWPPP, or if the SWPPP erosion and sediment controls are not effective, the qualified professional inspecting the site recommends corrections to the owner/operator.

[1] A "Qualified professional" is a person knowledgeable in the principles and practice of erosion and sediment controls, such as a licensed professional engineer, Certified Professional in Erosion and Sediment Control (CPESC), licensed landscape architect or soil scientist.

# 2.0 PRE-INSPECTION ACTIVITIES

## 2.1 Regulatory Oversight Authorities

This section is intended for inspectors with regulatory oversight authority such as agents of the DOW or a local municipality, or others acting on their behalf, such as county Soil and Water Conservation District staff. Examples of other regulatory oversight authorities include: the United States Environmental Protection Agency (EPA); New York City Department of Environmental Protection (DEP), Adirondack Park Agency (APA); the Lake George Park Commission (LGPC), and the Skaneateles Lake Watershed Authority (SLWA). Before arriving on-site to conduct the inspection, considerations concerning communication, documentation and equipment must be made.

Regulatory oversight authority is granted by state or local law to government agencies or, depending upon the particular law, an authorized representative of state or local government. SPDES rules 6 NYCRR 750-2.3 and Environmental Conservation Law 17-0303(6) and 17-0829(a) all allow for authorized representatives of the (NYSDEC) commissioner to perform all the duties of an inspector.

### 2.1.1 Communication

Coordination with Other Entities

Where appropriate, prior to selecting sites for inspection, compliance inspectors should communicate with other regulatory oversight authorities to avoid unnecessary duplication or to coordinate follow-up to inspections performed by other regulatory oversight authorities.

Announced vs. Unannounced Inspection

Inspections may be announced or unannounced. Each method has its own advantages and disadvantages. Unannounced inspections are preferred, however many job sites are not continuously manned, or not always staffed by someone who is familiar with the SWPPP, thus necessitating an announced inspection. As an alternative, when an announced inspection is necessary, inspectors should try to give as little advanced warning as possible (24 hours is suggested).

Itinerary

For obvious safety reasons, inspectors should be sure to inform someone in their office which site or sites they will be visiting prior to leaving the to perform inspections.

### 2.1.2 Documentation

Data Review

The inspector should review any available information such as:

- Notice of Intent
- Stormwater Pollution Prevention Plan
- Past inspection records
- Phasing plan

- Construction sequence
- Inspection and Maintenance schedules
- Site specific issues
- Consent Orders
- Access agreements

Inspection Form

The inspector should have copies of, and be familiar with, the inspection form used by their regulatory oversight authority (example in Attachment 1) before leaving the office. Static information such as name, location and permit number can be entered onto the inspection form prior to arriving at the inspection site.

Credentials

Inspectors should always carry proper identification to prove that they are employed by an entity with jurisdictional authority. Failure to display proper credentials may be legal grounds for denial of entry to a site.

2.1.3 Equipment

Personal Protective Equipment

DOW employees must conform to the DOW Health and Safety policy as it relates to personal protective equipment. Other regulatory oversight authorities should have their own safety policies or, if not, may wish to consult the OSHA health and safety tool at: www.osha.gov/dep/etools/ehasp/ to develop a health and safety plan.

The following is a list of some of the most common health and safety gear that may be needed:

- Hard hat (Class G, Type1 or better)
- Safety toe shoes
- Reflective vest
- Hearing protection (to achieve 85 dBA - 8 hr TWA)
- Safety glasses with side shields

If the construction is on an industrial site or a hazardous waste site, special training may be required prior to entering the site. The inspector should consult with OSHA or NYSDEC prior to entering such a site.

Monitoring Equipment

The following is a list of some equipment that may be helpful to document facts and verify compliance:

- Digital Camera
- Measuring tape or wheel
- Hand level or clinometer
- Turbidity meter (in limited circumstances)

### 2.2 Permittee's Self-inspection

This section is intended for qualified professionals who conduct site self-inspections on behalf of owner/operators. Self-inspectors are responsible for performing inspections in accordance with permit requirements and reporting to site owners and operators the results and any recommendations resulting from the inspection.

Prior to conducting inspections, qualified professionals should ensure familiarity with the Stormwater Pollution Prevention Plan and previous inspection reports.

## 3.0 ON-SITE INSPECTION PROCESS

### 3.1 Compliance Inspections

3.1.1 Professionalism

*Don't Pretend to Possess Knowledge*

**Unless the inspector has experience with a particular management practice, do not pretend to possess knowledge**. Inspectors cannot be expert in all areas; their job is to collect information, not to demonstrate superior wisdom. Site operators are often willing to talk to someone who is inquisitive and interested. Within reason, asking questions to obtain new information about a management practice, construction technique or piece of equipment is one of the inspector's main roles in an inspection.

*Don't Recommend Solutions*

**The inspector should not recommend solutions or endorse products**. The solution to a compliance problem may appear obvious based on the inspector's experience. However, the responsibility should be placed on the site owner to implement a workable solution to a compliance problem that meets NYSDEC standards. The inspector should refer the site operator to the New York Standards and Specifications for Erosion and Sediment Control (the Blue Book) or the New York State Stormwater Management Design Manual (the Design Manual).

Key advice must be offered carefully. One experienced stormwater inspector suggests saying: "I can't direct you or make recommendations, but what we've seen work in other situations is ..."

The way inspectors present themselves is important to the effectiveness of the inspection. An inspector cannot be overly familiar, but will be more effective if able to establish a minimum level of communication.

3.1.2 Safety

DOW employees must conform to Division health and safety policies when on a construction site. Other regulatory oversight authorities should have their own safety policies or, if not, may

wish to consult the OSHA health and safety tool at:

www.osha.gov/dep/etools/ehasp to develop a health and safety plan.

Some general protections for construction sites are:

- Beware of heavy equipment, avoid operator blind spots and make sure of operator eye contact around heavy equipment.
- Avoid walking on rock rip-rap if possible. Loose rock presents a slip hazard.
- Stay out of confined spaces like tanks, trenches and foundation holes.
- Avoid lightning danger. Monitor weather conditions, get out of water, avoid open areas and high points, do not huddle in groups or near trees.
- Protect yourself from sun and heat exposure. Use sun screen or shading clothing. Remain hydrated by drinking water, watching for signs of heat cramps, exhaustion (fatigue, nausea, dizziness, headache, cool or moist skin), or stroke (high body temperature; red, hot and dry skin)
- Protect yourself from cold weather. Wear multiple layers of thin clothing. Wear a warm hat. Drink warm fluids or eat hot foods, and keep dry.
- Avoid scaffolding in excess of 4 feet above grade.
- Beware of ticks, stinging insects, snakes and poison ivy or sumac.

3.1.3 Legal access

DOW has general powers, set forth under ECL 17-0303, subparagraph 6, to enter premises for inspections. In addition, ECL 3-0301.2 conveys general statutory authority granting the DOW the power to access private property to fulfill DOW obligations under the law.

ECL 15-0305 gives the DOW the authority to enter at all times in or upon any property, public or private, for the purpose of inspecting or investigating conditions affecting the construction of improvements to or developments of water resources for the public health, safety or welfare.

ECL 17-0829 allows an authorized DOW representative, upon presentation of their credentials, to enter upon any premises where any effluent source is located, or in which records are required to be maintained. The representative may at reasonable times have access to, and sample discharges/pollutants to the waters or to publicly owned treatment plants where the effluent source is located. This subparagraph provides DOW representatives performing their duties authority to enter a site to pursue administrative violations. Pursuing criminal violations may require a warrant or the owner's permission to enter the site.

For sites that are permitted, DOW has authority under the permit to enter the site.

If the owner/operator's representatives onsite deny access, the inspector *should not* physically force entry. Under these circumstances the attorney representing the inspector should be immediately notified and consideration should be given to soliciting the aid of a law officer to obtain entry.

DOW staff have the right to enter at any reasonable time. If no one is available, and the site is fenced or posted, DOW staff should make all reasonable efforts to identify, contact and notify the owner that the DOW is entering the site. If the inspector has made all reasonable efforts to contact site owners, but was unable to do so, the site can then be accessed. All efforts should be taken not to cause any damage to the facility.

Other regulatory oversight authorities should seek advice on their legal authorities to enter a job site. Municipalities that have adopted Article 6 of the New York State Sample Local Law for Stormwater Management and Erosion and Sediment Control (NYSDEC, 2004, updated 2006) will have legal authority to enter sites in accordance with that chapter and any other existing municipal authority .

Agents of DOW have authority similar DOW staff authority to enter sites. However, DOW staff enjoy significant personal liability protections as state employees. That liability protection may not be the same for authorized representatives of DOW. For authorized representatives of DOW (or other regulatory oversight authorities), it is prudent to obtain permission to enter the site. If such permission is denied, the authorized representatives should inform the appropriate DOW contact, usually the regional water manager.

3.1.4 Find the Legally Responsible Party (Construction Manager, Self-inspector)

The first action a compliance inspector should take upon entering a construction site is to find the construction trailer or the construction or project manager if they are available. The inspector should present appropriate identification to the site's responsible party and state the reason for the inspection; construction stormwater complaint response or neutral construction stormwater inspection. If the inspection is initiated as a response to a complaint, frequently the responsible party will ask who made the complaint. DOW keeps private individual complainants confidential. If the complainant is another regulatory oversight authority, DOW tends to make that known to the site's responsible party.

3.1.5 On-site records review (NOI, SWPPP, Self-inspection Reports, Permit)

Generally, the compliance inspector should next review the on-site records. Verify that a copy of the construction stormwater permit and NOI are on-site. Verify that the acreage, site conditions, and receiving water listed on the NOI are accurate. Compare the on-site documentation with documentation already submitted to, or obtained by the compliance inspector.

If the SWPPP has not been reviewed in the office, verify that it exists and contains the minimum required components (16 for a basic plan and 22 for a full plan). On-site review of the SWPPP should determine if: there is an appropriate phasing plan; the acreage disturbed in each phase, construction sequence for each phase; proposed implementation of erosion and sediment control measures; and, where required, post construction controls. For each of the erosion and sediment control practices, the SWPPP must show design details in accordance with the NYS Standards for Erosion and Sediment Controls. The SWPPP must also include provisions for maintenance of practices during construction. On-site review of post construction controls is generally limited to verification that the proposed stormwater management practices are shown on the site plan.

Where self-inspections are required, self-inspection reports are a significant tool for the compliance inspector to determine the performance history of the site. The self-inspection reports should be done with the required frequency . Self-inspection reports must include all the details required by the permit. Generally, it is desirable for permit information to be shown on a site plan. The compliance inspector should become familiar with the report and use that familiarity to judge whether the self-inspections are being performed correctly and that the site operator is correcting deficiencies noted in the report.

3.1.6 Walk the Site

During wet weather conditions, it may be advantageous to observe the receiving waters prior to walking the rest of the site. At some point during the inspection, the receiving water conditions must be observed and noted. It is critical to note if there is a substantial visible contrast to natural conditions, or evidence of deposition, streambank erosion, construction debris or waste materials (e.g. concrete washdown) in the receiving stream.

Each inspector should evaluate actual implementation and maintenance of practices on-site compared to how implementation and maintenance is detailed in the SWPPP. At a minimum, the compliance inspector should observe all areas of active construction. Observing equipment or materials storage, recently stabilized areas, or stockpile areas is also appropriate to evaluate the effectiveness of management practices.

3.1.7 Taking Photographs

Evidence of poor receiving water conditions and poor or ineffective practices should be documented with digital photographs. Those photographs should be logged date stamped and stored on media that cannot be edited (e.g. write only CDs). Photos should also be appended to the site inspector's report.

It is also beneficial to take photographs of good practices for educational and technology transfer reasons.

3.1.8 Exit Interview

Clearly communicate expectations and consequences. If it is clear from the inspection that the owner/operator must modify the SWPPP, or modify management practices within an assigned period (e.g. 24 hours, 48 hours, one week, two weeks), then that finding should be communicated at the time of the exit interview. The inspector should assign the period based on factors such as how long it would reasonably take to complete such modifications and the level of risk to water quality associated with failure to make such modifications.

The inspector should make clear that NYSDEC reserves rights to future enforcement actions. If the inspector's supervisor or enforcement coordinator determines additional enforcement actions are necessary, the inspector *should not* reassure the owner/operator that the current situation is acceptable.

### 3.2 Non-permitted Site Inspections

For sites not authorized in accordance with state or local laws, the process will be abbreviated. First verify the need for authorization and observe receiving waters to detect water quality standard violations. If there is a violation, notify the owner of the violation or other compliance actions in response to their illicit activity. For DOW staff, Attachment 2 or a similar notice can be used to notify the site owner/operator that stormwater authorization is required.

### 3.3 Self-inspections

The role of the self-inspector is to verify that the site is complying with stormwater requirements. In particular, the self-inspector verifies that the SWPPP is being properly implemented. The self-inspector also documents SWPPP implementation so regulatory agencies can review implementation activities.

**It is <u>not</u> the role of the self-inspector to report directly to regulatory authorities**.

Appendix H of *The New York Standards and Specifications for Erosion and Sediment Control* - August 2005 (the Blue Book) includes a Construction Duration Inspection checklist that can be used by the owner/operators qualified professional for self-inspections. The Blue Book is available on the NYSDEC website.

3.3.1 Purpose

The self inspector should ensure that the project's SWPPP is being properly implemented. This includes ensuring that the erosion and sediment control practices are properly installed and being maintained in accordance with the SWPPP/Blue Book.

The project must be properly phased to limit the disturbance to less than five acres, and the construction sequence for each phase must be followed. The SWPPP must also be modified to address evolving circumstances. Finally, and most importantly, receiving waters must be protected.

If a soil disturbance will be greater than five acres at any given time, the site operator must obtain written permission from the DOW regional office.

3.3.2 Pre-construction Conference

The parties responsible for various aspects of stormwater compliance should be identified at the pre-construction conference. Responsible parties may include, but are not limited to, owner's engineer, owner/operator/permittee, contractors, and subcontractors.

Typical responsibilities include: installation of erosion and sediment control (E & SC) practices; maintenance of E & SC practices, inspection of E&SC practices, installation of post construction stormwater management practices (SMPs), inspection of post construction SMPs, SWPPP revisions, and contractor direction.

All parties should clearly know what is expected of them. Responsible parties should complete the Pre-construction Site Assessment Checklist provided in Appendix H of the Blue Book.

3.3.3 Inspection Preparation

The inspector should review the project's SWPPP (including the phasing plan, construction sequence and site specific issues) and the last few inspection reports (if the inspector has them available).

3.3.4 Self-inspection Components

Inspect installation, performance and maintenance of all E&SC practices

The self inspector should inspect all areas that are under active construction or disturbance and areas that are vulnerable to erosion. The self-inspector should also inspect areas that will be disturbed prior to the next inspection for measures required prior to construction (e.g. silt barriers, stabilized construction entrance, diversions). Finally, self-inspectors should inspect post-construction controls during and after installation.

Identify site deficiencies and corrective measures

The self-inspector's reports must be maintained in a log book on site and the log book must be made available to the regulatory authorities. Although the legal responsibility for filing a Notice of Termination lies with the owner/operator, the self-inspector may also be called upon to perform a final site inspection, including post construction SMPs, prior to filing the Notice of Termination.

# 4.0 POST-INSPECTION ACTIVITIES

## 4.1 Regulatory Oversight Authorities

This section is intended for inspectors with regulatory oversight authority such as agents of the DOW or a local municipality, or others acting on their behalf (such as County Soil and Water Conservation District staff.) Upon completion of an inspection, inspection results should be documented for the record.

4.1.1 Written Notification

The inspector should inform the permittee or the on-site representative of their inspection results in writing by sending the permittee a complete, signed copy of the inspection report. The inspection report should be transmitted under a cover letter which elaborates on any deficiencies noted in the inspection report. It is not a good idea to commend exceptional efforts by the owner/operator in a letter, because such letters tend to undermine enforcement efforts when compliance status at a site degrades.

The inspector should consider providing a copy of the cover letter and inspection report to other parties with including:

- Permittee
- Contractor(s)
- Other regulatory oversight authorities
- Other parties present during the inspection (e.g. SWPPP preparer, permittee's self-inspector, etc.)

For DOW staff, an example of the inspection cover letter is included as Attachment 3.

4.1.2 Inspection Tracking

DOW staff must enter their inspection results into the electronic *Water Compliance System.*

Local municipalities and other regulatory oversight authorities are encouraged to develop an electronic tracking system in which to record their inspections.

## 4.2 Permittee's Self-inspections

This section is intended for qualified professionals who conduct site inspections for permittees in accordance with a SPDES permit or local requirements.

4.2.1 Written Records

Inspection Reports
The inspector shall prepare a written report summarizing inspection results. The inspection report is then provided to the permittee, or the permittee's duly authorized representative, and to the contractor responsible for implementing stormwater controls on-site in order to correct deficiencies noted in the inspection report. Finally, the inspection report must be added to the site log book that is required to be maintained on-site, and be available to regulatory oversight authorities for review.

4.2.2 Stormwater Pollution Prevention Plan Revisions

The inspector must inform the permittee of his/her duty to amend the Stormwater Pollution Prevention Plan (SWPPP) whenever an inspection proves the SWPPP to be ineffective in:

- Eliminating or significantly minimizing pollutants from on-site sources
- Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity
- Eliminating discharges that cause a substantial visible contrast to natural conditions

# ATTACHMENT 1

Construction Stormwater Compliance Inspection Report

| | | |
|---|---|---|
| Project Name and Location:<br><br>Municipality: County: | Date: | Page 1 of 2 |
| | Permit # (if any): **NYR** | |
| | Entry Time: | Exit Time: |
| On-site Representative(s) and contact information: | Weather Conditions: | |
| Name and Address of SPDES Permittee/Title/Phone/Fax Numbers: Contacted: Yes ☐ No ☐ | | |

## INSPECTION CHECKLIST

**SPDES Authority**

| | Yes | No | N/A | | Law, rule or permit citation |
|---|---|---|---|---|---|
| 1. | ☐ | ☐ | ☐ | Is a copy of the NOI posted at the construction site for public viewing? | |
| 2. | ☐ | ☐ | ☐ | Is an up-to-date copy of the signed SWPPP retained at the construction site? | |
| 3. | ☐ | ☐ | ☐ | Is a copy of the SPDES General Permit retained at the construction site? | |

**SWPPP Content**

| | Yes | No | N/A | | Law, rule or permit citation |
|---|---|---|---|---|---|
| 4. | ☐ | ☐ | ☐ | Does the SWPPP describe and identify the erosion & sediment control measures to be employed? | |
| 5. | ☐ | ☐ | ☐ | Does the SWPPP provide a maintenance schedule for the erosion & sediment control measures? | |
| 6. | ☐ | ☐ | ☐ | Does the SWPPP describe and identify the post-construction SW control measures to be employed? | |
| 7. | ☐ | ☐ | ☐ | Does the SWPPP identify the contractor(s) and subcontractor(s) responsible for each measure? | |
| 8. | ☐ | ☐ | ☐ | Does the SWPPP include all the necessary 'CONTRACTOR CERTIFICATION' statements? | |
| 9. | ☐ | ☐ | ☐ | Is the SWPPP signed/certified by the permittee? | |

**Recordkeeping**

| | Yes | No | N/A | | Law, rule or permit citation |
|---|---|---|---|---|---|
| 10. | ☐ | ☐ | ☐ | Are inspections performed as required by the permit (every 7 days and after ½" rain event)? | |
| 11. | ☐ | ☐ | ☐ | Are the site inspections performed by a qualified professional? | |
| 12. | ☐ | ☐ | ☐ | Are all required reports properly signed/certified? | |
| 13. | ☐ | ☐ | ☐ | Does the SWPPP include copies of the monthly/quarterly written summaries of compliance status? | |

**Visual Observations**

| | Yes | No | N/A | | Law, rule or permit citation |
|---|---|---|---|---|---|
| 14. | ☐ | ☐ | ☐ | Are all erosion and sediment control measures installed/constructed? | |
| 15. | ☐ | ☐ | ☐ | Are all erosion and sediment control measures maintained properly? | |
| 16. | ☐ | ☐ | ☐ | Have all disturbances of 5 acres or more been approved prior to the disturbance? | |
| 17. | ☐ | ☐ | ☐ | Are stabilization measures initiated in inactive areas? | |
| 18. | ☐ | ☐ | ☐ | Are permanent stormwater control measures implemented? | |
| 19. | ☐ | ☐ | ☐ | Was there a discharge into the receiving water on the day of inspection? | |
| 20. | ☐ | ☐ | ☐ | Are receiving waters free of there evidence of turbidity, sedimentation, or oil ? (If no , complete Page 2) | |

| | |
|---|---|
| **Overall Inspection Rating:** ❑ Satisfactory ❑ Marginal ❑ Unsatisfactory | |
| **Name/Agency of Lead Inspector:** | **Signature of Lead Inspector:** |
| **Names/Agencies of Other Inspectors:** | |

**Water Quality Observations**

Describe the discharge(s) [source(s), impact on receiving water(s), etc.] _____

_____

_____

_____

_____

Describe the quality of the receiving water(s) both upstream and downstream of the discharge_____

_____

_____

_____

_____

Describe any other water quality standards or permit violations _____

_____

_____

Additional Comments:_____

_____

_____

_____

_____

**ATTACHMENT 2**

# **** NOTICE ****

On March 10, 2003, provisions of the Federal Clean Water Act went into effect that apply to many construction operations.

If your construction operations result in the disturbance of one acre or greater and stormwater runoff from your site reaches surface waters (i.e., lake, stream, road side ditch, swale, storm sewer system, etc.), the stormwater runoff from your site must be covered by a State Pollutant Discharge Elimination System (SPDES) Permit issued by the New York State Department of Environmental Conservation (NYSDEC).

To facilitate your compliance with the law, NYSDEC has issued a General Permit which may be applicable to your project. To obtain coverage under this General Permit, you need to prepare a Stormwater Pollution Prevention Plan (SWPPP) and then file a Notice of Intent (NOI) to the NYSDEC headquarters in Albany. The NOI form is available on the DEC website. You may also obtain a copy of the NOI form at the nearest NYSDEC regional offices.

When you file your NOI you are certifying that you have developed a SWPPP and that it will be implemented prior to commencing construction. When you submit the NOI you need to indicate if your SWPPP is in conformance with published NYSDEC technical standards; if it is, your SPDES permit coverage will be effective in as few as five business days. If your SWPPP does not conform to the DEC technical standards, coverage will not be available for at least 60 business days.

**Failure to have the required permit can result in legal actions which include Stop Work Orders and/or monetary penalties of up to $37,500/day**

If your construction operations are already in progress and you are not covered by an appropriate NYSDEC permit contact the NYSDEC Regional Water Engineer as soon as possible. If your construction field operations have not yet commenced, review the NOI and the General Permit on the DEC's website or at the DEC regional office for your area. When you are comfortable that you understand and comply with the requirements, file your NOI.

The requirement to file an NOI does not replace any local requirements. Developers/Contractors are directed to contact the Local Code Enforcement Officer or Stormwater Management Officer for local requirements.

**ATTACHMENT 3**

<< Date >>

Mr. John Smith
123 Main Street
Ferracane, NY 12345

**Re: Stormwater Inspection**
**SPDES Permit Identification No. NYR10Z000 (through SPDES No. GP-02-01)**
**Blowing Leaves Subdivision**
**Gasper (T), Eaton (Co.)**

Dear Mr. Smith:

On the afternoon of << date >> I conducted an inspection of the construction activities associated with the Blowing Leaves Subdivision located on County Route 1 in the town of Gasper, Eaton County. The inspection was conducted in the presence of you and Mr. Samuel Siltfence of Acme Excavating Co., Inc. The purpose of the inspection was to verify compliance with the *State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Discharges from Construction Activity* ("the general permit").

The overall rating for the project at the time of the inspection was ***unsatisfactory***. A copy of my inspection report is attached for your information. In addition to the report, I would like to elaborate on the following:

**SPDES Authority**

- In accordance with subdivision 750-2.1 (a) of Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR), a copy of your permit must be retained at the construction site. You did not have a copy of the general permit at the site. **Your failure to retain a copy of the general permit at the construction site is a violation of 6 NYCRR Part 750-2.1 (a).** Please retain a copy of the general permit at the site from this point forward.

**SWPPP Content**

- In accordance with Part III.E.2. of the general permit, contractors and subcontractors must certify that they understand the terms and conditions of the general permit and the SWPPP before undertaking any construction activity at the site. Your SWPPP does not include a certification statement from Acme Excavating Co., Inc. **The failure of your contractor to sign this certification before undertaking construction activity at the site is a violation of Part III.E.2. of the general permit.** Please obtain copies of all necessary certifications and provide copies of them to each party who holds a copy of your SWPPP.

- In accordance with Part V.H.2. of the general permit, SWPPP's must be certified by the permittee. Your SWPPP was not certified by you. **Your failure to certify your SWPPP is a**

**violation of Part V.H.2. of the general permit.** Please certify your SWPPP.

**Recordkeeping**

- In accordance with Parts III.D.3.a. and III.D.3.b. of the general permit, permittees must have a qualified professional conduct site inspections within 24 hours of the end of 0.5" or greater rain events and at least once per week. A review of your records revealed that your "self-inspections" are only being conducted about two or three times per month. **Your failure to have a qualified professional conduct inspections at the required frequency is a violation of Part III.D.3.b. of the general permit.** Please immediately direct your qualified professional to conduct your site inspections at the required frequency.

- Although the frequency of self-inspections does not meet rquirements, the quality of them is very good. Your qualified professional has accurately noted the same SWPPP deficiencies and necessary maintenance activities that I also observed, and prepared thorough sketches on the self-inspection site maps.

- In accordance with Part V.H.2. of the general permit, the permittee must certify all reports required by the permit. A review of your records showed that your self-inspection reports were not certified. **Your failure to certify your self-inspection reports is a violation of Part V.H.2. of the general permit.** Please sign and certify any and all existing and future self-inspection reports.

**Visual Observations**

- In accordance with Parts III.A.2. and III.A.3. of the general permit, all erosion and sediment controls (E&SC) measures must be installed (as detailed in the SWPPP) prior to the initiation of construction. During the inspection, I noted all of your E&SC measures have been correctly installed at the right times and locations.

- In accordance with Part V.L. of the general permit, all of the E&SC measures at your site must be maintained properly. While on site I observed that, among other things, the section of silt fence in place parallel to County Route 1 is in various stages of disrepair. **The failure of your contractor to adequately maintain the E&SC measures currently in place at your site is a violation of Part V.L of the general permit.** Please direct your contractor to repair this silt fence immediately and to diligently maintain all of the other required E&SC measures as they are brought to his attention by your qualified professional.

- This inspection was conducted during a rain event which resulted in a stormwater discharge to the municipal separate storm sewer system (MS4) being operated by the Eaton County Department of Public Works. Your discharge was visibly turbid whereas upstream water MS4 was clear. As a result, the discharge from the MS4 outfall into Karimipour Creek was causing

Mr. John Smith << Date >>
Re: SPDES Inspection
Blowing Leaves Subdivision
Gasper (T), Eaton (Co.)

slight turbidity. Please be advised that the narrative water quality standard for turbidity in Karimipour Creek is “no increase that will cause a substantial visible contrast to natural conditions.” I attribute the lack of maintenance of your E&SC measures to be the primary cause of the turbid discharge. Please be reminded that the general permit does not authorize you cause or contribute to a condition in contravention of any water quality standards.

If you have any questions or comments, please feel free to contact me at (999) 456-5432.

Sincerely,

Hector D. Inspector, CPESC
Environmental Program Specialist 2

HDI:ms
Attachment

cc w/att.: Chester Checkdam, (T) Gasper Code Enforcement Officer
Samuel Siltfence, Acme Excavating Co., Inc.

# APPENDIX 11

# CONTRACTOR CERTIFICATION FORM

**CONTRACTOR'S CERTIFICATION**
**Pursuant to**
**NYS DEC GENERAL PERMIT GP-0-20-001**

Pursuant to the SPDES General Permit for Stormwater Discharges from Construction Activity (Permit GP-0-20-001) Part III.a.6, all contractors and subcontractors implementing all, or a portion of the Stormwater Pollution Prevention Plan (SWPPP) shall sign a copy of the following certification statement before undertaking any construction activity at the site identification in the SWPPP:

> *"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"*

| _____ | _____ | _____ |
|---|---|---|
| Signature | Print Name | Date |

**Contracting Firm Information:**

Contracting Firm Name:

Address:

Telephone Number:

Address of Site: _____

Name of trained individual responsible for SWPPP implementation, and who shall be on site on a daily basis when soil disturbance activities are being performed:

Name: _____ Title: _____

\\nbcad\reference\ny stormwater\swppp report template\GP-0-20-001 contractor certification.docx

# APPENDIX 12

# NYSDEC DEEP-RIPPING & DECOMPACTION MANUAL

New York State
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water

# Deep-Ripping and Decompaction

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**New York State**
**Department of Environmental Conservation**

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Alternative Stormwater Management
Deep-Ripping and Decompaction

## Description

The two-phase practice of 1) “Deep Ripping;” and 2) “Decompaction” (deep subsoiling), of the soil material as a step in the cleanup and restoration/landscaping of a construction site, helps mitigate the physically induced impacts of soil compression; i.e.: soil compaction or the substantial increase in the bulk density of the soil material.

Deep Ripping and Decompaction are key factors which help in restoring soil pore space and permeability for water infiltration. Conversely, the physical actions of cut-and-fill work, land grading, the ongoing movement of construction equipment and the transport of building materials throughout a site alter the architecture and structure of the soil, resulting in: the mixing of layers (horizons) of soil materials, compression of those materials and diminished soil porosity which, if left unchecked, severely impairs the soil’s water holding capacity and vertical drainage (rainfall infiltration), from the surface downward.

In a humid climate region, compaction damage on a site is virtually guaranteed over the duration of a project. Soil in very moist to wet condition when compacted, will have severely reduced permeability. Figure 1 displays the early stage of the deep-ripping phase (Note that all topsoil was stripped prior to construction access, and it remains stockpiled until the next phase – decompaction – is complete). A heavy-duty tractor is pulling a three-shank ripper on the first of several series of incrementally deepening passes through the construction access corridor's densely compressed subsoil material. Figure 2 illustrates the approximate volumetric composition of a loam surface soil when conditions are good for plant growth, with adequate natural pore space for fluctuating moisture conditions.



Fig. 1. A typical deep ripping phase of this practice, during the first in a series of progressively deeper “rips” through severely compressed subsoil.

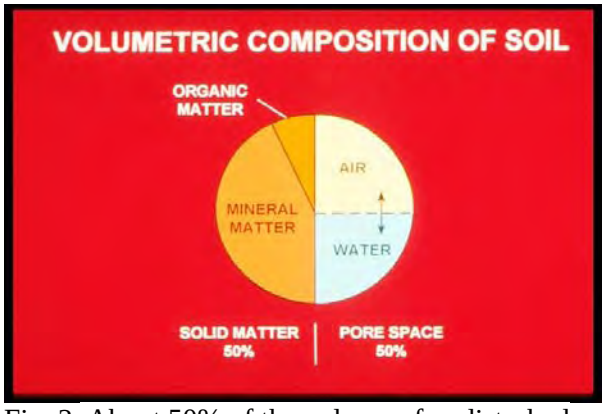



Fig. 2. About 50% of the volume of undisturbed loam surface soil is pore space, when soil is in good condition for plant growth. Brady, 2002.

## Recommended Application of Practice

The objective of Deep Ripping and Decompaction is to effectively fracture (vertically and laterallly) through the thickness of the physically compressed subsoil material (see Figure 3), restoring soil porosity and permeability and aiding infiltration to help reduce runoff. Together with topsoil stripping, the "two-phase" practice of Deep Ripping and Decompaction first became established as a "best management practice" through ongoing success on commercial farmlands affected by heavy utility construction right-of-way projects (transmission pipelines and large power lines).



Fig. 3. Construction site with significant compaction of the deep basal till subsoil extends 24 inches below this exposed cut-and-fill work surface.

Soil permeability, soil drainage and cropland productivity were restored. For broader construction application, the two-phase practice of Deep Ripping and Decompaction is best adapted to areas impacted with significant soil compaction, on contiguous open portions of large construction sites and inside long, open construction corridors used as temporary access over the duration of construction. Each mitigation area should have minimal above-and-below-ground obstructions for the easy avoidance and maneuvering of a large tractor and ripping/decompacting implements. Conversely, the complete two-phase practice is not recommended in congested or obstructed areas due to the limitations on tractor and implement movement.

## Benefits

Aggressive "deep ripping" through the compressed thickness of exposed subsoil before the replacement/respreading of the topsoil layer, followed by "decompaction," i.e.: "sub-soiling," through the restored topsoil layer down into the subsoil, offers the following benefits:

- Increases the project (larger size) area's direct surface infiltration of rainfall by providing the open site's mitigated soil condition and lowers the demand on concentrated runoff control structures

- Enhances direct groundwater recharge through greater dispersion across and through a broader surface than afforded by some runoff-control structural measures

- Decreases runoff volume generated and provides hydrologic source control

- May be planned for application in feasible open locations either alone or in

conjunction with plans for structural practices (e.g., subsurface drain line or infiltration basin) serving the same or contiguous areas

- Promotes successful long-term revegetation by restoring soil permeability, drainage and water holding capacity for healthy (rather than restricted) root-system development of trees, shrubs and deep rooted ground cover, minimizing plant drowning during wet periods and burnout during dry periods.

## Feasibility / Limitations

The effectiveness of Deep Ripping and Decompaction is governed mostly by site factors such as: the original (undisturbed) soil's hydrologic characteristics; the general slope; local weather/timing (soil moisture) for implementation; the space-related freedom of equipment/implement maneuverability (noted above in **Recommended Application of Practice**), and by the proper selection and operation of tractor and implements (explained below in **Design Guidance**). The more notable site-related factors include:

**Soil**

In the undisturbed condition, each identified soil type comprising a site is grouped into one of four categories of soil hydrology, Hydrologic Soil Group A, B, C or D, determined primarily by a range of characteristics including soil texture, drainage capability when thoroughly wet, and depth to water table. The natural rates of infiltration and transmission of soil-water through the undisturbed soil layers for Group A is "high" with a low runoff potential while soils in Group B are moderate in infiltration and the transmission of soil-water with a moderate runoff potential, depending somewhat on slope. Soils in Group C have slow rates of infiltration and transmission of soil-water and a moderately high runoff potential influenced by soil texture and slope; while soils in Group D have exceptionally slow rates of infiltration and transmission of soil-water, and high runoff potential.

In Figure 4, the profile displays the undisturbed horizons of a soil in Hydrologic Soil Group C and the naturally slow rate of infiltration through the subsoil. The slow rate of infiltration begins immediately below the topsoil horizon (30 cm), due to the limited amount of macro pores, e.g.: natural subsoil fractures, worm holes and root channels. Infiltration after the construction-induced mixing and compression of such subsoil material is virtually absent; but can be restored back to this natural level with the two-phase practice of deep ripping and decompaction, followed by the permanent establishment of an appropriate, deep taproot

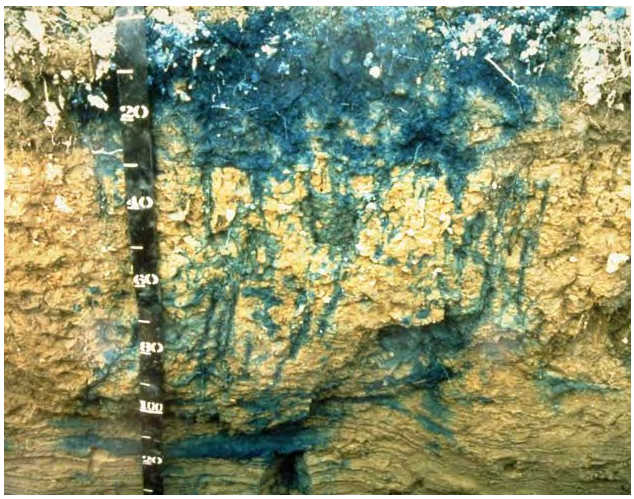


Fig. 4. Profile (in centimeters) displaying the infiltration test result of the natural undisturbed horizons of a soil in Hydrologic Soil Group C.

lawn/ground cover to help maintain the restored subsoil structure. Infiltration after construction-induced mixing and compression of such subsoil material can be notably rehabilitated with the Deep Ripping and Decompaction practice, which prepares the site for the appropriate long-term lawn/ground cover mix including deep taproot plants such as clover, fescue or trefoil, etc. needed for all rehabilitated soils.

Generally, soils in Hydrologic Soil Groups A and B, which respectively may include deep, well-drained, sandy-gravelly materials or deep, moderately well-drained basal till materials, are among the easier ones to restore permeability and infiltration, by deep ripping and decompaction. Among the many different soils in Hydrologic Soil Group C are those unique glacial tills having a natural fragipan zone, beginning about 12 to 18 inches (30 – 45cm), below surface. Although soils in Hydrologic Soil Group C do require a somewhat more carefully applied level of the Deep Ripping and Decompaction practice, it can greatly benefit such affected areas by reducing the runoff and fostering infiltration to a level equal to that of pre-disturbance.

Soils in Hydrologic Soil Group D typically have a permanent high water table close to the surface, influenced by a clay or other highly impervious layer of material. In many locations with clay subsoil material, the bulk density is so naturally high that heavy trafficking has little or no added impact on infiltration; and structural runoff control practices rather than Deep Ripping and Decompaction should be considered.

The information about Hydrologic Soil Groups is merely a general guideline. Site-specific data such as limited depths of cut-and-fill grading with minimal removal or translocation of the inherent subsoil materials (as analyzed in the county soil survey) or, conversely, the excavation and translocation of deeper, unconsolidated substratum or consolidated bedrock materials (unlike the analyzed subsoil horizons' materials referred to in the county soil survey) should always be taken into account.

Sites made up with significant quantities of large rocks, or having a very shallow depth to bedrock, are not conducive to deep ripping and decompation (subsoiling); and other measures may be more practical.

**Slope**

The two-phase application of 1) deep ripping and 2) decompaction (deep subsoiling), is most practical on flat, gentle and moderate slopes. In some situations, such as but not limited to temporary construction access corridors, inclusion areas that are moderately steep along a project's otherwise gentle or moderate slope may also be deep ripped and decompacted. For limited instances of moderate steepness on other projects, however, the post-construction land use and the relative alignment of the potential ripping and decompaction work in relation to the lay of the slope should be reviewed for safety and practicality. In broad construction areas predominated by moderately steep or steep slopes, the practice is generally not used.

**Local Weather/Timing/Soil Moisture**

Effective fracturing of compressed subsoil material from the exposed work surface, laterally and vertically down through the affected zone is achieved only when the soil material is moderately dry to moderately moist. Neither one of the two-phases, deep ripping nor decompaction (deep

subsoiling), can be effectively conducted when the soil material (subsoil or replaced topsoil) is in either a “plastic” or “liquid” state of soil consistency. Pulling the respective implements legs through the soil when it is overly moist only results in the “slicing and smearing” of the material or added “squeezing and compression” instead of the necessary fracturing. Ample drying time is needed for a “rippable” soil condition not merely in the material close to the surface, but throughout the material located down to the bottom of the physically compressed zone of the subsoil.

The “poor man’s Atterberg field test” for soil plasticity is a simple “hand-roll” method used for quick, on-site determination of whether or not the moisture level of the affected soil material is low enough for: effective deep ripping of subsoil; respreading of topsoil in a friable state; and final decompaction (deep subsoiling). Using a sample of soil material obtained from the planned bottom depth of ripping, e.g.: 20 - 24 inches below exposed subsoil surface, the sample is hand rolled between the palms down to a 1/8-inch diameter thread. (Use the same test for stored topsoil material before respreading on the site.) If the respective soil sample crumbles apart in segments no greater than 3/8 of an inch long, by the time it is rolled down to 1/8 inch diameter, it is low enough in moisture for deep ripping (or topsoil replacement), and decompaction. Conversely, as shown in Figure 5, if the rolled sample stretches out in increments greater than 3/8 of an inch long before crumbling, it is in a “plastic” state of soil consistency and is too wet for subsoil ripping (as well as topsoil replacement) and final decompaction.



Fig. 5. Augered from a depth of 19 inches below the surface of the replaced topsoil, this subsoil sample was hand rolled to a 1/8-inch diameter. The test shows the soil at this site stretches out too far without crumbling; it indicates the material is in a plastic state of consistence, too wet for final decompaction (deep subsoiling) at this time.

## Design Guidance

Beyond the above-noted site factors, a vital requirement for the effective Deep Ripping and Decompaction (deep subsoiling), is implementing the practice in its distinct, two-phase process:

1) Deep rip the affected thickness of exposed subsoil material (see Figure 10 and 11), aggressively fracturing it before the protected topsoil is reapplied on the site (see Figure 12); and

2) Decompact (deep subsoil), simultaneously through the restored topsoil layer and the upper half of the affected subsoil (Figure 13). The second phase, “decompaction,” mitigates the partial recompaction which occurs during the heavy process of topsoil spreading/grading. Prior to deep ripping and decompacting the site, all construction activity, including construction equipment and material storage, site cleanup and trafficking (Figure 14), should be finished; and the site closed off to further disturbance. Likewise, once the practice is underway and the area’s soil permeability and

rainfall infiltration are being restored, a policy limiting all further traffic to permanent travel lanes is maintained.

The other critical elements, outlined below, are: using the proper implements (deep, heavy-duty rippers and subsoilers), and ample pulling-power equipment (tractors); and conducting the practice at the appropriate speed, depth and pattern(s) of movement.

Note that an appropriate plan for the separate practice of establishing a healthy perennial ground cover, with deep rooting to help maintain the restored soil structure, should be developed in advance. This may require the assistance of an agronomist or landscape horticulturist.

**Implements**

Avoid the use of all undersize implements. The small-to-medium, light-duty tool will, at best, only "scarify" the uppermost surface portion of the mass of compacted subsoil material. The term "chisel plow" is commonly but incorrectly applied to a broad range of implements. While a few may be adapted for the moderate subsoiling of non-impacted soils, the majority are less durable and used for only lighter land-fitting (see Figure 6).



Fig. 6. A light duty chisel implement, not adequate for either the deep ripping or decompaction (deep subsoiling) phase.



Fig. 7. One of several variations of an agricultural ripper. This unit has long, rugged shanks mounted on a steel V-frame for deep, aggressive fracturing through Phase 1.

Use a "heavy duty" agricultural-grade, deep ripper (see Figures 7,9,10 and 11) for the first phase: the lateral and vertical fracturing of the mass of exposed and compressed subsoil, down and through, to the bottom of impact, prior to the replacement of the topsoil layer. (Any oversize rocks which are uplifted to the subsoil surface during the deep ripping phase are picked and removed.) Like the heavy-duty class of implement for the first phase, the decompaction (deep subsoiling) of Phase 2 is conducted with the heavy-duty version of the deep subsoiler. More preferable is the angled-leg variety of deep subsoiler (shown in Figures 8 and 13). It minimizes the inversion of the subsoil and topsoil layers while laterally and vertically fracturing the upper half of the previously ripped subsoil layer and all of the topsoil layer by delivering a momentary, wave-like "lifting and shattering" action up through the soil layers as it is pulled.

**Pulling-Power of Equipment**

Use the following rule of thumb for tractor horsepower (hp) whenever deep ripping and decompacting a significantly impacted site: For both types of implement, have at least 40 hp of tractor pull available for each mounted shank/ leg.

Using the examples of a 3-shank and a 5-shank implement, the respective tractors should have 120 and 200 hp available for fracturing down to the final depth of 20-to-24 inches per phase. Final depth for the deep ripping in Phase 1 is achieved incrementally by a progressive series of passes (see Depth and Patterns of Movement, below); while for Phase 2, the full operating depth of the deep subsoiler is applied from the beginning.

The operating speed for pulling both types of implement should not exceed 2 to 3 mph. At this slow and managed rate of operating speed, maximum functional performance is sustained by the tractor and the implement performing the soil fracturing. Referring to Figure 8, the implement is the 6-leg version of the deep angled-leg subsoiler. Its two outside legs are "chained up" so that only four legs will be engaged (at the maximum depth), requiring no less than 160 hp, (rather than 240 hp) of pull. The 4-wheel drive, articulated-frame tractor in Figure 8 is 174 hp. It will be decompacting this unobstructed, former construction access area simultaneously through 11 inches of replaced topsoil and the upper 12 inches of the previously deep-ripped subsoil. In constricted areas of Phase 1) Deep Ripping, a medium-size tractor with adequate hp, such as the one in Figure 9 pulling a 3-shank deep ripper, may be more maneuverable.



Fig. 8. A deep, angled-leg subsoiler, ideal for Phase 2 decompaction of after the topsoil layer is graded on top of the ripped subsoil.



Fig. 9. This medium tractor is pulling a 3-shank deep ripper. The severely compacted construction access corridor is narrow, and the 120 hp tractor is more maneuverable for Phase 1 deep ripping (subsoil fracturing), here.

Some industrial-grade variations of ripping implements are attached to power graders and bulldozers. Although highly durable, they are generally not recommended. Typically, the shanks or "teeth" of these rippers are too short and stout; and they are mounted too far apart to achieve the well-distributed type of lateral and vertical fracturing of the soil materials necessary to restore soil permeability and infiltration. In addition, the power graders and bulldozers, as pullers, are far less maneuverable for turns and patterns than the tractor.

**Depth and Patterns of Movement**

As previously noted both Phase 1 Deep Ripping through significantly compressed, exposed subsoil and Phase 2 Decompaction (deep subsoiling) through the replaced topsoil and upper subsoil need to be performed at maximum capable depth of each implement. With an implement's guide wheels attached, some have a "normal" maximum operating depth of 18 inches, while others may go deeper. In many situations, however, the tractor/implement operator must first remove the guide wheels and other non essential elements from the implement. This adapts the ripper or the deep subsoiler for skillful pulling with its frame only a few inches above surface, while the shanks or legs, fracture the soil material 20-to-24 inches deep.

There may be construction sites where the depth of the exposed subsoil's compression is moderate, e.g.: 12 inches, rather than deep. This can be verified by using a ¾ inch cone penetrometer and a shovel to test the subsoil for its level of compaction, incrementally, every three inches of increasing depth. Once the full thickness of the subsoil's compacted zone is finally "pieced" and there is a significant drop in the psi measurements of the soil penetrometer, the depth/thickness of compaction is determined. This is repeated at several representative locations of the construction site. If the thickness of the site's subsoil compaction is verified as, for example, ten inches, then the Phase 1 Deep Ripping can be correspondingly reduced to the implement's minimum operable depth of 12 inches. However, the Phase 2 simultaneous Decompation (subsoiling) of an 11 inch thick layer of replaced topsoil and the upper subsoil should run at the subsoiling implements full operating depth.



Fig. 10. An early pass with a 3-shank deep ripper penetrating only 8 inches into this worksite's severely compressed subsoil.



Fig. 11. A repeat run of the 3-shank ripper along the same patterned pass area as Fig. 9; here, incrementally reaching 18 of the needed 22 inches of subsoil fracture.

Typically, three separate series (patterns) are used for both the Phase 1 Deep Ripping and the Phase 2 Decompaction on significantly compacted sites. For Phase 1, each series begins with a moderate depth of rip and, by repeat-pass, continues until full depth is reached. Phase 2 applies the full depth of Decompation (subsoiling), from the beginning.

Every separate series (pattern) consists of parallel, forward-and-return runs, with each progressive

pass of the implement's legs or shanks evenly staggered between those from the previous pass. This compensates for the shank or leg-spacing on the implement, e.g., with 24-to-30 inches between each shank or leg. The staggered return pass ensures lateral and vertical fracturing actuated every 12 to 15 inches across the densely compressed soil mass.

**Large, Unobstructed Areas**

For larger easy areas, use the standard patterns of movement:

- The first series (pattern) of passes is applied lengthwise, parallel with the longest spread of the site; gradually progressing across the site's width, with each successive pass.

- The second series runs obliquely, crossing the first series at an angle of about 45 degrees.

- The third series runs at right angle (or 90 degrees), to the first series to complete the fracturing and shattering on severely compacted sites, and avoid leaving large unbroken blocks of compressed soil material. (In certain instances, the third series may be optional, depending on how thoroughly the first two series loosen the material and eliminate large chunks/blocks of material as verified by tests with a ¾-inch cone penetrometer.)




Fig. 12. Moderately dry topsoil is being replaced on the affected site now that Phase 1 deep ripping of the compressed subsoil is complete.



Fig. 13. The same deep, angled-leg subsoiler shown in Fig. 7 is engaged at maximum depth for Phase 2, decompaction (deep soiling), of the replaced topsoil and the upper subsoil materials.

**Corridors**

In long corridors of limited width and less maneuverability than larger sites, e.g.: along compacted areas used as temporary construction access, a modified series of pattern passes are used.

- First, apply the same initial lengthwise, parallel series of passes described above.

● A second series of passes makes a broad “S” shaped pattern of rips, continually and gradually alternating the “S” curves between opposite edges inside the compacted corridor.

● The third and final series again uses the broad, alternating S pattern, but it is “flip-flopped” to continually cross the previous S pattern along the corridor’s centerline. This final series of the S pattern curves back along the edge areas skipped by the second series.

## Maintenance and Cost

Once the two-phase practice of Deep Ripping and Decompation is completed, two items are essential for maintaining a site’s soil porosity and permeability for infiltration. They are: planting and maintaining the appropriate ground cover with deep roots to maintain the soil structure (see Figure 15); and keeping the site free of traffic or other weight loads.

Note that site-specific choice of an appropriate vegetative ground-cover seed mix, including the proper seeding ratio of one or more perennial species with a deep taproot system and the proper amount of lime and soil nutrients (fertilizer mix) adapted to the soil-needs, are basic to the final practice of landscaping, i.e: surface tillage, seeding/planting/fertilizing and culti-packing or mulching is applied. The "maintenance" of an effectively deep-ripped and decompacted area is generally limited to the successful perennial (long-term) landscape ground cover; as long as no weight-bearing force of soil compaction is applied.



Fig. 14. The severely compacted soil of a temporary construction yard used daily by heavy equipment for four months; shown before deep ripping, topsoil replacement, and decompaction.



Fig. 15. The same site as Fig. 14 after deep ripping of the exposed subsoil, topsoil replacement, decompaction through the topsoil and upper subsoil and final surface tillage and revegetation to maintain soil permeability and infiltration.

The Deep Ripping and Decompaction practice is, by necessity, more extensive than periodic subsoiling of farmland.The cost of deep ripping and decompacting (deep subsoiling), will vary according to the depth and severity of soil-material compression and the relative amount of tractor and implement time that is required. In some instances, depending on open maneuverability, two-to-three acres of compacted project area may be deep-ripped in one day. In other situations of more severe compaction and - or less maneuverability, as little as one acre may be fully ripped in a day. Generally, if the Phase 1) Deep Ripping is fully effective, the Phase 2) Decompaction should be completed in 2/3 to 3/4 of the time required for Phase 1.

Using the example of two acres of Phase 1) Deep Ripping in one day, at $1800 per day, the net cost is $900 per acre. If the Phase 2) Decompacting or deep subsoiling takes 3/4 the time as Phase 1, it costs $675 per acre for a combined total of $1575 per acre to complete the practice (these figures do not include the cost of the separate practice of topsoil stripping and replacement). Due to the many variables, it must be recognized that cost will be determined by the specific conditions or constraints of the site and the availability of proper equipment.

## Resources

Publications:


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- Ellis, B. (Editor). 1997. Safe & Easy Lawn Care: The Complete Guide to Organic Low Maintenance Lawn. Houghton Mifflin.
- Harpstead, M.I., T.J. Sauer, and W.F. Bennett. 2001. *Soil Science Simplified. 4th ed.* Iowa State University Press.
- Magdoff, F., and H. van Es. 2000. *Building Soils for Better Crops. 2nd ed.* Sustainable Agricultural Networks
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- Union Gas Limited, Ontario, Canada. 1984. *Rehabilitation of Agricultural Lands, Dawn-Kerwood Loop Pipeline; Technical Report*. Ecological Services for Planning, Ltd.; Robinson, Merritt & Devries, Ltd. and Smith, Hoffman Associates, Ltd.
- US Department of Agriculture in cooperation with Cornell University Agricultural Experiment Station. Various years. *Soil Survey of (various names) County, New York.* USDA.


Internet Access:


- Examples of implements:

V-Rippers. Access by internet search of *John Deere Ag -New Equipment for 915* (larger-frame model) *V-Rippe*; and, *for 913* (smaller-frame model) *V-Ripper*. Deep, angled-leg subsoiler. Access by internet search of: B*igham Brothers Shear Bolt Paratill-Subsoiler.* http://salesmanual.deere.com/sales/salesmanual/en_NA/primary_tillage/2008/feature/rippers/915v_pattern_frame.html?sbu=ag&link=prodcat Last visited March 08.

- Soils data of USDA Natural Resources Conservation Service. *NRCS Web Soil Survey.* http://websoilsurvey.nrcs.usda.gov/app/ and *USDA-NRCS Official Soil Series Descriptions; View by Name.* http://ortho.ftw.nrcs.usda.gov/cgi-bin/osd/osdname.cgi . *Last visited Jan. 08.*
- Soil penetrometer information. Access by internet searches of: *Diagnosing Soil Compaction using a Penetrometer (soil compaction tester), PSU Extension;* as well as *Dickey-john Soil Compaction Tester*. http://www.dickey-johnproducts.com/pdf/SoilCompactionTest.pdf and http://cropsoil.psu.edu/Extension/Facts/uc178pdf Last visited Sept. 07

# APPENDIX 13

# NOAA PRECIPITATION DATA

**NOAA Atlas 14, Volume 10, Version 3**
**Location name: Beacon, New York, USA***
**Latitude: 41.5095°, Longitude: -73.9785°**
**Elevation: 104 ft****
* source: ESRI Maps
** source: USGS

**POINT PRECIPITATION FREQUENCY ESTIMATES**

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

## PF tabular

**PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]**

| Duration | Average recurrence interval (years) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 5 | 10 | 25 | 50 | 100 | 200 | 500 | 1000 |
| 5-min | **0.342** (0.260-0.441) | **0.403** (0.306-0.521) | **0.503** (0.381-0.652) | **0.585** (0.440-0.762) | **0.699** (0.511-0.940) | **0.785** (0.563-1.07) | **0.874** (0.610-1.23) | **0.968** (0.648-1.39) | **1.10** (0.710-1.62) | **1.20** (0.760-1.81) |
| 10-min | **0.484** (0.368-0.625) | **0.571** (0.433-0.738) | **0.712** (0.538-0.922) | **0.829** (0.624-1.08) | **0.990** (0.724-1.33) | **1.11** (0.798-1.52) | **1.24** (0.864-1.74) | **1.37** (0.918-1.97) | **1.56** (1.01-2.30) | **1.70** (1.08-2.56) |
| 15-min | **0.570** (0.433-0.736) | **0.671** (0.509-0.868) | **0.837** (0.633-1.08) | **0.975** (0.734-1.27) | **1.16** (0.851-1.57) | **1.31** (0.939-1.79) | **1.46** (1.02-2.05) | **1.62** (1.08-2.32) | **1.83** (1.18-2.71) | **2.00** (1.27-3.01) |
| 30-min | **0.779** (0.592-1.01) | **0.918** (0.696-1.19) | **1.14** (0.865-1.48) | **1.33** (1.00-1.73) | **1.59** (1.16-2.14) | **1.79** (1.28-2.44) | **1.99** (1.38-2.79) | **2.20** (1.47-3.16) | **2.48** (1.60-3.67) | **2.70** (1.71-4.07) |
| 60-min | **0.989** (0.751-1.28) | **1.16** (0.883-1.50) | **1.45** (1.10-1.88) | **1.69** (1.27-2.20) | **2.01** (1.47-2.70) | **2.26** (1.62-3.09) | **2.52** (1.75-3.52) | **2.78** (1.86-3.99) | **3.13** (2.03-4.63) | **3.40** (2.16-5.12) |
| 2-hr | **1.28** (0.974-1.64) | **1.50** (1.14-1.92) | **1.86** (1.42-2.40) | **2.17** (1.64-2.80) | **2.59** (1.90-3.46) | **2.90** (2.09-3.94) | **3.23** (2.27-4.51) | **3.58** (2.40-5.11) | **4.06** (2.64-5.97) | **4.45** (2.82-6.65) |
| 3-hr | **1.46** (1.12-1.87) | **1.72** (1.32-2.21) | **2.16** (1.65-2.77) | **2.51** (1.91-3.24) | **3.01** (2.22-4.01) | **3.38** (2.45-4.59) | **3.77** (2.66-5.26) | **4.20** (2.82-5.97) | **4.80** (3.12-7.03) | **5.29** (3.36-7.88) |
| 6-hr | **1.80** (1.39-2.28) | **2.16** (1.67-2.75) | **2.76** (2.12-3.52) | **3.25** (2.49-4.16) | **3.93** (2.92-5.23) | **4.44** (3.24-6.01) | **4.98** (3.55-6.96) | **5.60** (3.78-7.92) | **6.52** (4.25-9.48) | **7.28** (4.64-10.8) |
| 12-hr | **2.16** (1.68-2.73) | **2.66** (2.06-3.36) | **3.48** (2.69-4.41) | **4.16** (3.20-5.30) | **5.10** (3.82-6.76) | **5.79** (4.26-7.82) | **6.54** (4.71-9.15) | **7.44** (5.04-10.5) | **8.79** (5.74-12.7) | **9.94** (6.36-14.6) |
| 24-hr | **2.55** (1.99-3.20) | **3.18** (2.48-3.98) | **4.20** (3.27-5.28) | **5.05** (3.91-6.38) | **6.22** (4.68-8.20) | **7.08** (5.25-9.52) | **8.02** (5.81-11.2) | **9.16** (6.23-12.8) | **10.9** (7.15-15.7) | **12.4** (7.96-18.1) |
| 2-day | **2.98** (2.34-3.70) | **3.67** (2.88-4.58) | **4.82** (3.77-6.02) | **5.76** (4.48-7.24) | **7.07** (5.35-9.25) | **8.03** (5.98-10.7) | **9.08** (6.61-12.6) | **10.4** (7.06-14.4) | **12.3** (8.10-17.6) | **14.0** (9.00-20.3) |
| 3-day | **3.26** (2.58-4.05) | **4.00** (3.15-4.96) | **5.20** (4.08-6.47) | **6.19** (4.84-7.74) | **7.56** (5.75-9.86) | **8.57** (6.40-11.4) | **9.67** (7.06-13.3) | **11.0** (7.53-15.2) | **13.1** (8.62-18.6) | **14.8** (9.57-21.4) |
| 4-day | **3.50** (2.77-4.34) | **4.27** (3.37-5.28) | **5.51** (4.34-6.84) | **6.54** (5.13-8.16) | **7.97** (6.07-10.4) | **9.02** (6.75-12.0) | **10.2** (7.43-14.0) | **11.6** (7.92-15.9) | **13.7** (9.03-19.4) | **15.5** (10.0-22.4) |
| 7-day | **4.13** (3.29-5.09) | **4.97** (3.94-6.12) | **6.33** (5.01-7.82) | **7.46** (5.87-9.26) | **9.02** (6.90-11.6) | **10.2** (7.63-13.4) | **11.4** (8.36-15.6) | **12.9** (8.88-17.7) | **15.2** (10.0-21.4) | **17.1** (11.1-24.5) |
| 10-day | **4.76** (3.79-5.83) | **5.64** (4.50-6.93) | **7.09** (5.63-8.73) | **8.30** (6.55-10.3) | **9.95** (7.63-12.8) | **11.2** (8.41-14.6) | **12.5** (9.15-16.9) | **14.1** (9.69-19.2) | **16.4** (10.9-23.0) | **18.3** (11.9-26.1) |
| 20-day | **6.74** (5.41-8.21) | **7.74** (6.21-9.44) | **9.39** (7.50-11.5) | **10.7** (8.54-13.2) | **12.6** (9.70-16.0) | **14.0** (10.6-18.1) | **15.5** (11.3-20.6) | **17.1** (11.9-23.2) | **19.4** (12.9-27.0) | **21.2** (13.8-30.1) |
| 30-day | **8.42** (6.79-10.2) | **9.51** (7.66-11.6) | **11.3** (9.06-13.8) | **12.8** (10.2-15.6) | **14.8** (11.4-18.7) | **16.4** (12.3-21.0) | **18.0** (13.1-23.6) | **19.6** (13.6-26.4) | **21.8** (14.6-30.3) | **23.5** (15.3-33.2) |
| 45-day | **10.5** (8.51-12.7) | **11.7** (9.47-14.2) | **13.7** (11.0-16.6) | **15.3** (12.3-18.6) | **17.5** (13.6-22.0) | **19.3** (14.5-24.5) | **21.0** (15.3-27.3) | **22.7** (15.8-30.5) | **24.9** (16.7-34.4) | **26.5** (17.3-37.3) |
| 60-day | **12.3** (9.95-14.8) | **13.6** (11.0-16.4) | **15.7** (12.7-19.0) | **17.4** (14.0-21.2) | **19.8** (15.4-24.8) | **21.7** (16.4-27.5) | **23.6** (17.1-30.5) | **25.3** (17.7-33.9) | **27.6** (18.5-38.0) | **29.2** (19.1-40.9) |

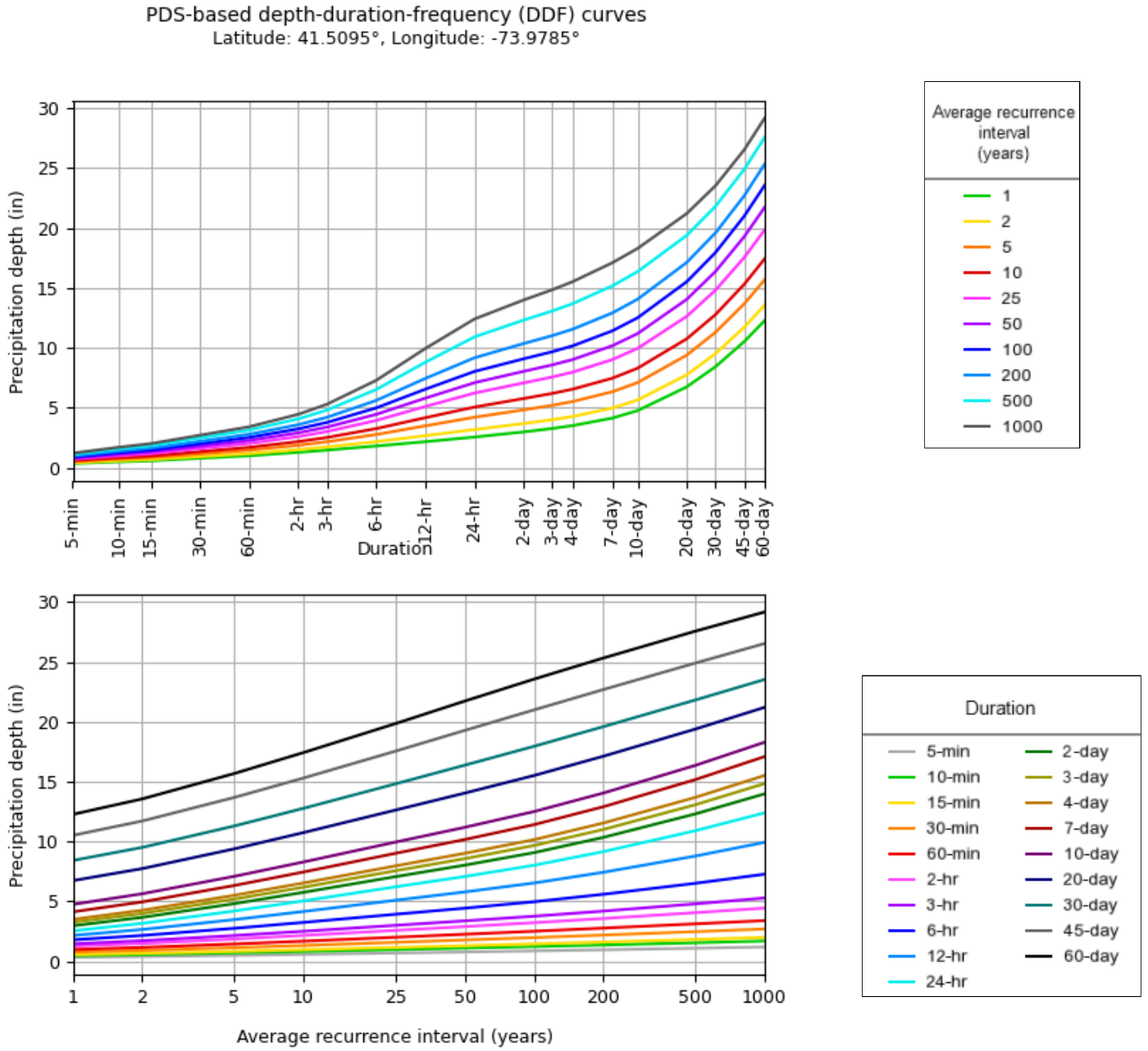
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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## PF graphical



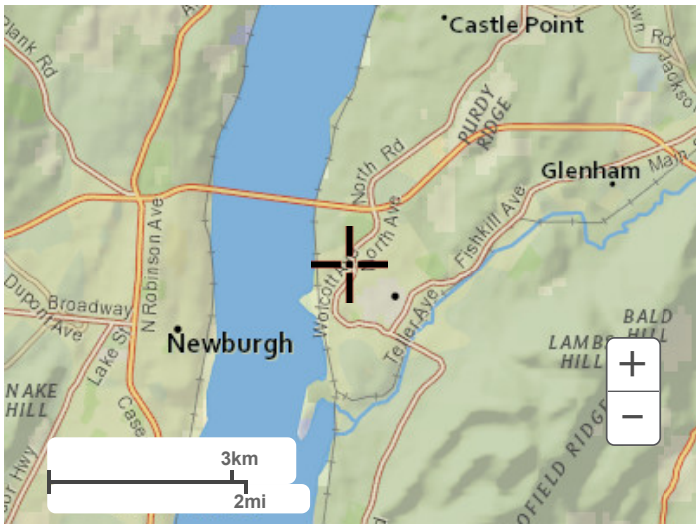

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Created (GMT): Thu Jan 25 14:06:05 2024

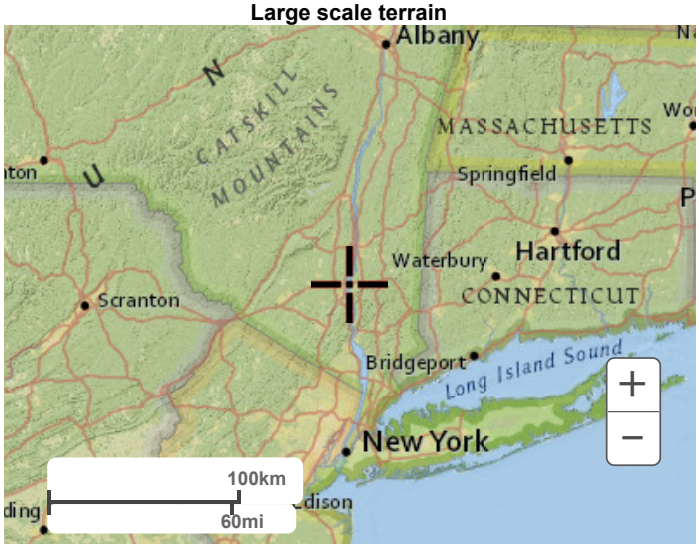
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## Maps & aerials

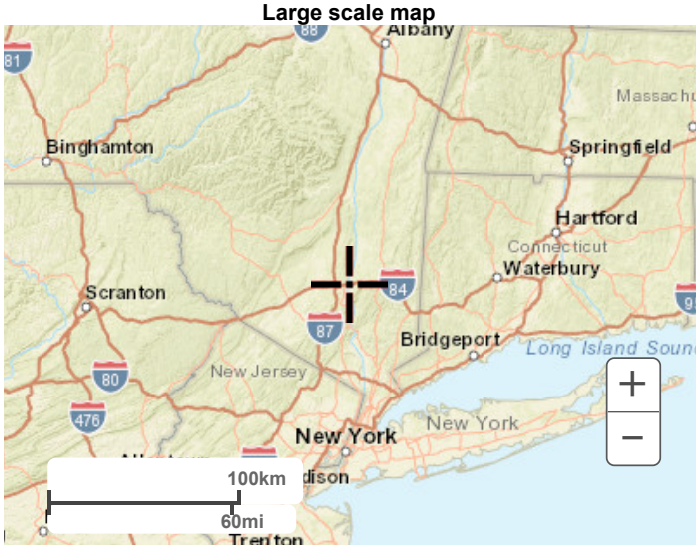
**Small scale terrain**



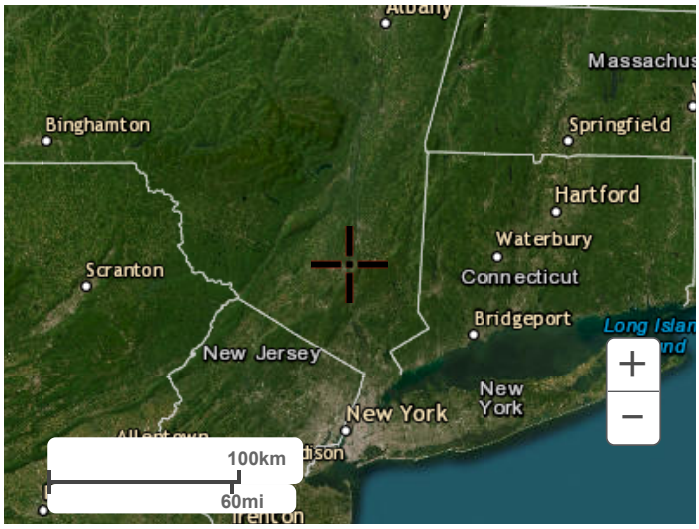

**Large scale terrain**




**Large scale map**




**Large scale aerial**




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# APPENDIX 14

# EROSION AND SEDIMENT CONTROL PLAN

# GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FOURTEEN (14) DAYS FOR DISTURBANCES LESS THAN FIVE (5) ACRES AND SEVEN (7) DAYS FOR DISTURBANCES GREATER THAN FIVE (5) ACRES, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
3. PERMANENT VEGETATION TO BE SEEDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCHING IS REQUIRED ON ALL SEEDING. WHEN HYDROSEEDING, MULCH SHALL NOT BE INCLUDED IN THE TANK WITH THE SEED.
4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE 2016 NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL OR AS AMENDED.
5. A SUBBASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUBBASE SHALL BE INSTALLED WITHIN FIVE (5) DAYS OF THE PRELIMINARY GRADING.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION CONTINUES (I.E. SLOPES GREATER THAN 3:1).
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A STONE PAD, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
9. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE (12) INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF TWENTY-FOUR (24) INCHES OF SOIL HAVING A PH OF 5 OR MORE.
10. AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.
11. CONDUIT OUTLET PROTECTION MUST BE REVIEWED & SUPPLEMENTED AT ALL OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
12. UNFILTERED DEWATERING IS NOT PERMITTED. TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH STATE STANDARDS.
13. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.
14. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY WILL BE REMOVED IMMEDIATELY.
15. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION AND SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
16. STOCKPILE AND STAGING LOCATIONS DETERMINED IN THE FIELD, SHALL BE PLACED WITHIN THE LIMITS OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN.
17. CONCRETE WASHOUT, DUMPSTER, & STAGING AREA LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED AT THE PRE-CONSTRUCITON MEETING. THEY SHALL BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE AND STAGING AREAS AND SHALL BE USED PRIOR TO EXITING THE PROJECT SITE. THE LOCATION SHALL BE IN A PRACTICAL, CLEARLY DELINEATED, AREA AND BE MAINTAINED THROUGHOUT CONSTRUCTION.
18. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
19. ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED BY THE PROPERTY OWNER, AND SHALL BECOME THEIR RESPONSIBILITY.
20. PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES.
21. DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR CONTROL SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLAN SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE MUNICIPAL ENGINEER.
22. ALL TEMPORARY, STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES CAN BE REMOVED, WHEN ALL CONSTRUCTION ACTIVITY IDENTIFIED IN THE SWPPP HAS BEEN COMPLETED, ALL AREAS OF DISTURBANCE HAVE ACHIEVED FINAL STABILIZATION** AND ALL POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE SWPPP AND ARE OPERATIONAL.
23. BOTTOM AND BERM ELEVATIONS OF TEMPORARY SEDIMENT BASINS TO BE REVIEWED WITH THE CONTRACTOR BASED ON THEIR PROPOSED CONSTRUCTION SEQUENCE FOR THE PROJECT.

# CONSTRUCTION SEQUENCE

- INSTALL CONSTRUCTION ENTRANCES.
- STAKE LIMITS OF DISTURBANCE AND ORANGE CONSTRUCTION FENCE.
- INSTALL PERIMETER SILT FENCING ON DOWNHILL AREAS AS SHOWN ON PLAN.
- INSTALL SEDIMENT PONDS. INSTALL TEMPORARY SWALES TO DIRECT ALL OPEN SOIL AREA DISTURBANCE TO SEDIMENT PONDS, AS NECESSARY. LOCATIONS AND SIZE OF THE EROSIONS AND SEDIMENT CONTROL PRACTICES ARE NOTED ON THE PLAN. THESE MAY VARY DEPENDING ON THE CONTRACTOR'S SCHEDULE AND APPROACH BUT 3,600 CF OF STORAGE MUST BE PROVIDED AT A MINIMUM PER ACRE OF UPSTREAM DISTURBANCE. SEDIMENT TRAPS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND DETAILS. SEDIMENT TRAPS AND BASINS SHALL BE SIZED IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL MANUAL.
- SEDIMENT POND RESTORATION: WHEN TEMPORARY STRUCTURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, THE EMBANKMENT AND RESULTING SEDIMENT DEPOSITS ARE TO BE LEVELED OR OTHERWISE DISPOSED OF. SEDIMENT CAN BE DISPOSED OF BY EXPORTING IT OFF SITE FOR DISPOSAL OR BE USED AS FILL IN LAWN AREAS. SEDIMENT PONDS IN FUTURE OPEN SPACE OR LAWN AREAS MAY BE PUMPED DRY, GRADED, AND BACKFILLED. SEDIMENT PONDS IN PAVED OR STRUCTURAL AREAS MUST HAVE THE BASIN MATERIAL AND TRAPPED SEDIMENTS REMOVED, SAFELY DISPOSED OF, AND BACKFILLED WITH STRUCTURAL FILL. SEDIMENT PONDS IN LOCATIONS OF FUTURE STORMWATER PONDS MUST HAVE THE TRAPPED SEDIMENT REMOVED LEAVING THE BASIN AREA OPEN FOR THE DEVELOPMENT OF THE FINAL STORMWATER POND.
- ROUGH GRADE PROPOSED DRIVEWAY/ROAD.
- DISTURBED SOILS SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICAL. MATERIALS STORED IN STOCKPILES SHALL BE CORDONED OFF WITH SILT FENCE PER THE APPROPRIATE SPECIFICATIONS AND DETAILS. THE OPERATOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
- CONSTRUCT ROADS, DRIVES, BUILDINGS, PARKING AREAS AND INSTALL DRAINAGE SYSTEMS.
- TOPSOIL/HAYSEED LAWN AREAS.
- THE PROJECT SITE MUST MEET FINAL STABILIZATION CRITERIA PRIOR TO REMOVING ALL EROSION AND SEDIMENT CONTROL DEVICES AND CLOSING OUT THE PROJECT. LITTER AND CONSTRUCTION DEBRIS SHALL BE REMOVED AS PRACTICAL THROUGHOUT THE LIFE OF THE PROJECT.
- UPON FINAL STABILIZATION BEING MET, THE CONTRACTOR SHALL CLEAR DRAINAGE PIPES AND STRUCTURES OF ANY SEDIMENT WHICH MAY HAVE ACCUMULATED. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED, AS MAY BE NECESSARY, REQUIRED AND/OR REQUESTED BY AUTHORITIES, TO PREVENT THE INCIDENTAL DISCHARGE OF SILT LADEN RUNOFF FROM ENTERING A WATER COURSE OR A DRAINAGE SYSTEM. THE GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES STATES THAT IT IS UNLAWFUL FOR ANY PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS.
- ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED, AS MAY BE NECESSARY, REQUIRED AND/OR REQUESTED BY AUTHORITIES, TO PREVENT THE INCIDENTAL DISCHARGE OF SILT LADEN RUNOFF FROM ENTERING A WATER COURSE OR A DRAINAGE SYSTEM. THE GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES STATES THAT IT IS UNLAWFUL FOR ANY PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS.

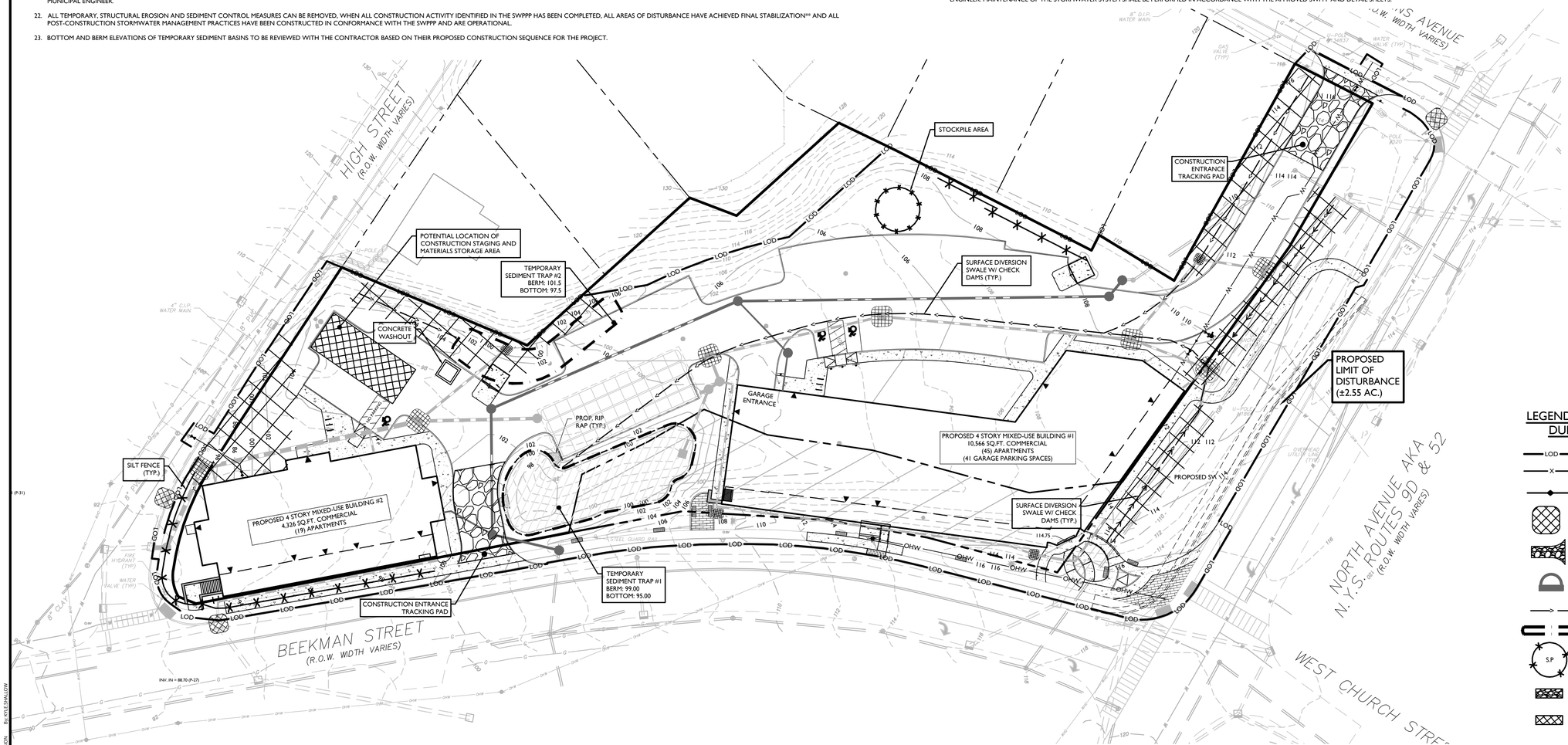
**FINAL STABILIZATION - MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES, SUCH AS PERMANENT LANDSCAPE MULCHES, ROCK RIP-RAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.

MAINTENANCE PLAN DURING CONSTRUCTION:

INSPECTION AND MAINTENANCE SHALL BE PERFORMED IN CONFORMANCE WITH GP-0-20-001 OR AS AMENDED. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED AND INSTALLED FOR THE PROJECT. THE SEDIMENT TRAPS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 25% OF ITS' CAPACITY. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES APPROXIMATELY 6" DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE LANDSCAPE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

MAINTENANCE AGREEMENT NOTE:

THE OWNER/APPLICANT SHALL ENTER INTO AN ENFORCEABLE MAINTENANCE AGREEMENT WITH THE MUNICIPALITY (IF AN MS4 COMMUNITY). RELATED TO MAINTENANCE OF STORMWATER FACILITIES. THE OWNER/APPLICANT IS RESPONSIBLE TO PERFORM ALL REQUIRED MAINTENANCE BOTH DURING CONSTRUCTION AND LONG-TERM. THE NATURE OF THE AGREEMENT IS TO ALLOW THE MUNICIPALITY TO PERFORM MAINTENANCE AT THEIR OPTION SHOULD THE OWNER/APPLICANT FAIL TO ADEQUATELY MAINTAIN THE SYSTEM AS DETERMINED BY THE MUNICIPAL ENGINEER. MAINTENANCE OF THE STORMWATER SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED SWPPP AND DETAIL SHEETS.




## LEGEND FOR EROSION CONTROL DURING CONSTRUCTION

- LOD — CONSTRUCTION LIMIT LINE
- X — SILT FENCE
- ORANGE CONSTRUCTION FENCE
- STORM INLET SEDIMENT TRAP
- STABILIZED CONSTRUCTION ENTRANCE
- SEDIMENT TRAP OUTLET
- TEMPORARY SWALE
- TEMPORARY SEDIMENT BASIN
- S.P — MATERIAL STOCKPILE
- CHECK DAM
- SLOPE MATTING

30 0 30 60

SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

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| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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| PROJECT NUMBER: | DRAWING NAME: | | |
| 23010468A | C-SESC | | |

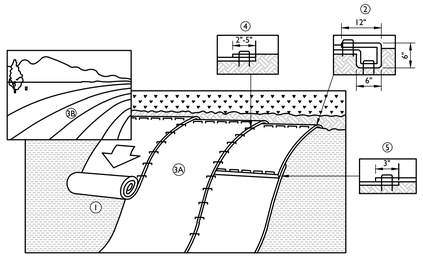
SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:
10 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

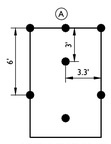


\\Ad\data\h_175\BRC_SESC.dwg|C-10 SOIL EROSION By: KYLE SHALLOW

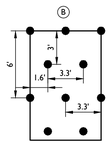



SLOPE INSTALLATION

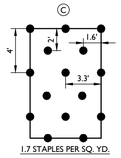
STAPLES PATTERN GUIDE
6.67' WIDE ROLLS




0.7 STAPLES PER SQ. YD.




1.15 STAPLES PER SQ. YD.



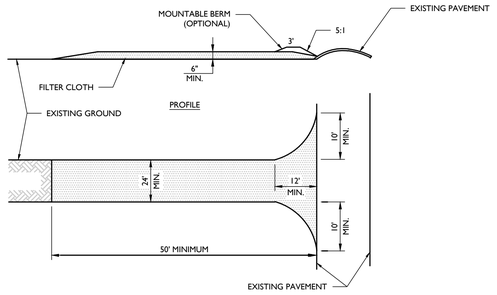

1.7 STAPLES PER SQ. YD.

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
   * WHEN USING MATTING WITH SEED, DO NOT SEED THE AREA. FOLLOW MANUFACTURER'S RECOMMENDATIONS.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP x 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECPS BACK OVER SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY STEP BY STEP ACROSS THE SLOPE TAMPERING IT DOWN ALONG THE WAY. RECP'S SHALL UNROLL WITH APPROPRIATE SIDE TIGHTLY AGAINST THE SOIL SURFACE. RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKESSHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAKED WITH APPROXIMATELY 2" TO 5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.
6. MATTING SHALL BE 100% BIODEGRADABLE
   * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

## EROSION MATTING DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-2200 | 07/01/19



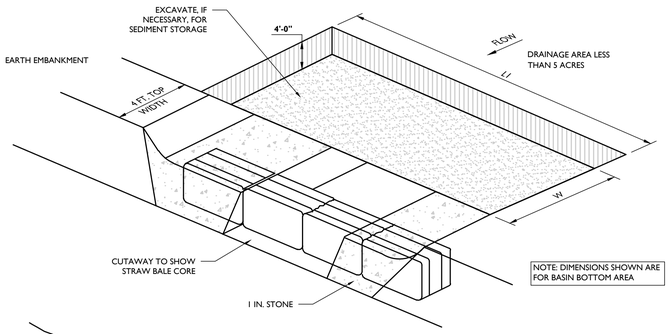

PLAN VIEW

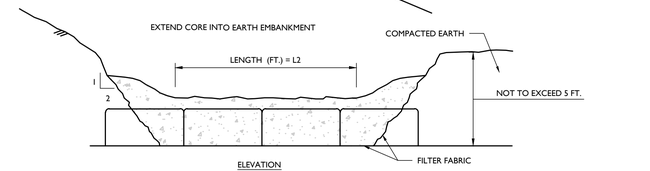
NOTES:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. LENGTH: NOT LESS THAN 50 FEET. THICKNESS: NOT LESS THAN (6) INCHES.
2. WIDTH - 24'
3. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
4. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTING BERM WITH 5:1 SLOPES WILL BE PERMITTED.
5. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
6. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.

## STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-1000 | 07/01/19




ELEVATION

TO BE INSTALLED PRIOR TO GRADING OR FILLING IN THE DRAINAGE AREA THEY ARE TO PROTECT. TRAPS THAT ARE TO FUNCTION DURING BUILDING CONSTRUCTION MUST NOT BE LOCATED WITHIN 20 FEET OF A PROPOSED BUILDING FOUNDATION. WHILE TRAPS SHOULD BE SITED TO MAXIMIZE STORAGE BENEFIT, THEY SHOULD NOT BE LOCATED IN WETLANDS OR WETLAND BUFFER AREAS, OR IN EXISTING WATERCOURSES.

SEE EROSION AND SEDIMENT CONTROL PLAN FOR LOCATIONS.

INSTALLATION NOTES:

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED AS WELL.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER SIZED STONES, ROCKS, ORGANIC MATERIAL AND OTHER QUESTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
6. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
7. ALL CUT AND FILL SLOPES SHALL BE 1 : 2 OR FLATTER.
8. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.

SIZING CALCULATIONS

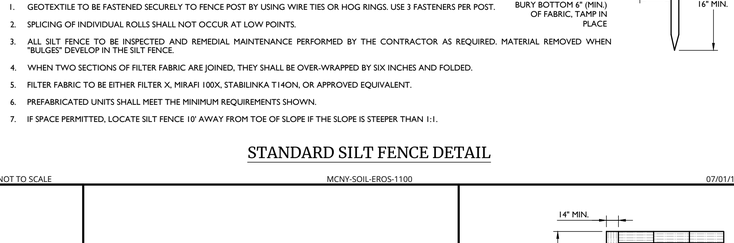
NOTE:

1. 3,600 CUBIC FEET OF STORAGE REQUIRED PER ACRE OF DISTURBANCE.

*THIS IS THE MINIMUM AMOUNT OF SEDIMENT TRAPS, ADDITIONAL MAY BE REQUIRED BASED UPON OTHER ON-SITE CONDITIONS AND CONTRACTOR SCHEDULE AND PHASING ACTIVITIES.

## STONE OUTLET SEDIMENT TRAP DETAIL

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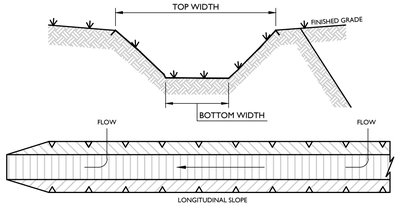

NOTES:

1. GEOTEXTILE TO BE FASTENED SECURELY TO FENCE POST BY USING WIRE TIES OR HOG RINGS. USE 3 FASTENERS PER POST.
2. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
3. ALL SILT FENCE TO BE INSPECTED AND REMEDIAL MAINTENANCE PERFORMED BY THE CONTRACTOR AS REQUIRED. MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
4. WHEN TWO SECTIONS OF FILTER FABRIC ARE JOINED, THEY SHALL BE OVER-WRAPPED BY SIX INCHES AND FOLDED.
5. FILTER FABRIC TO BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
6. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
7. IF SPACE PERMITTED, LOCATE SILT FENCE 10' AWAY FROM TOE OF SLOPE IF THE SLOPE IS STEEPER THAN 1:1.




## STANDARD SILT FENCE DETAIL

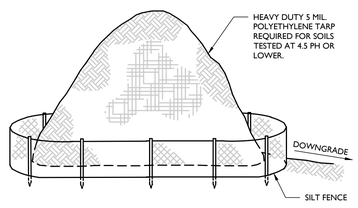
NOT TO SCALE | MCNY-SOIL-EROS-1100 | 07/01/19




PLAN

| VEGETATED SWALE | | | | | |
|---|---|---|---|---|---|
| SWALE | BOTTOM WIDTH | SIDE SLOPE | LONGITUDINAL SLOPE | DEPTH | LENGTH |
| 1R | 2.0 FT | 50% | 2.00% | | 506' |

## VEGETATIVE SWALE DETAIL

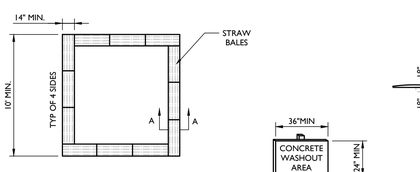



NOTES:

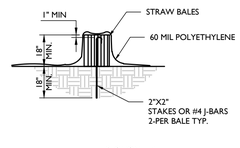
1. ALL STOCKPILES SHALL NOT TO BE LOCATED WITHIN 50 FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY.

## TOPSOIL STOCKPILE DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-2500 | 07/01/19



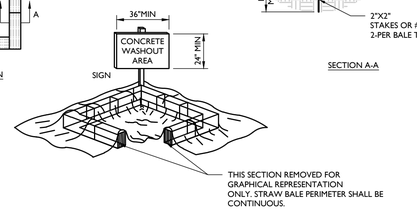

BALE CONFIGURATION




SECTION A-A

DETAIL NOTES:

1. FACE SIGN TOWARDS NEAREST STREET OR ACCESS POINT.
2. CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 50 FT. MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.




NOTES:

1. CONCRETE WASHOUTS ARE REQUIRED ON ALL CONSTRUCTION SITES INVOLVING CONCRETE AND STUCCO USE.
2. THE CONTRACTOR SHALL REQUIRE ALL CONCRETE DRIVERS TO UTILIZE THE CONCRETE WASHOUTS ONSITE.
3. WASHOUT FACILITIES SHALL BE LOCATED AT LEAST 50 FEET AWAY FROM STORM SEWER DRAIN INLETS, GUTTERS, OPEN DITCHES, AND WATER COURSES.
4. APPROPRIATE STONE SHOULD COVER PATHS TO CONCRETE WASHOUT.
5. THE NUMBER OF CONCRETE WASHOUTS DEPENDS ON THE EXPECTED DEMAND FOR STORAGE CAPACITY. LARGE SITES WITH EXTENSIVE CONCRETE WORK SHALL BE PLACED AT MULTIPLE LOCATIONS FOR USE BY CONCRETE TRUCK DRIVERS.
6. CONCRETE WASHOUT AREAS SHALL BE IDENTIFIED BY POSTING SIGNS ONSITE.
7. CONCRETE WASHOUTS ARE TO BE INSPECTED DAILY BY THE CONTRACTOR FOR LEAKS OR TEARS IN PLASTIC LINER.
8. REMOVE AND DISPOSE OF ALL MATERIAL WHEN THE WASHOUT HAS BEEN FILLED TO 75% CAPACITY.
9. PRIOR TO ANY RAINFALL, ALL CONCRETE WASHOUTS ARE TO BE CLEANED OUT OR COVERED.
10. ONCE THE MATERIAL HAS BEEN CLEANED OUT OF THE CONCRETE WASHOUT FACILITY, THE FACILITY MUST BE INSPECTED FOR REPAIR, RECONSTRUCTION OR REPLACEMENT. ALL PLASTIC LINING SHALL BE REMOVED AND REPLACED.
11. PRE-FABRICATED OR ONSITE FABRICATED CONCRETE WASHOUTS MAY BE USED.
12. OPTIONS FOR ONSITE CONCRETE WASHOUTS:
    A. DIG A PIT AND LINE WITH 10 MIL PLASTIC SHEETING.
    B. CREATE AN ABOVE-GROUND STRUCTURE FROM STRAW BALES OR SANDBAGS WITH 10 MIL PLASTIC LINING.

## CONCRETE WASHOUT DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-1700 | 07/01/19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

\\APdata\h_1756\RC-SESC.dwg\C-11 SOIL EROSION DETAILS By: KYLE SHALLOW

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

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COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-SESC

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL DETAILS

SHEET NUMBER:
11 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

# APPENDIX 15

# NJ CAT CERTIFICATION – FIRST DEFENSE

# First Defense® High Capacity

A Simple Solution for your Trickiest Sites

## Product Profile

The First Defense® High Capacity is an enhanced vortex separator that combines an effective stormwater treatment chamber with an integral peak flow bypass. It efficiently removes sediment total suspended solids (TSS), trash and hydrocarbons from stormwater runoff without washing out previously captured pollutants. The First Defense® High Capacity is available in several model configurations to accommodate a wide range of pipe sizes, peak flows and depth constraints (**Table 1**, next page).

## Applications

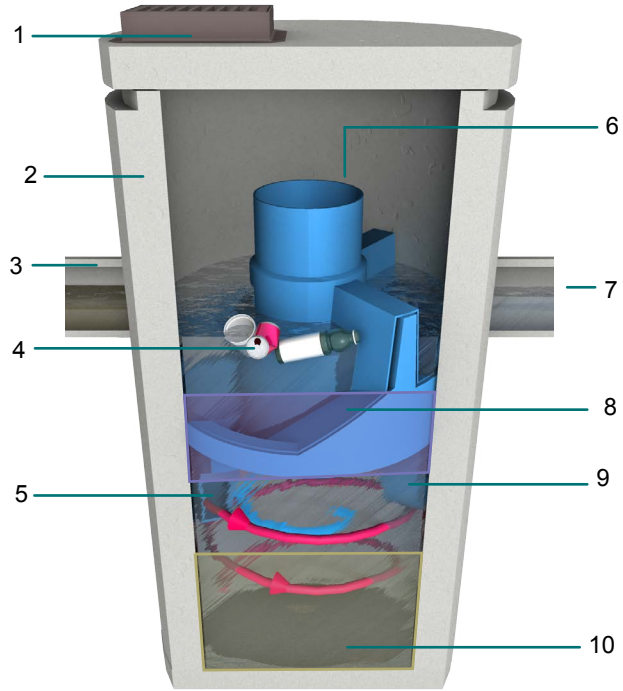
- Stormwater treatment at the point of entry into the drainage line
- Sites constrained by space, topography or drainage profiles with limited slope and depth of cover
- Retrofit installations where stormwater treatment is placed on or tied into an existing storm drain line
- Pretreatment for filters, infiltration and storage

## Advantages

- Inlet options include surface grate or multiple inlet pipes
- Integral high capacity bypass conveys large peak flows without the need for "offline" arrangements using separate junction manholes
- Proven to prevent pollutant washout at up to 450% of its treatment flow
- Long flow path through the device ensures a long residence time within the treatment chamber, enhancing pollutant settling
- Delivered to site pre-assembled and ready for installation

## Verified by NJCAT and NJDEP

**Fig.1** The First Defense® High Capacity has internal components designed to efficiently capture pollutants and prevent washout at peak flows.




## Components

1. Inlet Grate (optional)
2. Precast chamber
3. Inlet Pipe (optional)
4. Floatables Draw Off Slot (not pictured)
5. Inlet Chute
6. Internal Bypass
7. Outlet pipe
8. Oil and Floatables Storage
9. Outlet chute
10. Sediment Storage Sump

## How it Works

The First Defense® High Capacity has internal components designed to remove and retain gross debris, total suspended solids (TSS) and hydrocarbons (**Fig.1**).

Contaminated stormwater runoff enters the inlet chute from a surface grate and/or inlet pipe. The inlet chute introduces flow into the chamber tangentially to create a low energy vortex flow regime (magenta arrow) that directs sediment into the sump while oils, floating trash and debris rise to the surface.

Treated stormwater exits through a submerged outlet chute located opposite to the direction of the rotating flow (blue arrow). Enhanced vortex separation is provided by forcing the rotating flow within the vessel to follow the longest path possible rather than directly from inlet to outlet.

Higher flows bypass the treatment chamber to prevent turbulence and washout of captured pollutants. An internal bypass conveys infrequent peak flows directly to the outlet eliminating the need for, and expense of, external bypass control structures. A floatables draw off slot functions to convey floatables into the treatment chamber prior to bypass.

Hydro International, 94 Hutchins Drive, Portland, ME 04102
Tel: (207) 756-6200 Fax: (207) 756-6212
Email: stormwaterinquiry@hydro-int.com Web: www.hydro-int.com

# First Defense® High Capacity

## Sizing & Design

This adaptable online treatment system works easily with large pipes, multiple inlet pipes, inlet grates and now, contains a high capacity bypass for the conveyance of large peak flows. Designed with site flexibility in mind, the First Defense® High Capacity allows engineers to maximize available site space without compromising treatment level.

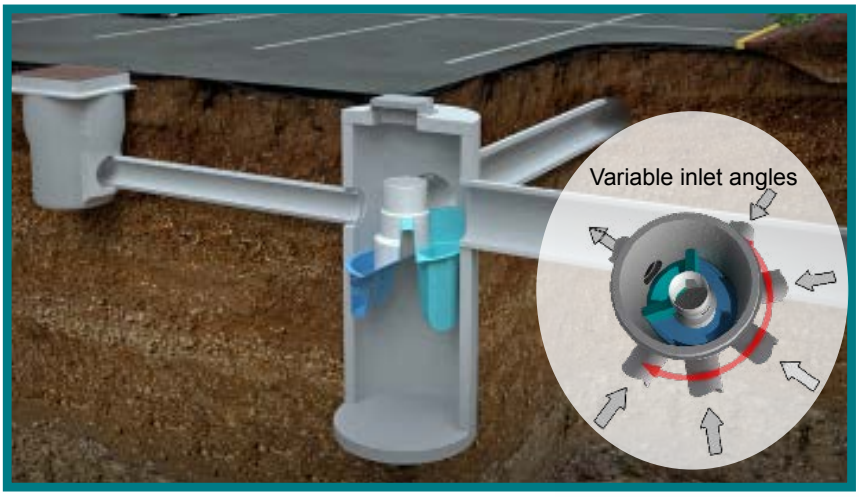



**Fig 2.** Works with multiple inlet pipes and grates

### Free *Stormwater Separator Sizing Calculator* for Engineers



This simple online tool will recommend the best separatror, model size and online/offline arrangement based on site-specific data entered by the user.

Go to hydro-int.com/sizing to access the tool.

## Inspection and Maintenance

Nobody maintains our systems better than we do. To ensure optimal, ongoing device performance, be sure to recommend Hydro International as a preferred service and maintenance provider to your clients.

Call **1 (800) 848-2706** to schedule an inspection and cleanout or learn more at **hydro-int.com/service**



**Fig 3.** Maintenance is done with a vactor truck

**Table 1.** First Defense® High Capacity Design Criteria.

| First Defense® High Capacity Model Number | Diameter | Typical TSS Treatment Flow Rates | | | Peak Online Flow Rate | Maximum Pipe Diameter[1] | Oil Storage Capacity | Typical Sediment Storage Capacity[2] | Minimum Distance from Outlet Invert to Top of Rim[3] | Standard Distance from Outlet Invert to Sump Floor |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NJDEP Certified | 106µm | 230µm | | | | | | |
| | (ft / m) | (cfs / L/s) | (cfs / L/s) | (cfs / L/s) | (cfs / L/s) | (in / mm) | (gal / L) | ($yd^3$ / $m^3$) | (ft / m) | (ft / m) |
| FD-3HC | 3 / 0.9 | 0.84 / 23.7 | 0.3 / 8.77 | 0.53 / 15.0 | 15 / 424 | 18 / 457 | 125 / 473 | 0.4 / 0.3 | 2.0 - 3.5 / 0.6 - 1.0 | 3.71 / 1.13 |
| FD-4HC | 4 / 1.2 | 1.50 / 42.4 | 0.7 / 20 | 1.2 / 34 | 18 / 510 | 24 / 600 | 191 / 723 | 0.7 / 0.5 | 2.3 - 3.9 / 0.7 - 1.2 | 4.97 / 1.5 |
| FD-5HC | 5 / 1.5 | 2.34 / 66.2 | 1.3 / 37.9 | 2.2 / 62.2 | 20 / 566 | 24 / 609 | 300 / 1135 | 1.1 / .84 | 2.5 - 4.5 / 0.7 - 1.3 | 5.19 / 1.5 |
| FD-6HC | 6 / 1.8 | 3.38 / 95.7 | 2.2 / 63 | 3.8 / 108 | 32 / 906 | 30 / 750 | 496 / 1,878 | 1.6 / 1.2 | 3.0 - 5.1 / 0.9 - 1.6 | 5.97 / 1.8 |
| FD-8HC | 8 / 2.4 | 6.00 / 169.9 | 5.1 / 144 | 8.6 / 243 | 50 / 1,415 | 48 / 1219 | 1120 / 4239 | 2.8 / 2.1 | 3.0 - 6.0 / 0.9 -1.8 | 7.40 / 2.2 |

[1]Contact Hydro International when larger pipe sizes are required.
[2]Contact Hydro International when custom sediment storage capacity is required.
[3]Minimum distance for models depends on pipe diameter.

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Nonpoint Pollution Control
Division of Water Quality
401-02B
Post Office Box 420
Trenton, New Jersey 08625-0420
609-633-7021 Fax: 609-777-0432
http://www.state.nj.us/dep/dwq/bnpc_home.htm

CHRIS CHRISTIE
*Governor*

KIM GUADAGNO
*Lt. Governor*

BOB MARTIN
*Commissioner*

**April 4, 2016**

Lisa Lemont, CPSWQ
Business Development Manager
Hydro International
94 Hutchins Drive
Portland, ME 04102

Re: MTD Lab Certification
First Defense® HC (FDHC) Stormwater Treatment Device by Hydro International

**TSS Removal Rate 50%**

Dear Ms. Lemont:

The Stormwater Management rules under N.J.A.C. 7:8-5.5(b) and 5.7 (c) allow the use of manufactured treatment devices (MTDs) for compliance with the design and performance standards at N.J.A.C. 7:8-5 if the pollutant removal rates have been verified by the New Jersey Corporation for Advanced Technology (NJCAT) and have been certified by the New Jersey Department of Environmental Protection (NJDEP). Hydro International has requested an MTD Laboratory Certification for the First Defense® HC Stormwater Treatment Device.

The projects falls under the "Procedure for Obtaining Verification of a Stormwater Manufactured Treatment Device from New Jersey Corporation for Advance Technology" dated January 25, 2013. The applicable protocol is the "New Jersey Laboratory Testing Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device" dated January 25, 2013.

NJCAT verification documents submitted to the NJDEP indicate that the requirements of the aforementioned protocol have been met or exceeded. The NJCAT letter also included a recommended certification TSS removal rate and the required maintenance plan. The NJCAT Verification Report with the Verification Appendix (dated February 2016) for this device is published online at http://www.njcat.org/verification-process/technology-verification-database.html.

**The NJDEP certifies the use of the First Defense® HC Stormwater Treatment Device by Hydro International at a TSS removal rate of 50% when designed, operated and maintained in accordance with the information provided in the Verification Appendix and the following conditions:**

1. The maximum treatment flow rate (MTFR) for the manufactured treatment device (MTD) is calculated using the New Jersey Water Quality Design Storm (1.25 inches in 2 hrs) in N.J.A.C. 7:8-5.5.

2. The First Defense® HC Stormwater Treatment Device shall be installed using the same configuration reviewed by NJCAT and shall be sized in accordance with the criteria specified in item 6 below.

3. This First Defense® HC Stormwater Treatment Device cannot be used in series with another MTD or a media filter (such as a sand filter) to achieve an enhanced removal rate for total suspended solids (TSS) removal under N.J.A.C. 7:8-5.5.

4. Additional design criteria for MTDs can be found in Chapter 9.6 of the New Jersey Stormwater Best Management Practices (NJ Stormwater BMP) Manual which can be found on-line at www.njstormwater.org.

5. The maintenance plan for a site using the First Defense® HC Stormwater Treatment Device shall incorporate, at a minimum, the maintenance requirements noted in the attached document. However, it is recommended to review the maintenance website at http://www.hydro-int.com/UserFiles/downloads/FD_O%2BM_F1512.pdf for any changes to the maintenance requirements.

6. Sizing Requirements:

   The example below demonstrates the sizing procedure for the First Defense® HC Stormwater Treatment Device:

   Example: A 0.25 acre impervious site is to be treated to 50% TSS removal using a First Defense® HC Stormwater Treatment Device. The impervious site runoff (Q) based on the New Jersey Water Quality Design Storm was determined to be 0.79 cfs.

   Maximum Treatment Flow Rate (MTFR) Evaluation:

   The site runoff (Q) was based on the following:
   time of concentration = 10 minutes
   i=3.2 in/hr (page 5-8, Fig. 5-3 of the NJ Stormwater BMP Manual)
   c=0.99 (curve number for impervious)
   Q=ciA=0.99x3.2x0.25=0.79 cfs

   Given the site runoff is 0.79 cfs and based on Table 1 below, the First Defense® HC Model 4-ft with a MTFR of 1.5 cfs would be the smallest model approved that could be used for this site that could remove 50% of the TSS from the impervious area without exceeding the MTFR.

   The sizing table corresponding to the available system models is noted below. Additional specifications regarding each model can be found in the Verification Appendix under Table A-1 and Table A-2 of the NJCAT Verification Report.

Table 1 First Defense® HC Models

| First Defense® Model | Manhole Diameter (ft) | Maximum Treatment Flowrate, MTFR (cfs) |
|---|---|---|
| 4-ft | 4-ft | 1.50 |
| 6-ft | 6-ft | 3.38 |
| 8-ft | 8-ft | 6.00 |

Be advised a detailed maintenance plan is mandatory for any project with a Stormwater BMP subject to the Stormwater Management Rules, N.J.A.C. 7:8. The plan must include all of the items identified in the Stormwater Management Rules, N.J.A.C. 7:8-5.8. Such items include, but are not limited to, the list of inspection and maintenance equipment and tools, specific corrective and preventative maintenance tasks, indication of problems in the system, and training of maintenance personnel. Additional information can be found in Chapter 8: Maintenance of the New Jersey Stormwater Best Management Practices Manual.

If you have any questions regarding the above information, please contact Mr. Titus Magnanao of my office at (609) 633-7021.

Sincerely,

James J. Murphy, Chief
Bureau of Nonpoint Pollution Control

Attachment: Maintenance Plan
C: Chron File
Richard Magee, NJCAT
Vince Mazzei, DLUR
Ravi Patraju, NJDEP
Gabriel Mahon, BNPC
Titus Magnanao, BNPC

## PART 1 - GENERAL

### 1.01 SCOPE

A. Work described in this section includes furnishing all labor, equipment, materials, tools and incidentals required for a complete and operable installation of the First Defense® stormwater treatment system as shown on the drawings and specified herein.

B. The manufacturer shall design and supply the equipment listed herein and the Contractor shall install the equipment in accordance with the manufacturer's Handling, Storage, and Installation Instructions.

### 1.02 GENERAL REQUIREMENTS

A. The treatment system shall use an induced vortex to separate pollutants from stormwater runoff. The system shall be self-activating with no mechanical parts or external power requirements.

B. Upon request, independently certified performance data and references shall be made available to the Engineer of Record for use in determining that the treatment system meets the design criteria and performance requirements stated herein.

### 1.03 SUBMITTALS

A. Submittals shall be provided and shall include the following:

i. Site plan showing location and orientation of proposed pipe sizes, connections and excavation limits.

ii. Product installation drawings showing plan and elevation views with water elevations for the flow conditions specified herein.

iii. Performance data as required in Part 2.

iv. Inspection and maintenance procedures.

### 1.04 QUALITY ASSURANCE

A. The treatment system shall be manufactured under the direction of an ISO 9001 Certified Company.

B. Inspection

The treatment system shall be subject to inspection by the Engineer of Record or the owner's representative at either the place of manufacture or the project site. Any and all observed defects shall be repaired to the satisfaction of the owner or owner's representative or replacement shall be made available.

C. Warranty

The manufacturer shall guarantee the treatment system free from defects in materials and workmanship for a period of two years following installation. If during the warranty period defects in materials or workmanship are noted, then the manufacturer shall be promptly notified. The decision to repair or replace affected units shall be made at the discretion of the manufacturer.

D. Patent Indemnity

Upon request, the manufacturer shall warrant that the treatment system does not infringe upon or violate any patent, copyright, trade secret or any other proprietary right of any third party and shall indemnify the Owner against any loss, cost, expense or liability arising out of such claim whether or not such claim is successful.

E. Certificate of Compliance

Upon request, the manufacturer shall provide a "Letter of Certification" to certify that the treatment system adheres to the specifications required herein and complies with the project's stormwater management permit.

### 1.05 MANUFACTURER

A. The treatment system shall be supplied by a manufacturer regularly engaged in such work who has furnished similar installations that have been in successful and continuous operation for a minimum period of five years. The manufacturer shall be a Stormwater Equipment Manufacturer Association (SWEMA) member.

B. The treatment system shall be certified by an acceptable State agency, such as a State Department of Environmental Protection (DEP) or industry verification or assessment agency (e.g.: ETV, NJCAT, NETE, MaSTEP).

## PART 2 – STORMWATER HVS

### 2.01 General

A. The treatment system shall use a tangential inlet chute to establish rotational flow within a cylindrical vortex chamber and be able to treat the Water Quality Flow Rate stated herein without re-suspending and releasing captured pollutants. The treatment system shall not release captured floating pollutants during surcharge conditions.

B. The treatment system shall not exceed the pressure drop (headloss) for the design flow rates specified herein as determined by ASTM C1745 / C1745M – 11.

C. The treatment system shall fit within the limits of excavation (area and depth) as shown in the project plans and will not exceed the dimensions for the design flow rates specified herein.

D. The storage capacities for pollutants that settle (sediment) and float (oil) shall not be less than the volumes listed in Table 1. The treatment system shall operate as

intended and perform as specified herein as pollutants accumulate. The accumulation of pollutants that settle shall not reduce the volume required in the treatment system for separation and for preventing re-suspension and washout, or reduce the floatables storage volume capacity.

E. Minimum 24-inch frame and cover shall provide access to the sediment storage volumes from the surface for inspection and maintenance. Removal of pollutants from the treatment system shall be possible without requiring confined space entry.

## 2.02 Performance

A. Performance of the treatment system shall be based on independent full-scale laboratory testing and shall adhere to the Performance Specifications listed in Table 1. The laboratory testing used as the basis of product performance shall be undertaken in accordance with testing protocols approved or endorsed by SWEMA or acceptable State agency, such as a State Department of Environmental Protection (DEP) or recognized verification agency (e.g.: ETV, NJCAT, NETE, MaSTEP).

B. Performance of the treatment system shall be based on treating the Water Quality Flow rate (WQF) without internally bypassing and without re-suspension and washout of captured pollutants (scour). The Maximum Treatment Flow Rate(s) (MTFR-106 and/or MTFR-230) shall be greater than or equal to the WQF. The treatment system shall remove greater than or equal to 90% of TSS based on the Target Particle Size (TPS) of 106 microns and/or 80% of TSS based on the TPS of 230 microns at MTFR-106 and MTFR-230, respectively.

C. The treatment system shall convey the Peak On-line Flow Rates listed in Table 1 without causing upstream surcharge conditions. Full-scale independent laboratory scour testing shall demonstrate effluent control of less than or equal to 5 mg/L for all flows up to 200% of MTFR-106.

D. The treatment system shall be capable of capturing and retaining fine silt and sand size particles. Analysis of captured sediment from full-scale field installations shall demonstrate particle sizes predominately in the 20-micron range.

Table 1.

| First Defense® Model | Diameter | Maximum Treatment Flow Rates (MTFR) | | Peak Online Flow Rate | Maximum Pipe Diameter | Oil Storage Capacity | Minimum Sediment Storage Capacity | Min. Cover (F/G to Invert) | Min. Depth |
|---|---|---|---|---|---|---|---|---|---|
| | | 106µm | 230µm | | | | | | |
| | (ft/m) | (cfs/ L/s) | (cfs/ L/s) | (cfs /L/s) | (in/mm) | (gal/L) | ($yd^3/m^3$) | (ft/m) | (ft/m) |
| FD-4 | 4/1.2 | 0.7/20 | 1.2/34 | 6.0/170 | 18/450 | 180/681 | 1.3/ 1.0 | 3.1/1.1 | 5.47/1.7 |
| FD-4HC | | | | 18.0/510 | 24/600 | | | 2.3-3.9/0.7-1.2 | |
| FD-6 | 6/1.8 | 2.2/63 | 3.8/108 | 18.0/510 | 24/600 | 420/1,590 | 3.3/ 2.5 | 4.0 / 1.2 | 6.52/2.0 |
| FD-6HC | | | | 32/906 | 30/750 | | | 3.0-5.1/0.9-1.6 | |

## PART 3 – EQUIPMENT

A. The treatment system shall be manufactured with materials typically used in stormwater drainage systems that have a minimum life expectancy of 30 years.

(i) Materials of construction shall be cross-linked polyethylene (XLPE) and/or Type 304 stainless steel or carbon steel powder coated in accordance with ASTM 775/ ASTM A775M. All components shall be designed to withstand normal loadings associated with fabrication, shipping, site installation, and normal operation of the equipment.

(ii) Precast shall be manufactured with concrete that has attained a compressive strength of 4,000 psi after 28 days. The structure shall be reinforced to withstand an HS20-44 loading. Shiplap joints shall be sealed with butyl rubber mastic sealant conforming to ASTM C990. Slab tops shall be suitably reinforced and provided with manhole openings and covers as required. The cast iron manhole frames and covers shall be sized as per the manufacturer's drawings and shall be in accordance with ASTM A48, CL.35B and AASHTO M105. The masonry fixing bolts shall be Type 304 stainless steel.

(iii) All piping connections and ancillary items not listed herein shall be provided by the Contractor.

## PART 4 - EQUIPMENT DELIVERY

A. The treatment components of the treatment system shall be delivered within six weeks of date of approved technical submittal.

B. The components of the treatment system shall be preassembled and delivered to the site fully fabricated and ready for the final assembly.

C. Off-loading, storage, and installation shall be by the Contractor.

D. The Contractor shall inspect and provide signed acceptance of equipment prior to unloading, or notify the manufacturer of any damage to equipment to effect proper remedial action. Failure to notify the manufacturer of damage to equipment prior to unloading will void all warranties pertaining to subject equipment.

## PART 5 - EQUIPMENT INSTALLATION

A. The system shall be installed in strict accordance with the site plans, and the manufacturer's general arrangement drawings and Handling, Storage and Installation Instructions. The Contractor shall be responsible for installing the equipment and all necessary site connections.

B. The Manufacturer shall be notified immediately of any equipment which is damaged during unloading, storage, or installation. The damaged equipment shall be repaired or replaced at the discretion of the manufacturer and entirely at the Contractor's expense.

C. The precast concrete structure shall be set on a granular or compacted sand sub-base in accordance with local requirements for standard manhole installation. In no instances shall the compacted sub-base material have a thickness of less than 12 inches.

D. The precast concrete structure shall be set level and plumb to within 0.5%.

E. Non-shrink grout or hydraulic cement conforming to ASTM C 595 shall be used to provide a water tight seal in the lift holes, any drain holes and around the concrete knock-outs for the inlet and outlet pipes.

F. The Contractor shall, at the discretion of the owner or owner's representative, test the concrete structure for water tightness before backfilling.

555 Hudson Valley Avenue Suite 101
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Main: 877 627 3772

Colliers
Engineering & Design

January 2, 2025

John Gunn, Chairman
City of Beacon Planning Board
1 Municipal Plaza
Beacon, NY 12508

45 Beekman Street & High Street – Mixed-Use Project
Parcels: 5954-26-689990 & 781983 and 5955-19-706012
City of Beacon, Dutchess County, NY
Colliers Engineering & Design Project No. 23010468A

Dear Chairman Gunn and the Members of the Planning Board,

Based on the discussions at the December 10, 2024, meeting, we have made the following modifications to the Site Plans:

- In coordination with the project architect and the evolution of the corner access to the Beekman Street Building (referenced as Building #1 on our site plans), we have redesigned the access hardscape to this building from the Route 9D/Beekman Street intersection. We feel this layout utilizing curvilinear walkways with both steps and ramp to address the elevation change between the building finished floor and the street elevation is more cohesive with the proposed building corner access. The landscape design has also been modified for this layout and proposes low growing plant material directly in front of the building access to not impede sightlines of the main entrance. The proposal for a sculpture display area remains a component of the design for a point of interest and breaks up the hardscape of the walkways.
- The proposed landscaping on the northwest side of the site which provides buffering and screening for the neighboring properties, has been enhanced with additional shade/canopy trees and we've included additional species of evergreen trees for a more diverse plant palette.
- Lastly, the bolded responses from Lanc & Tully Engineering and Surveying in their project review memo from December 7, 2024 remain as up to date, with the exception of the comment regarding the Stormwater Pollution Prevention Plan (SWPPP). We have provided a revised SWPPP with this submission and included additional responses to the open SWPPP comments from the previous review.

Below please find our revised responses to the SWPPP comment letter received from Lanc & Tully Engineering and Surveying dated February 14, 2024. The comments have been repeated for clarity:

Colliers Engineering & Design

## Lanc & Tully Engineering and Surveying dated 2/14/24:

Preliminary SWPPP Review:

Comment 1: The pages shall be numbered to correspond with the "Table of Contents" at the front of the report.

**Response 1: The page numbers have been added to the report and correspond to the Table of Contents.**

Comment 2: The "Introduction" notes the use of two (2) bioretention basins, but the plans only show one. The report should be updated to reflect the actual practices to be used as shown on the plans.

**Response 2: The introduction of the report has been updated to reflect the proposed stormwater improvements on the current site plans.**

Comment 3: Provide Existing Drainage Map and Proposed Drainage Map on larger sheets so that they are at proper scale and legible.

**Response 3: The Full sized, to scale watershed maps are included as appendix 1 of the SWPPP.**

Comment 4: Soil testing shall be performed at the site to verify the types of soils present, infiltration rate of soils, depth to bedrock, and depth to groundwater. It should be noted that joint soil testing shall be conducted with the City Engineer's office present.

**Response 4: Comment noted. Soil testing shall be conducted in accordance with the latest design manual to confirm the depth the bedrock and the seasonally high groundwater table. This testing shall be coordinated with and witnessed by a representative from the City's Engineer's office. Please note that the current design doesn't rely on infiltration of stormwater runoff.**

Comment 5: At the end of the 4th paragraph on page 9, it notes the 75% required for water quality volume as 1.148 acres. As the existing impervious area is 1.90 acres, the 75% water quality volume equates to 1.43 acres. The report, and the calculations for "Require WQv" below, shall be updated.

**Response 5: The project is considered redevelopment with an increase in impervious area. The redevelopment portion of the project shall be designed to treat 75% of the existing disturbed impervious area. As the LOD is 2.55 Acres, the redevelopment has been sized to treat 75% of the impervious areas within the LOD. Additional language has been added to this section of the report to clarify how treatment was provided.**

Colliers Engineering & Design

Comment 6: The "Project Site" call out in the figure shown under the "Water Quality Volume" section on page 10 should be adjusted, as the project is located in Dutchess County, not Orange County as currently depicted.

**Response 6: The figure has been updated as requested. Please note that the water quality "P" value is still 1.4".**

Comment 7: The measurements for the "Filter Width" and "Filter Length" listed in the "Determine Actual Bio-Retention Area" on the back of the calculation page in Appendix 3 should be checked or provide notes in the columns to the right on the table as to how these measurements were arrived at.

**Response 7: The "filter width" & "filter length" editable field on the GI worksheets are used to determine the filter area. The filter area is the important component in the design calculations, not the length and width. The proposed bioretention basin is an irregular shape. Therefore, the actual filter area provided on the site plans (as measured in AutoCAD), was entered into the "filter width", and the "filter length" was entered as 1 to produce an accurate filter area for the GI worksheet calculations. Notes have been added to the GI worksheet to eliminate confusion.**

Comment 8: Pretreatment is required for the proposed bio-retention area in accordance with Section 6.4.3 of the NYS Stormwater Management Design Manual. The bottom of Page 16 of the states "Flush curbs with rip rap leading to grass filter strips …", but the plans and detail on Sheet 17 of 18 do not show any pretreatment for the bioretention area. The plans, construction detail, and SWPPP shall be updated for the bioretention basin to employee pre-treatment as required by NYSDEC.

**Response 8: The bioretention basin has been redesigned to provide a forebay. The site plan details and the SWPPP narrative has been revised to discuss pretreatment.**

Comment 9: Although the SWPPP discusses the bio-retention basin and hydrodynamic separator, it should be updated to discuss the proposed Stormtech subsurface system.

**Response 9: Comment noted. The report has been revised to discuss the subsurface detention system on page 17 of the SWPPP.**

Comment 10: The plans note the hydrodynamic separator to have to inverts going out. Where is the 2nd line out going to? It appears that this should be re-labeled as the line behind the building should be directed into the structure.

**Response 10: The plans have been revised to correct the pipes in and out of the hydrodynamic separator.**

Colliers Engineering & Design

Comment 11: Structure MH S-7 should be checked to ensure that it is not compromised structurally based upon the close proximity of the 3 pipes entering the structure.

**Response 11: The drainage pipe alignment has been revised to remove this potential conflict.**

Comment 12: Under the "End of Project" section of the report, this shall also note that a topographic as-built shall be provided for the stormwater facilities, as well as a certification letter being provided to the City of Beacon by the project engineer certifying that the stormwater facilities were constructed in accordance with the SWPPP and plans.

**Response 12: Comment noted. This section of the report has been revised to require the as-built survey and engineer's certification of the stormwater facilities. See page 25.**

Comment 13: The bio-retention detail on Sheet 17 of 18 shall be updated to include elevations for all components of the system. This would also apply to the subsurface system.

**Response 13: The site plan stormwater details have been revised to include the site-specific elevations for the bioretention basin and subsurface detention system.**

Comment 14: The elevation of the outlet control structure grate for the bio-retention facility should be compared to that of the elevation in the SWPPP, and the two coordinated.

**Response 14: The HydroCAD model and OCS detail have been reviewed and revised for consistency.**

Comment 15: There is concern that during the storm events the bio-retention facility will drain out through the curb cut on the lower access drive, as the elevation of this curb cut is 101.4. The storage abilities of the bio-retention facility shall be further evaluated, along with the grading of the facility.

**Response 15: The grading of the entrance, and bioretention basin have been revised to eliminate this concern. The 100 year storm elevation shall remain within the limits of the basin and not inundate the site entrance. New 100' peak EL = 99.57; road low point elevation = 100.6.**

If you have any questions regarding the above project responses, please feel free to call me at 845.564.4495. We look forward to the continued discussions with the Board on this project at the next available meeting.

Sincerely,

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.



Justin E. Dates, R.L.A.
Geographic Discipline Leader

Encl.
cc: File w/encl.

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ARYEH SIEGEL
ARCHITECT

John Gunn - Planning Board Chairman
City of Beacon
One Municipal Plaza
Beacon, NY 12508

**Re: 45 Beekman Street & High Street, Beacon, New York**
*Site Plan Application – Responses to Comments*

January 2, 2024

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in KARC Planning Consultant's Memorandum, dated December 5, 2024.

**KARC Planning Consultant's Comment Responses:**

**1. Architecture & Design:**Revised architectural elevations and renderings were not submitted at the time of the Planning Board's submission deadline. However, the applicant has indicated that revised designs will be reviewed with the ARB at their December 6th meeting. Comments on the revised elevations and tower design are therefore forthcoming.

*Response: Revised designs were presented to the ARB at its December 6, 2024 meeting date and with the Planning Board at its December 10, 2024 meeting date. We are awaiting further updated renderings, responsive to the comments made at both meeting dates, and will submit them prior to the January Planning Board meeting.*

**2. Plaza / Sculpture Display Area:** I appreciate and support the changes the applicant has made to provide direct pedestrian access at the corner of Beekman Street and NYS Route 9D via sidewalk access and an accessible ramp. The board should discuss the potential to treat the entire corner with brick pavers to create one consolidated access point, allowing pedestrians to enter directly from the crosswalk alignment (green lines) rather traveling down Beekman Street or Route 9D to access the concrete sidewalk (red lines). This will avoid pedestrians creating a "preferred path" across the lawn that is currently proposed at the corner.

*Response: Comment noted. A revised plan for the corner plaza and its relationship with the updated building design is detailed within Colliers' response to comments and Site Plan Set enclosed with this submission.*

**3. Streetscape Improvements**: The applicant has proposed enhancing the streetscape by adding two street trees along Beekman Street and adding shade trees along the corner façade of Building #1. Additionally, shade trees within the pocket greenspace will be relocated closer to the sidewalk. These updates are supportable in that they will help to green the streetscape and create a softer, more inviting appearance for the façade of Building #1.

*Response: Comment acknowledged. Additional revisions are proposed corresponding to the new corner plaza design. See enclosed Site Plan Set.*

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Please note that a key plan will be provided to show view locations on the Elevation sheet for the forthcoming revised elevations.

Please refer to Collier's letter for responses to Lanc & Tully comments. Thank you. Please let me know if you have any questions.

Sincerely,



Aryeh Siegel
*Aryeh Siegel, Architect*

LANC & TULLY
Engineering and Surveying, P.C.

January 12, 2025

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: 45 Beekman Street
Mixed-Use Building
Tax Nos. 5955-19-706012, 5954-26-689990 & 781983
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding two mixed-use buildings to be located at 45 Beekman Street:

- Correspondence dated January 2, 2025, from Cuddy & Feder.
- Response correspondence dated January 2, 2025, from Colliers Engineering & Design.
- Response correspondence dated January 2, 2025, from Aryeh Siegel, Architect.
- Report titled "Stormwater Pollution Prevention Plan – 45 Beekman Street Mixed Use Development", dated December 31, 2024, as prepared by Colliers Engineering & Design.
- Plan set titled "Preliminary Site Plan for Beekman Arts Center LLC & Bay Ridge Studios LLC", with the latest revision date of December 31, 2024, and consisting of Sheets of 1 of 19 through 19 of 19, as prepared by Colliers Engineering & Design.
- Architectural plan Sheets A-101, A-102, A-103, A-104, A-105, and A-106 titled "45 Beekman Street", with the latest revision date of December 31, 2024, consisting of floor plans, site section diagrams, and building elevations, as prepared by Aryeh Siegel, Architect.

The proposed project entails the demolition of the existing structure located at the intersection of North Avenue & Beekman Street, and the merging of the three (3) parcels into a single parcel; and the construction of two (2) mixed-use buildings. Both buildings are proposed to have commercial space, tenant amenity space on the 1st floor and dwelling units on the 2nd through 4th floors. The applicant is currently pursuing the acquisition of a portion of the NYSDOT right-of-way along Beekman Street. If the applicant is able to acquire this land, the applicant will be able to develop the site in a more consistent manner with the zoning code, as shown on the current plans. The submitted architectural floor plans show a total of 62 dwelling units consisting of 33 one-bedroom units and 31 two-bedroom units. The project site, with the lots merged, has an area of 2.05± acres and is located in the L (Linkage) Zone, with a small portion of the lot along North Avenue being located in the R1-7.5 Zone and the vacant parcel along High Street being located in

the Historic District and Landmark Overly (HDLO) district. The proposed uses, commercial and residential, are permitted uses within the L Zone.

We would like to note that a number of the comments are those as previously presented in our December 7, 2024 review letter, which the applicant's engineer has acknowledged as still needing to be addressed. Based on our review of the above documents, plans and report, we would like to offer the following comments:

General Comments:

1. A lot-line merger plan shall be prepared for the project. ***Applicant notes that a plan will be provided pending NYSDOT response to proposal to acquire additional site area along Beekman Street.***

2. A subdivision plan shall be prepared to show the combining of the lots and the offers of dedications for lands to be conveyed to the City of Beacon for road right-of-way area along Beekman Street and High Street. ***Applicant notes that a subdivision plan shall be provided to the Board upon confirmation of land acquisition from the NYSDOT.***

3. A stormwater maintenance and access agreement shall be prepared for the project and provided for review. ***Applicant's consultant notes that this will be provided pending NYSDOT response to acquire additional site area along Beekman Street.***

4. As the project progresses, the project engineer shall prepare a construction cost estimate for all public improvements and submit it for review. ***Applicant's consultant notes that this will be provided pending NYSDOT response to acquire additional site area along Beekman Street.***

5. As the current plans show grading, drainage improvements, and sidewalks with the NYSDOT right-of-way along Route 9D, the proposed work within the NYSDOT right-of-way will require their review and approval, as well as NYSDOT permitting for the work. ***Applicant notes that coordination with the NYSDOT for the R.O.W. acquisition and intersection improvements continues to proceed.***

Survey Plans:

1. The "Sanitary Sewer & Utilities Survey" plan should include a legend to define the following terms TFC, TFA, MMC, TFI, RTJ, and MSA, that appear on this plan. ***Applicant notes final updated plans will be provided once other pending utility investigations are completed.***

Sheet 4 of 19:

1. The applicant will need to seek a variance for the proposed parking located within the required setback along High Street.

Sheets 8 & 9 of 19:

1. The "Sanitary Sewer & Utilities Survey" plan shows 5 possible connections to the sanitary sewer line running between SMH-12 and SMH-13. The applicant shall conduct further studies of these connections to determine if they are active or not. It may be possible to determine this through dye testing of the neighboring homes. As the sanitary sewer lines running across the site are private, there is concern that a neighboring parcel(s) may be connected to this private system. If it is found that a neighboring parcel(s) is connected to the private system, the applicant will need to make provisions to reconnect the neighboring parcel(s) to the sewer collection system in Tompkins Avenue. If dye testing is to be performed, we would recommend that the applicant coordinate this with the City's Water & Sewer Department. ***The applicant's consultant has been able to confirm that the sewer lateral for the residence at 7 Tompkins is connected to the sewer line running through the project parcel and are proposing to re-connect this sewer service to the sewer line within Tompkins Avenue. The applicant further notes that continue to reach out to the neighboring residents at 9 and 11 Tompkins Avenue to determine where the sewer services for each of these dwellings drain to.***

   The plans shall be updated to reflect the proposed relocation of sewer services as proposed by the applicant for each of the dwellings that may be connected to the existing sewer running through the project parcel.

2. The plans shall show the sanitary sewer to continue from SMH-14 to SMH-12. Based upon recent discussions with the City's Water & Sewer Superintendent, this interconnection is blocked, as the sewer is conveyed south from SMH-14 to SMH-8 on the south side of Beekman Street. This in conjunction with the findings of the sewer lateral connections just north of SMH-13 as mentioned in Comment No. 1 above, may allow for the applicant to remove the existing sewer collection running across the site, as well as reducing the amount of new sewer main and manholes (213 feet of main and 2 manholes) to be installed as part of the project. ***Applicant's consultant notes that plan revisions will be provided upon the results of the dye-testing for the neighboring parcels.***

3. The proposed size of the water connection lines to both buildings shall be noted on the plans. ***Applicant notes that upon completion of the water system for the buildings, the size of the piping will be provided.***

4. The condition of the 12" clay sewer line running across Beekman Street from the proposed doghouse manhole to SMH 5 should be assessed as to its condition. ***Applicant notes that they are in the process of scheduling the work to have the existing drainage line televised.***

5. The plan shall be updated to reflect the 6" underdrain pipe located within the bio-retention area.

6. It is recommended that the invert for storm pipe P-7 be set higher than the invert out pipe of P-21 in structure MH S-8, or the invert elevation of the outlet pipe (P-21) be lowered, so as to avoid water surcharging or backing up into the drain line from the bio-retention area, especially the 6" underdrain line.

Stormwater Pollution Prevention Plan:

1. Our office has reviewed the recently submitted Stormwater Pollution Prevention Plan (SWPPP) dated December 31, 2024, and find it to be in general compliance with the requirements as set forth by NYSDEC. Acceptance of the SWPPP cannot be completed until such time as soil testing is conducted at the site and the applicant has acquired the land from the NYSDOT, as this may have an impact on the design of the site and the SWPPP itself. The applicant's engineer shall notify the City Engineer's office as to when soil testing is to be conducted at the site so that we can ensure we are present at the time of testing.

2. Once the soil testing has been conducted at the site, the finding from the soil testing shall be added to the Stormwater Pollution Prevention Plan (SWPPP).

Architectural Plans:

1. The "Views" on the Elevations plan (Sheet A106) should be labeled as where the view is from. Although the response comments note that they have been labeled, the current plan still is missing the required labeling.

This completes our review at this time. Further comments may be provided based on future submissions when more detailed plans are prepared for the project. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

**TO:** John Gunn, Chair, and the City of Beacon Planning Board

**FR:** KARC Planning Consultants, Inc.

**DATE:** January 14, 2025

**RE:** 45 Beekman Street Site Plan, Beekman Arts Center LLC & Bay Ridge Studios LLC

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I have reviewed the following materials regarding the proposed construction of two (2) new mixed-use buildings at 45 Beekman Street:

- Cover letter by Taylor M. Palmer, Cuddy + Feder LLP, dated January 2, 2025
- Full Site Plan Set (19 sheets) prepared by Colliers Engineering and Design, P.C., dated January 30, 2024, last revised 12/31/2024
- Architectural Plan Set by Aryeh Siegel, dated November 28, 2023, last revised 12/31/2024
- Stormwater Pollution Prevention Plan prepared by Colliers Engineering and Design, P.C., dated 12/31/2024
- Exhibit A – Response to Comments Memo by Colliers Engineering & Design, dated January 2, 2025
- Exhibit B – Response to Comments Memo by Aryeh Siegel Architect, dated January 2, 2025

**Project Description:**
The proposed project includes construction of two 4-story mixed-use buildings with a total of 64 residential dwelling units, 14,892 sq. ft. commercial space, and 91 off-street parking spaces. The 2.06-acre site includes three parcels and ROW acquisition to be merged into a single lot of record. The property is located primarily within the Linkage (L) district, with only the northern driveway onto Tompkins Avenue located in the R1-7.5 Residential district, with frontages on Beekman Street, High Street, and Tompkins Avenue. Multifamily residential, retail, and office uses are permitted within this portion of the Linkage District. The project site is within the Local Waterfront Revitalization Program (LWRP) area, and immediately abuts parcels that fall within the Historic District and Landmark Overlay Zone along High Street and Thompkins Avenue.

**Comments & Recommendations:**

1. **Architecture & Design:** Revised architectural elevations and renderings were presented at the December 6th ARB meeting and December 10th Planning Board meeting. The Applicant has indicated that updated renderings, responsive to the comments made at both meetings, are forthcoming.
    - **Consistency Between Renderings and Site Plan:** There are a number of inconsistencies between the provided renderings and the proposed site plan, such as the plaza described below and the landscaped area between the two buildings (the Grading and Landscape Plans show a depressed bioretention area whereas renderings show a mounded berm-like area that slopes down towards the road and significantly screens

views of the internal parking.) While we understand that renderings will never be 100% realistic, the applicant should take care to ensure site grades and landscaping are not significantly misrepresented as the renderings are updated.

2. **Pedestrian Plaza / Tower Entrance:** The applicant has made changes to the proposed entrance plaza to relocate the proposed sculpture to the middle of the open area and add four curvilinear walkways from various points of the southeast corner of the property. Previous comments requested that the pedestrian access through the plaza be made more direct and aligned with the pedestrian crosswalks across Beekman Street and Route 9D, and that the plaza be designed and landscaped to create a cohesive public space. The four curvilinear entrance walkways achieve the opposite effect, making the pedestrian entrance more convoluted and dividing the overall plaza. To highlight the entrance and create a presence on this important corner, it is recommended that the applicant propose a layout similar to what is featured in the most recent renderings.



3. **Lighting Plan:** The provided lighting plan proposes wall-mounted lights on the rear façade of the buildings, pole lights in the rear parking area, and 3.5 ft. bollards along the front pedestrian paths and landscaped areas. The applicant should clarify if any lighting is proposed on the front façade of the building(s) or within the arcade. If yes, details of these should be added to the lighting plan.

If you have any questions, please feel free to contact me.

Natalie Quinn
Beacon Planning Consultant

Cc: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer
Taylor M Palmer, Esq., Attorney for the Applicant

# *Full Environmental Assessment Form*
# *Part 2 - Identification of Potential Project Impacts*

**Part 2 is to be completed by the lead agency.** Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

**Tips for completing Part 2:**

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes"** to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No"** to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

**1. Impact on Land**
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)
*If "Yes", answer questions a - j. If "No", move on to Section 2.*

☐ NO ☑ YES

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may involve construction on land where depth to water table is less than 3 feet. | E2d | ☑ | ☐ |
| b. The proposed action may involve construction on slopes of 15% or greater. | E2f | ☑ | ☐ |
| c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface. | E2a | ☑ | ☐ |
| d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material. | D2a | ☑ | ☐ |
| e. The proposed action may involve construction that continues for more than one year or in multiple phases. | D1e | ☑ | ☐ |
| f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides). | D2e, D2q | ☑ | ☐ |
| g. The proposed action is, or may be, located within a Coastal Erosion hazard area. | B1i | ☑ | ☐ |
| h. Other impacts: _____ _____ | | ☐ | ☐ |

**2. Impact on Geological Features**

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☑ NO ☐ YES

*If "Yes", answer questions a - c. If "No", move on to Section 3.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. Identify the specific land form(s) attached: _____ _____ | E2g | □ | □ |
| b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____ | E3c | □ | □ |
| c. Other impacts: _____ _____ | | □ | □ |

**3. Impacts on Surface Water**

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☑ NO ☐ YES

*If "Yes", answer questions a - l. If "No", move on to Section 4.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may create a new water body. | D2b, D1h | □ | □ |
| b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water. | D2b | □ | □ |
| c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body. | D2a | □ | □ |
| d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body. | E2h | □ | □ |
| e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments. | D2a, D2h | □ | □ |
| f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water. | D2c | □ | □ |
| g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s). | D2d | □ | □ |
| h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies. | D2e | □ | □ |
| i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action. | E2h | □ | □ |
| j. The proposed action may involve the application of pesticides or herbicides in or around any water body. | D2q, E2h | □ | □ |
| k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities. | D1a, D2d | □ | □ |

| | | | |
|---|---|---|---|
| l. Other impacts: _____ _____ | | □ | □ |

**4. Impact on groundwater**

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) ☐ NO ☑ YES

*If "Yes", answer questions a - h. If "No", move on to Section 5.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells. | D2c | ☑ | ☐ |
| b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____ | D2c | ☑ | ☐ |
| c. The proposed action may allow or result in residential uses in areas without water and sewer services. | D1a, D2c | ☑ | ☐ |
| d. The proposed action may include or require wastewater discharged to groundwater. | D2d, E2l | ☑ | ☐ |
| e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated. | D2c, E1f, E1g, E1h | ☑ | ☐ |
| f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer. | D2p, E2l | ☑ | ☐ |
| g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources. | E2h, D2q, E2l, D2c | ☑ | ☐ |
| h. Other impacts: _____ _____ | | ☐ | ☐ |

**5. Impact on Flooding**

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) ☑ NO ☐ YES

*If "Yes", answer questions a - g. If "No", move on to Section 6.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may result in development in a designated floodway. | E2i | □ | □ |
| b. The proposed action may result in development within a 100 year floodplain. | E2j | □ | □ |
| c. The proposed action may result in development within a 500 year floodplain. | E2k | □ | □ |
| d. The proposed action may result in, or require, modification of existing drainage patterns. | D2b, D2e | □ | □ |
| e. The proposed action may change flood water flows that contribute to flooding. | D2b, E2i, E2j, E2k | □ | □ |
| f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade? | E1e | □ | □ |

| | | | |
|---|---|---|---|
| g. Other impacts: _____<br>_____ | | ☐ | ☐ |

**6. Impacts on Air**

The proposed action may include a state regulated air emission source. ☑ NO ☐ YES
(See Part 1. D.2.f., D.2.h, D.2.g)
*If "Yes", answer questions a - f. If "No", move on to Section 7.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: | | | |
| i. More than 1000 tons/year of carbon dioxide ($CO_2$) | D2g | ☐ | ☐ |
| ii. More than 3.5 tons/year of nitrous oxide ($N_2O$) | D2g | ☐ | ☐ |
| iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) | D2g | ☐ | ☐ |
| iv. More than .045 tons/year of sulfur hexafluoride ($SF_6$) | D2g | ☐ | ☐ |
| v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions | D2g | ☐ | ☐ |
| vi. 43 tons/year or more of methane | D2h | ☐ | ☐ |
| b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants. | D2g | ☐ | ☐ |
| c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour. | D2f, D2g | ☐ | ☐ |
| d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above. | D2g | ☐ | ☐ |
| e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour. | D2s | ☐ | ☐ |
| f. Other impacts: _____<br>_____ | | ☐ | ☐ |

**7. Impact on Plants and Animals**

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☐ NO ☑ YES
*If "Yes", answer questions a - j. If "No", move on to Section 8.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2o | ☑ | ☐ |
| b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government. | E2o | ☑ | ☐ |
| c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2p | ☑ | ☐ |
| d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government. | E2p | ☑ | ☐ |

| | | | |
|---|---|---|---|
| e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect. | E3c | ☑ | ☐ |
| f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____ | E2n | ☑ | ☐ |
| g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site. | E2m | ☑ | ☐ |
| h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____ | E1b | ☑ | ☐ |
| i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides. | D2q | ☑ | ☐ |
| j. Other impacts: _____ _____ | | ☐ | ☐ |

**8. Impact on Agricultural Resources**

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☑ NO ☐ YES

*If "Yes", answer questions a - h. If "No", move on to Section 9.*

| | **Relevant Part I Question(s)** | **No, or small impact may occur** | **Moderate to large impact may occur** |
|---|---|---|---|
| a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System. | E2c, E3b | □ | □ |
| b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc). | E1a, Elb | □ | □ |
| c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land. | E3b | □ | □ |
| d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District. | E1b, E3a | □ | □ |
| e. The proposed action may disrupt or prevent installation of an agricultural land management system. | El a, E1b | □ | □ |
| f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland. | C2c, C3, D2c, D2d | □ | □ |
| g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan. | C2c | □ | □ |
| h. Other impacts: _____ | | □ | □ |

**9. Impact on Aesthetic Resources**

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.)

☑ NO ☐ YES

*If "Yes", answer questions a - g. If "No", go to Section 10.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource. | E3h | ☐ | ☐ |
| b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views. | E3h, C2b | ☐ | ☐ |
| c. The proposed action may be visible from publicly accessible vantage points:<br>i. Seasonally (e.g., screened by summer foliage, but visible during other seasons)<br>ii. Year round | E3h | <br>☐<br>☐ | <br>☐<br>☐ |
| d. The situation or activity in which viewers are engaged while viewing the proposed action is:<br>i. Routine travel by residents, including travel to and from work<br>ii. Recreational or tourism based activities | E3h<br>E2q,<br>E1c | <br><br>☐<br>☐ | <br><br>☐<br>☐ |
| e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource. | E3h | ☐ | ☐ |
| f. There are similar projects visible within the following distance of the proposed project:<br>0-1/2 mile<br>½ -3 mile<br>3-5 mile<br>5+ mile | D1a, E1a, D1f, D1g | ☐ | ☐ |
| g. Other impacts: _____<br>_____ | | ☐ | ☐ |

**10. Impact on Historic and Archeological Resources**

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.)

☐ NO ☑ YES

*If "Yes", answer questions a - e. If "No", go to Section 11.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places. | E3e | ☑ | ☐ |
| b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory. | E3f | ☑ | ☐ |
| c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory.<br>Source: _____ | E3g | ☐ | ☐ |

| | | | |
|---|---|---|---|
| d. Other impacts: _____ _____ | | ☐ | ☐ |
| e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3: | | | |
| i. The proposed action may result in the destruction or alteration of all or part of the site or property. | E3e, E3g, E3f | ☐ | ☐ |
| ii. The proposed action may result in the alteration of the property's setting or integrity. | E3e, E3f, E3g, E1a, E1b | ☐ | ☐ |
| iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting. | E3e, E3f, E3g, E3h, C2, C3 | ☐ | ☐ |

**11. Impact on Open Space and Recreation**

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
*If "Yes", answer questions a - e. If "No", go to Section 12.*

☑ NO ☐ YES

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat. | D2e, E1b E2h, E2m, E2o, E2n, E2p | □ | □ |
| b. The proposed action may result in the loss of a current or future recreational resource. | C2a, E1c, C2c, E2q | □ | □ |
| c. The proposed action may eliminate open space or recreational resource in an area with few such resources. | C2a, C2c E1c, E2q | □ | □ |
| d. The proposed action may result in loss of an area now used informally by the community as an open space resource. | C2c, E1c | □ | □ |
| e. Other impacts: _____ _____ | | □ | □ |

**12. Impact on Critical Environmental Areas**

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
*If "Yes", answer questions a - c. If "No", go to Section 13.*

☑ NO ☐ YES

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA. | E3d | □ | □ |
| b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA. | E3d | □ | □ |
| c. Other impacts: _____ _____ | | □ | □ |

**13. Impact on Transportation**

The proposed action may result in a change to existing transportation systems. ☐ NO ☑ YES
(See Part 1. D.2.j)
*If "Yes", answer questions a - f. If "No", go to Section 14.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. Projected traffic increase may exceed capacity of existing road network. | D2j | ☐ | ☑ |
| b. The proposed action may result in the construction of paved parking area for 500 or more vehicles. | D2j | ☑ | ☐ |
| c. The proposed action will degrade existing transit access. | D2j | ☑ | ☐ |
| d. The proposed action will degrade existing pedestrian or bicycle accommodations. | D2j | ☑ | ☐ |
| e. The proposed action may alter the present pattern of movement of people or goods. | D2j | ☑ | ☐ |
| f. Other impacts: _____ _____ | | ☐ | ☐ |

**14. Impact on Energy**

The proposed action may cause an increase in the use of any form of energy. ☐ NO ☑ YES
(See Part 1. D.2.k)
*If "Yes", answer questions a - e. If "No", go to Section 15.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action will require a new, or an upgrade to an existing, substation. | D2k | ☑ | ☐ |
| b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use. | D1f, D1q, D2k | ☑ | ☐ |
| c. The proposed action may utilize more than 2,500 MWhrs per year of electricity. | D2k | ☑ | ☐ |
| d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed. | D1g | ☑ | ☐ |
| e. Other Impacts: _____ _____ | | ☐ | ☐ |

**15. Impact on Noise, Odor, and Light**

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☐ NO ☑ YES
(See Part 1. D.2.m., n., and o.)
*If "Yes", answer questions a - f. If "No", go to Section 16.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may produce sound above noise levels established by local regulation. | D2m | ☑ | ☐ |
| b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home. | D2m, E1d | ☑ | ☐ |
| c. The proposed action may result in routine odors for more than one hour per day. | D2o | ☑ | ☐ |

| | | | |
|---|---|---|---|
| d. The proposed action may result in light shining onto adjoining properties. | D2n | ☑ | ☐ |
| e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions. | D2n, E1a | ☑ | ☐ |
| f. Other impacts: _____ _____ | | ☐ | ☐ |

**16. Impact on Human Health**

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☑ NO ☐ YES

*If "Yes", answer questions a - m. If "No", go to Section 17.*

| | Relevant Part I Question(s) | No,or small impact may cccur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community. | E1d | ☐ | ☐ |
| b. The site of the proposed action is currently undergoing remediation. | E1g, E1h | ☐ | ☐ |
| c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action. | E1g, E1h | ☐ | ☐ |
| d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction). | E1g, E1h | ☐ | ☐ |
| e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health. | E1g, E1h | ☐ | ☐ |
| f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health. | D2t | ☐ | ☐ |
| g. The proposed action involves construction or modification of a solid waste management facility. | D2q, E1f | ☐ | ☐ |
| h. The proposed action may result in the unearthing of solid or hazardous waste. | D2q, E1f | ☐ | ☐ |
| i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste. | D2r, D2s | ☐ | ☐ |
| j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste. | E1f, E1g E1h | ☐ | ☐ |
| k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures. | E1f, E1g | ☐ | ☐ |
| l. The proposed action may result in the release of contaminated leachate from the project site. | D2s, E1f, D2r | ☐ | ☐ |
| m. Other impacts: _____ _____ | | | |

**17. Consistency with Community Plans**

The proposed action is not consistent with adopted land use plans. (See Part 1. C.1, C.2. and C.3.) ☑ NO ☐ YES

*If "Yes", answer questions a - h. If "No", go to Section 18.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s). | C2, C3, D1a E1a, E1b | ☐ | ☐ |
| b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%. | C2 | ☐ | ☐ |
| c. The proposed action is inconsistent with local land use plans or zoning regulations. | C2, C2, C3 | ☐ | ☐ |
| d. The proposed action is inconsistent with any County plans, or other regional land use plans. | C2, C2 | ☐ | ☐ |
| e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure. | C3, D1c, D1d, D1f, D1d, Elb | ☐ | ☐ |
| f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure. | C4, D2c, D2d D2j | ☐ | ☐ |
| g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action) | C2a | ☐ | ☐ |
| h. Other: _____ _____ | | ☐ | ☐ |

**18. Consistency with Community Character**

The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3) ☑ NO ☐ YES

*If "Yes", answer questions a - g. If "No", proceed to Part 3.*

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|---|---|---|
| a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community. | E3e, E3f, E3g | ☐ | ☐ |
| b. The proposed action may create a demand for additional community services (e.g. schools, police and fire) | C4 | ☐ | ☐ |
| c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing. | C2, C3, D1f D1g, E1a | ☐ | ☐ |
| d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources. | C2, E3 | ☐ | ☐ |
| e. The proposed action is inconsistent with the predominant architectural scale and character. | C2, C3 | ☐ | ☐ |
| f. Proposed action is inconsistent with the character of the existing natural landscape. | C2, C3 E1a, E1b E2g, E2h | ☐ | ☐ |
| g. Other impacts: _____ _____ | | ☐ | ☐ |

**PRINT FULL FORM**

**City of Beacon Planning Board Agenda**
**01/14/2025**

**Title:**

Continue review of applications for Site Plan Approval and Subdivision Approval, Mixed-Use Commercial Use and Residential, 420-430 Fishkill Avenue, submitted by DK HHH Realty, LLC.

**ATTACHMENTS**

420 Fishkill PB 1.14.25 Supplemental Submission cvr ltr.pdf

420 Fishkill PB 1.14.25 Exhibit A - Response by Colliers 12-30-2024.pdf

420 Fishkill PB 1.14.25 Exhibit B - Response by HLD 1-2-25.pdf

420 Fishkill PB 1.14.25 Exhibit C - Correspondence from Debra Adamsons 1-2-25.pdf

420 Fishkill PB 1.14.25 Attachment 1 - Drainage Report HLD 12.24.24.pdf

420 Fishkill PB 1.14.25 Attachment 2 - light fixtures Spec sheets.pdf

420 Fishkill PB 1.14.25 Attachment 3 - Floor Plans and Renderings by Studio Architecture rev 1.2.25.pdf

420 FIshkill PB 1.14.25 Attachment 4 Site Redevelopment plans and Lotline Removal Plat by HLD rev 10.29.24.pdf

Lanc & Tully 420-430 Fishkill Ave 01-12-25 review.pdf

KARC Review PB_420 Fishkill Ave_2025.01.14.pdf

CUDDY +FEDER LLP

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cuddyfeder.com

Taylor M. Palmer, Esq.
tpalmer@cuddyfeder.com

January 2, 2025

**VIA E-MAIL AND HAND DELIVERY**
Hon. John Gunn
and Members of the Planning Board
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Application for Subdivision Approval (Lot Merger) and Site Plan Approval
Supplemental Submission & Request to Set Public Hearing
Premises: 420-430 Fishkill Avenue, Beacon, New York
Tax Parcel IDs: 6055-80-443076, 450087, and 455098

Dear Chairman Gunn and Members of the Planning Board:

On behalf of DKH Realty, LLC (the "Applicant"), the owners of the above-referenced Premises, we respectfully submit this letter and the referenced enclosures in furtherance of the Application for Subdivision Approval (Lot Merger) and Site Plan Approval (the "Application") for the proposed adaptive reuse Project on the Premises.

**SITE PLAN REFINEMENTS AND RESPONSES TO CONSULTANT COMMENTS:**

The enclosed Floor Plans and Renderings prepared by the Applicant's architect, Studio Architecture, DPC, and the enclosed Site Redevelopment plans and Lot Line Removal Plat prepared by Hudson Land Design ("HLD") Professional Engineering, P.C. (collectively, the "Plans") have been revised in response to comments provided by this Board and contained in the City Planning Consultant, Engineering Consultant, and Traffic Consultant's comment memoranda. Additionally, response letters prepared by Colliers Engineering and Design, P.C. and HLD are enclosed as **Exhibit A** & **Exhibit B**, respectively.

As is more fully detailed on the Plans, the Project has been further refined in response to Board comments to enhance the pedestrian experience along Fishkill Avenue and provide additional on-site amenities to augment the Premises. For instance, the parking area previously located along the front of the building has been removed, and an additional pedestrian crosswalk is proposed to be installed connecting the proposed walking path for the future rail trail/Fishkill Creek Greenway & Heritage trail connection to the building. In addition, the proposed paved outdoor patio area has been expanded and will now include areas adjacent to both the northern and

western sides of the coffee house. "Beacon brick" has also been incorporated throughout the whole façade of the building. *See* enclosed Renderings. Finally, it should be noted that the Applicant remains amenable to further defining the proposed "land-banked sidewalk area" located along the frontage of the Premises to provide pedestrian facilities within the Fishkill Avenue corridor, as may be recommended by the Fishkill Avenue Concepts Committee, and has increased the area designated for this purpose from 5 feet to 13 feet.

The Plans also include the following updates:

- Redesignation of the previously proposed "Deliveries Only" driveway at the southern portion of the Premises as an entrance-only driveway;
- Relocation of the proposed tenant-only parking spaces to the southern portion of the Premises, nearer to the proposed residential portion of the building, and incorporation of a pedestrian crosswalk connecting the tenant-only parking spaces to the building;
- As noted above, the parking areas previously located along the front of the building were removed and replaced with the expanded paved outdoor patio area to create a more inviting street-side experience and enhance the outdoor areas provided for residents of the Premises and patrons of the coffee house;
- Reconfiguration of the main parking area to provide a one-way pass through from the first parking aisle into the second parking aisle, allowing patrons who are unable to find an available parking space in the first aisle to easily enter the second aisle and facilitating circulation through the parking area;
- Integration of additional red brick elements along the building façade, including replacement of the previously proposed glass stair parapet at the entryway to the residential portion of the building with a brick stair tower and decorative clock feature, and definition of the cornices along the building roofline to present a cohesive design strategy for the building; and
- Identification of the dimensions and details of the proposed signage.

In addition to the foregoing, a Lighting Plan has been incorporated into the Plans, and an enhanced Landscaping Plan is being prepared by Debra Adamsons, who recently designed the landscaping plan for the 397 Fishkill Avenue project across the street from the Project. In the meantime, Ms. Adamsons has provided a narrative summary of elements that will be incorporated into the Landscaping Plan for the public hearing, including the tree and shrub species intended

to be used at the Premises, a copy of which is enclosed herewith as **Exhibit C**.

It is respectfully submitted that this submission illustrates the Applicant's ongoing commitment to the future of the City and to the best possible adaptive reuse of the Premises. The Applicant has carefully responded to all comments offered by the City and its consultants, and these efforts reveal a clear intention to give the Premises new life and create a new opportunity for mixed-use redevelopment within the Fishkill Avenue corridor. To that end, the Applicant respectfully requests that the Planning Board consider setting the Public Hearing for the Board's February 11, 2025 meeting Agenda.

**INDEX OF ENCLOSURES:**

In support of this Application, enclosed please find five (5) copies of the following documents:

**Exhibit A**: Response to Comments Memorandum and updated Preliminary Site Circulation Plans, prepared by Colliers Engineering and Design, P.C., dated December 30, 2024, providing responses to traffic and parking comments from the Planning Board and its consultants;

**Exhibit B**: Response to Comments Memorandum prepared by HLD, dated January 2, 2025, providing responses to City Engineering Consultant Lanc & Tully's memorandum dated December 7, 2024 and City Planning Consultant KARC Planning Consultants' memorandum dated December 5, 2024; and

**Exhibit C**: Landscape Narrative prepared by Debra Adamsons, dated January 2, 2025, providing a narrative summary of the proposed Landscaping Plan.

In further support of this Application, we respectfully submit three (3) copies of the Drainage Report for 420 Fishkill Avenue, prepared by HLD, dated December 24, 2024, along with three (3) copies of the specification sheets for the light fixtures identified on the Lighting Plan. Also enclosed please find five (5) full-size sets of the revised Floor Plans and Renderings, prepared by Studio Architecture, DPC, dated October 29, 2024, last revised January 2, 2025, and five (5) full-size sets of the revised Site Redevelopment plans and Lot Line Removal Plat prepared by HLD, dated October 29, 2024, last revised December 31, 2024.

**CONCLUSION**:

We look forward to appearing at this Board's regular meeting on January 14, 2025 to continue the Board's review of the Project and to answer any questions the Board may have. In the meantime, should this Board or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact us. Thank you in advance for your consideration of this matter.

Very truly yours,

Taylor M. Palmer

Enclosures

cc: Bruce Flower, City of Beacon Building Inspector
Jennifer L. Gray, Esq., City of Beacon Planning Board Attorney
Natalie Quinn, KARC Planning Consultants, Inc.
John Russo, P.E., Lanc & Tully Engineering & Surveying, P.C.
Kenneth Wersted, P.E., Creighton Manning Engineering, LLP
Hudson Land Design Professional Engineering, P.C.
Studio Architecture, DPC
Colliers Engineering & Design, P.C.
DKH Realty, LLC
Jessica Zalin, Esq.

6293094.v1

400 Columbus Avenue, Suite 180E
Valhalla, New York 10595
Main: 877 627 3772
colliersengineering.com

Colliers
Engineering
& Design

December 30, 2024

Mr. John Gunn, Chairperson
City of Beacon Planning Board
City of Beacon City Hall
1 Municipal Plaza
Beacon, NY 12508

420 Fishkill Avenue
City of Beacon, Dutchess County, New York
Colliers Engineering & Design Project No. 24010260A

Dear Mr. John Gunn, Chairperson and Members of the Planning Board,

We are writing on behalf of the Applicant for the 420 Fishkill Avenue Project to provide updates on specific project changes relating to traffic and parking based on comments from the Planning Board and its consultants. The following provides a summary of the pertinent changes.

1. The previously proposed three (3) parking spaces located in the front of the building have been eliminated and relocated to other areas of the site. The total parking supply on the site remains at 35 parking spaces including two (2) ADA accessible parking spaces. As provided in our previously submitted Traffic Impact Study dated November 11, 2025 the site is anticipated to have a peak parking demand of 33 parking spaces.

2. The four (4) proposed residential dedicated parking spaces have been moved to the south end of the site as parallel parking spaces. This provides closer proximity of the residential parking to the residential entrance.

3. The above modification to the location of residential parking necessitated the removal of the previously proposed dedicated loading space. As a result, no dedicated loading space has been provided on the site. A further discussion of deliveries and delivery vehicle circulation is provided below. Also note that the southern driveway is now proposed to be an entry only driveway that may be utilized by all vehicles rather than for deliveries only as was previously proposed. The width of this driveway has been reduced to approximately 15-ft.

4. A pedestrian access crosswalk between the proposed trail/walkway and the building has been added to the plan.

5. The parking aisle closest to the building has been modified to allow vehicles an exit only escape in order to maintain traffic flow in the event that all parking spaces in the drive aisle are occupied.

Colliers Engineering & Design

6. Based on comments from Creighton Manning a sidewalk curb ramp has been added to the south side of the building that may be utilized by both apartment residents and for deliveries as discussed further below.

7. Pedestrian crosswalk signage has been added along Fishkill Avenue to warn vehicles of the proposed Townsend Street crosswalk location.

   Based on Comments from KARC Planning Consultants, Inc., installation of a Rectangular Rapid Flashing Beacon (RRFB) was considered at this location, however, it was determined that given potential modifications to Fishkill Avenue, as part of the Fishkill Avenue committee recommendations, placement of a RRFB would likely require modification and/or relocation in the future. Since RRFB signs require more significant installations including concrete foundations, it is the Applicant's opinion that installation of RRFBs is not appropriate at this time. These could be considered by the City in the future based on actual pedestrian demand at the crosswalk.

As noted above, a dedicated loading space is no longer proposed on the site. As a result, the Applicant has committed to restricted deliveries to overnight hours when the retail spaces will not be in operation, the Dunkin drive-thru will not be in use and parking on the site is anticipated to be limited primarily to the residential parking only. Under these conditions, vehicle deliveries would be able to utilize the drive-thru lane and/or main parking area for loading/unloading. As shown on the updated Site Circulation Plans dated 12/30/2024 (attached) all vehicles would still be able to access the site via the southerly entry only driveway with the exception of a WB-40 (33-ft. Trailer) truck arriving from the south. This vehicle arriving from the south would need to enter and exit the site via the northerly driveway as shown on Sheet No. TT-04.

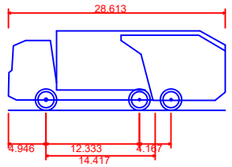
Sincerely,

Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT P.C.



Richard D'Andrea, P.E., PTOE
Department Manager

R:\Projects\2024\24010260A\Correspondence\OUT\241230RGD_PB_Comment Response.docx




Mack TerraPro Cabover 6x4 MRU613 + Wayne Curbtender 31cu yd

| | |
|---|---|
| Overall Length | 28.613ft |
| Overall Width | 8.000ft |
| Overall Body Height | 10.481ft |
| Min Body Ground Clearance | 1.311ft |
| Track Width | 8.000ft |
| Lock-to-lock time | 6.00s |
| Curb to Curb Turning Radius | 33.500ft |

1 STORY COMMERCIAL BUILDING

ASPHALT PARKING AREA

EXISTING GAS STATION

EDGE OF ASPHALT

OHW

DC

CONCRETE WALK

O MH

PAVER WALK

166.21'

S 30° 15' 12" W

N 60° 38' 27" W

16.39'

172.96'

S 29° 24' 02" W

EDGE OF PARKING

N 68° 54' 58" E

N

W

E

S

30 0 30

SCALE : 1" = 30'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

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| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| | | | |

PRELIMINARY SITE CIRCULATION PLANS
FOR
DKH REALTY

420-430 FISHKILL AVENUE
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue, Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C.

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 12/30/24 | RGD | PJG |

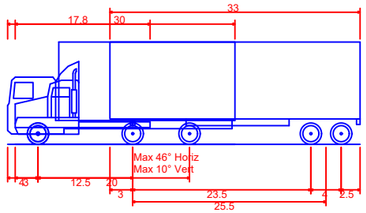
PROJECT NUMBER: 24010260A
DRAWING NAME: R-CNPT-TRCK

SHEET TITLE: GARBAGE TRUCK

SHEET NUMBER: TT-01



2024\24010260A\Transportation\Concept\R-CNPT-TRCK.dwg\R-TT01-GARBAGE By: RDANDREA




| SU-30 - Single Unit Truck - Semi-Trailer | |
|---|---|
| Overall Length | 30.00 ft |
| Overall Width | 8.00 ft |
| Overall Body Height | 13.50 ft |
| Min Body Ground Clearance | 1.33 ft |
| Track Width | 8.00 ft |
| Lock-to-lock time | 6.00 s |
| Max Steering Angle (Virtual) | 30.83 ° |

1 STORY COMMERCIAL BUILDING

ASPHALT PARKING AREA

EXISTING GAS STATION

EDGE OF ASPHALT

OHW

DC

MH

CONCRETE WALK

PAVER WALK

SU-30 - Single Unit Truck

N 60° 38' 27" W 16.39'

166.21'

S 30° 15' 12" W

N 68° 54' 58" W

S 49° 14' 15"

172.96'

S 29° 24' 02" W

S 61° 33' 27" E

30 0 30

SCALE : 1" = 30'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

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2024\24010260A\Transportation\Concept\R-CNPT-TRCK.dwg\R-TT02-SU30 By: RDANDREA

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| REV | DATE | DESCRIPTION | DRAWN BY |
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| | | | |

# PRELIMINARY SITE CIRCULATION PLANS FOR DKH REALTY

420-430 FISHKILL AVENUE
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

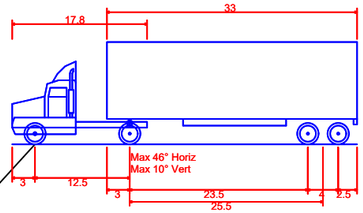
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Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C.

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 12/30/24 | RGD | PJG |

PROJECT NUMBER: 24010260A
DRAWING NAME: R-CNPT-TRCK

SHEET TITLE: SINGLE UNIT 30 FT. (SU-30) BOX TRUCK

SHEET NUMBER: TT-02




WB-40 - Intermediate Semi-Trailer

| | |
|---|---|
| Overall Length | 45.499ft |
| Overall Width | 8.000ft |
| Overall Body Height | 13.500ft |
| Min Body Ground Clearance | 1.334ft |
| Track Width | 8.000ft |
| Lock-to-lock time | 4.00s |
| Max Steering Angle (Virtual) | 20.30° |

1 STORY COMMERCIAL BUILDING

ASPHALT PARKING AREA

EXISTING GAS STATION

EDGE OF ASPHALT

OHW

WV

DC

GV

MH

CONCRETE WALK

PAVER WALK

WB-40 Intermediate Semi-Trailer

N 60° 38' 27" W 16.39'

166.21'

S 30° 15' 12" W

N 68° 54' 58" W

S 49° 14' 15"

EDGE OF PARKING 172.96'

S 29° 24' 02" W

S 61° 33' 27" E

30 0 30

SCALE : 1" = 30'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

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STATE REQUIRED FILE NUMBER
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

| REV | DATE | DESCRIPTION | DRAWN BY |
|---|---|---|---|
| | | | |

PRELIMINARY SITE CIRCULATION PLANS
FOR
DKH REALTY

420-430 FISHKILL AVENUE
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

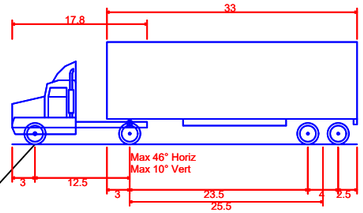
Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue, Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C.

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 12/30/24 | RGD | PJG |

PROJECT NUMBER: 24010260A
DRAWING NAME: R-CNPT-TRCK

SHEET TITLE:
33 FT. TRACTOR TRAILER (WB-40) TRUCK FROM NORTH

SHEET NUMBER: TT-03




WB-40 - Intermediate Semi-Trailer

| | |
|---|---|
| Overall Length | 45.499ft |
| Overall Width | 8.000ft |
| Overall Body Height | 13.500ft |
| Min Body Ground Clearance | 1.334ft |
| Track Width | 8.000ft |
| Lock-to-lock time | 4.00s |
| Max Steering Angle (Virtual) | 20.30° |

1 STORY COMMERCIAL BUILDING

ASPHALT PARKING AREA

EXISTING GAS STATION

EDGE OF ASPHALT

OHW

WV

DC

CONCRETE WALK

GV

MH

PAVER WALK

WB-40 - Intermediate Semi-Trailer

N 60° 38' 27" W 16.39'

N 68° 54' 58" W 166.21'

S 30° 15' 12" W

S 49° 14' 15"

S 29° 24' 02" W 172.96'

EDGE OF PARKING

N 61° 33' 27" E

30 0 30

SCALE : 1" = 30'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

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Engineering & Design
www.colliersengineering.com

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811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
STATE REQUIRED FILE NUMBER
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| | | | |

PRELIMINARY SITE CIRCULATION PLANS
FOR
DKH REALTY

420-430 FISHKILL AVENUE
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK

Colliers Engineering & Design
WESTCHESTER
400 Columbus Avenue, Suite 180E
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Phone: 914.347.7500
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| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 12/30/24 | RGD | PJG |

PROJECT NUMBER: 24010260A
DRAWING NAME: R-CNPT-TRCK

SHEET TITLE:
33 FT. TRACTOR TRAILER (WB-40) TRUCK FROM SOUTH

SHEET NUMBER: TT-04



2024\24010260A\Transportation\Concept\R-CNPT-TRCK.dwg\R-TT04-WB40 By: RDANDREA

*Civil & Environmental Engineering Consultants*
*174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)*
*13 Chambers Street, Newburgh, NY 12550 (Satellite Office)*
*Phone: 845-440-6926*
*www.HudsonLandDesign.com*

January 2, 2025

John Gunn, Chairman and Members of the City of Beacon Planning Board
1 Municipal Plaza
Beacon, New York 12508

Re: Coffee House with Accessory Drive Through
Application for Subdivision and Site Plan Approvals
420-430 Fishkill Avenue, City of Beacon, New York
Tax Parcels: 6055-80-443076; -450087; -455098 (±1.095 acres total)

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) is pleased to submit copies of the following documents in support of the Project:

- Five (5) copies of the Civil Site Plan Set (Sheets 1 through 8 of 8)
- Five (5) copies of the Preliminary Plat (Sheet 1 of 1)
- Three (3) copies of the Drainage Report
- Three (3) copies of Lighting Cut Sheets

The documents have been prepared and/or updated in response to comments from the Planning Board and from the City's consultants for the Planning Board's continued review and consideration of the Application. The following are point-by-point responses to each comment contained within the letters prepared by the City's consultants:

**Lanc & Tully Review Letter, Dated December 7, 2024:**

Lot Line Removal Plat:

1. A survey description will be provided at the appropriate time as the project nears final approvals. The Plat is unchanged from the last submittal; however, we are including it with this submittal.

General Comments:

1. A cost estimate will be prepared with a future submittal once the layout has been generally accepted by the Planning Board.
2. The plan currently shows a potential future path for trail access. Any easement will be shown once the layout is generally accepted by the Planning Board and will be reviewed by the City attorney.

3. Grading will be provided in future submittals once the layout is generally accepted by the Planning Board.
4. A lighting plan, including photometrics, has been provided in this submittal for review.
5. In its current configuration, a fire service line will be required for the residential/second floor portion of the building. The proposed location of the service line, intended to also serve as the domestic supply line where it will split in the mechanical room, has been shown on the latest plan. The size of the line is to be determined by the MEP engineer.
6. A formal landscaping plan is being developed by Debra Adamsons based upon feedback received from the Planning Board and its consultants. Conceptual landscaping is provided for the time being. A narrative of intended species has been prepared and is attached as Exhibit C to part of the Cuddy & Feder submittal documents.
7. The most recent layout reduces the impervious coverage as compared to existing site conditions. A drainage analysis showing the reduction in post-developed flow rates is included in this submittal.
8. A complete Utility Plan is intended to be included in the plan set as the plan progresses and the layout is generally accepted by the Planning Board.

Site Plan (Sheet 3 of 5):

1. The reputed location of the existing sanitary sewer service has been shown.
2. The layout has been revised, and there is no longer a sidewalk to that particular location; therefore, the crosswalk has been removed.
3. The 6" pipe is a discharge from the yard drain in the parking lot. Both the yard drain and the 6" pipe are proposed to be removed.
4. Additional signage has been provided, including "Do Not Enter" signs at the end of the parking areas near the drive-thru lane.
5. The island is now curbed/landscaped.

**KARC Planning Consultants, Inc. Review Letter, Dated December 5, 2024:**

1. The bulk table has been revised to address residential density as a row within the table.
2. A lighting plan, including photometrics, has been provided in this submittal for review.
3. A formal landscaping plan is being developed by Debra Adamsons based upon feedback received from the Planning Board and its consultants. Conceptual landscaping is provided for the time being. A narrative of intended species has been prepared and is attached as Exhibit C to part of the Cuddy & Feder submittal documents.
4. The project traffic consultant suggests crosswalk signage and not rectangular rapid flashing beacons. The Site Plan shows the crosswalk signage, including advisory signs that are proposed.
5. Resident parking has been relocated to the south side of the project. Considerations for internal pedestrian movements have been incorporated into the latest layout.
6. The entirety of the ±13 feet between the right-of-way line and the Fishkill Avenue fog line has been hatched, identifying area that may be used for pedestrians, subject to the Fishkill Avenue Corridor suggestions.
7. Traffic signage has been provided; however, other signage will be provided in a future submittal.

We look forward to continuing our discussions regarding this Application at your January 14, 2025 Planning Board meeting. Should you have any questions, please feel free to contact me on my direct line 845-766-8955.

Sincerely,



Daniel G. Koehler, P.E.
Principal

cc: DKH Realty, LLC, Owner & Applicant (via email)
Taylor M. Palmer, Esq., Cuddy & Feder LLP, Counsel to Applicant (via email)
Chris Raffaelli, Studio Architecture, DPC, Applicant's Architect (via email)
Richard D'Andrea, P.E., PTOE, Colliers Engineering and Design, Traffic Consultant (via email)
Michael A. Bodendorf, P.E. (HLD file)

Landscape Restorations
Practicing Ecological Landscape Design and Management Principles
P.O. Box 286 Beacon New York 12508

January 2, 2025

Re: 420 Fishkill Avenue – Application for Amended Site Plan Approval – Landscaping Plan

Dear City of Beacon Planning Board,

I have been retained by DKH Realty, LLC, the owners of the 420 Fishkill Avenue property, to support and enhance the landscaped areas on the Amended Site Plan. In working with the project team, the in-progress updated landscape plan will incorporate native species, tolerant of urban conditions, which I have applied in neighboring projects in the City of Beacon, such as the landscaping plan developed and approved for 397 Fishkill Avenue. See images below for reference as well. For the forthcoming public hearing, the updated landscaping plan will include Red Maples and Blackgum for street shade trees, evergreen species such as Inkberry, Juniper, Thuja, Aromatic Sumac and Viburnum shrubs, while adding a few other species for diversity. I look forward to creating a beautiful, low-maintenance landscape that accounts for the urban conditions and the project's utility plans.

Respectfully,

Debra Adamsons









*-Using Native Plants is Economically and Ecologically Sound-*

# *Drainage Report*
# *for*
# *420 Fishkill Avenue*

Prepared for:
DKH Realty, LLC
P.O. Box 859
Goshen, NY 10924

December 24, 2024




HUDSON
LAND DESIGN

Prepared by:
Hudson Land Design Professional Engineering, P.C.
174 Main Street
Beacon, NY 12508
Ph: (845) 440-6926

# TABLE OF CONTENTS

**1.0 INTRODUCTION ..... 1**

**2.0 METHODOLOGY AND REGULATORY COMPLIANCE ..... 1**

**3.0 SOIL CONDITIONS ..... 1**

**4.0 EXISTING DRAINAGE CONDITIONS ..... 2**

**5.0 PROPOSED DRAINAGE CONDITIONS ..... 3**

**6.0 DRAINAGE ANALYSIS CONCLUSIONS ..... 3**

**7.0 EROSION AND SEDIMENT CONTROL ..... 4**

# APPENDICES

**APPENDIX A: DRAINAGE MAPS**
**APPENDIX B: SUPPORTING DATA**
**APPENDIX C: HYDROLOGIC MODELING**
**APPENDIX D: GROUND COVER CALCULATIONS**

# 1.0 INTRODUCTION

The 420 Fishkill Avenue project is located in the City of Beacon on the east side of road to the west side of Pardy Lane. The project is located on three parcels within the GB zoning district and has a tax map designation of 6055-80-443076, 450087 & 455098 totaling ±1.097 acres. The parcels currently have a car dealership. The project proposes to repurpose the existing building with a drive-through café, office space, and residential units.

# 2.0 METHODOLOGY AND REGULATORY COMPLIANCE

The proposed project will result in a total 0.50 acres of disturbance and 0.6 acres of pavement resurfacing, and therefore is not subject to the requirements of NYSDEC GP-0-20-001 General Permit for Construction Activities. Pre-development vs. post-development drainage analysis for the project was performed to evaluate stormwater runoff patterns and demonstrate that the post-development runoff rates leaving the project area will not have adverse impacts.

Runoff calculations were performed utilizing Hydraflow Express Extension for Autodesk Civil 3D published by Autodesk, Inc. For this project the modified rational method for determining the peak runoff rates and for generating hydrographs. Intensity duration frequency curves for the 2-Year, 10-Year, 25-Year, and 100-Year Dutchess County NY area can be found in Appendix B of this report.

# 3.0 SOIL CONDITIONS

A review of the Soil Survey of Dutchess County indicates that there are three types of soil present on the project site and its associated contributing drainage area. Supporting information has been provided in Appendix B. Table I below summarizes the characteristics of the soil types present within the drainage area.

**Table I - Soil Types**

| Map Unit | Soil Names | Water Table (ft) | Bedrock | Hydrologic Soil Group |
|---|---|---|---|---|
| Ur | Urban land | N/A | N/A | N/A |
| Ud | Udorthents, smoothed | 3-6 | >80” | A |

Source: websoilsurvey.sc.egov.usda.gov

# 4.0 EXISTING DRAINAGE CONDITIONS

## 4.1 Design Points

Design Points represent the location where the majority of runoff from an area exits the site. The same design point is identified in post-development conditions so that a comparison can be made between the pre-development and post-development conditions. One design point for the project area was selected, and as follows:

**Table II - Stormwater Design/Discharge Point**

| Stormwater Discharge Point | |
|---|---|
| **SDP** | **Description** |
| 1 | Area to southeast of the project area, MTA right-of-way |

## 4.2 Existing Watershed Areas

Runoff from the project area during existing conditions was analyzed as a single subcatchment under existing conditions.

The pre-development watershed is comprised of 1.4 acres of onsite area tributary to the study point at the rear of the project area. This area includes the existing building, parking, and the surrounding area. 95.4% of the watershed area has impervious cover. The majority of soils in this subcatchment area are urban land and small amount udorthents. Drainage generally flows southeast towards the MTA right-of-way.

## 4.3 Existing Runoff Rates

Runoff rates for existing conditions have been calculated at the designated SDP and summarized in Table III as follows:

**Table III - Existing Runoff Rates**

| Drainage Area | 2-Year | 10-Year | 25-Year | 100-Year |
|---|---|---|---|---|
| Pre-Dev | 8.12 cfs | 10.15 cfs | 11.51 cfs | 13.65 cfs |

Modified rational analysis results for pre-development conditions have been included as Appendix C. Ground cover calculations are provided in Appendix D.

# 5.0 PROPOSED DRAINAGE CONDITIONS

## 5.1 Developed Watershed Area

The proposed project results in a total of approximately 0.50 acres of disturbance due to the site improvements, parking islands, and drive through lane. The site was analyzed as a single subcatchment under developed conditions.

The post-development watershed is comprised of 1.4 acres of offsite area tributary to the study point at the rear of the project area. This area includes the subject parcels and the area of pavement removal in the MTA right-of-way. 70.7% of the watershed area has impervious cover. The majority of soils in this subcatchment area are urban land and small amount udorthents. Drainage generally flows southeast towards the MTA right-of-way. Drainage patterns are unchanged from existing conditions.

## 5.2 Proposed Runoff Rates

Runoff rates for proposed conditions have been calculated for each of the drainage areas and are summarized in Table IV as follows:

**Table IV - Proposed Runoff Rates**

| Drainage Area | 2-Year | 10-Year | 25-Year | 100-Year |
|---|---|---|---|---|
| Post-Dev | 5.71 cfs | 7.31 cfs | 8.34 cfs | 9.97 cfs |

Rational analysis results for post-development conditions have been included as Appendix C. Ground cover calculations are provided in Appendix D.

# 6.0 DRAINAGE ANALYSIS CONCLUSIONS

The stormwater runoff rates at Design Points under pre-development and post-development conditions are summarized below.

**Table V - Proposed Runoff Rates Comparison**

| SDP | 2-Year | 10-Year | 25-Year | 100-Year |
|---|---|---|---|---|
| Pre | 8.12 cfs | 10.15 cfs | 11.51 cfs | 13.65 cfs |
| Post | 5.71 cfs | 7.31 cfs | 8.34 cfs | 9.97 cfs |
| Change | -2.41 cfs | -2.84 cfs | -3.17 cfs | -3.68 cfs |

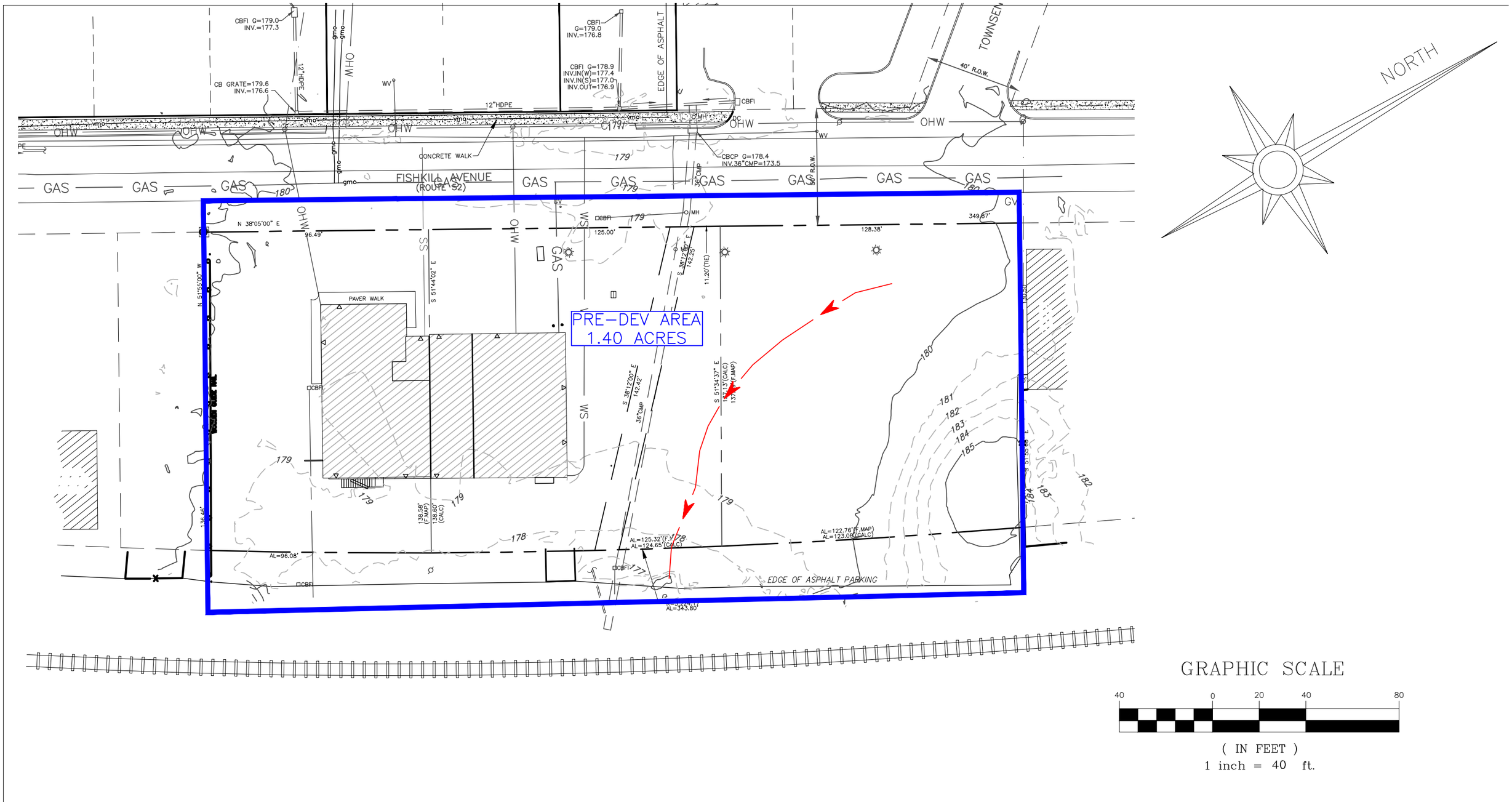
Runoff rates at the Design Point show decreases during all analyzed storms due to the reduction in impervious cover.

# 7.0 EROSION AND SEDIMENT CONTROL

Contractors shall adhere to the temporary and permanent erosion control measures as indicated on the plan. Repairs shall be made as necessary to remain in compliance with the New York State Standards and Specifications for Erosion and Sediment Control, 2016. The site plans include detailed erosion and sediment control practices for this project.

# APPENDIX A

# DRAINAGE MAPS




GRAPHIC SCALE

40 0 20 40 80

( IN FEET )

1 inch = 40 ft.

DRAWN BY: ESR CHECKED BY: DGK

REVISIONS:

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

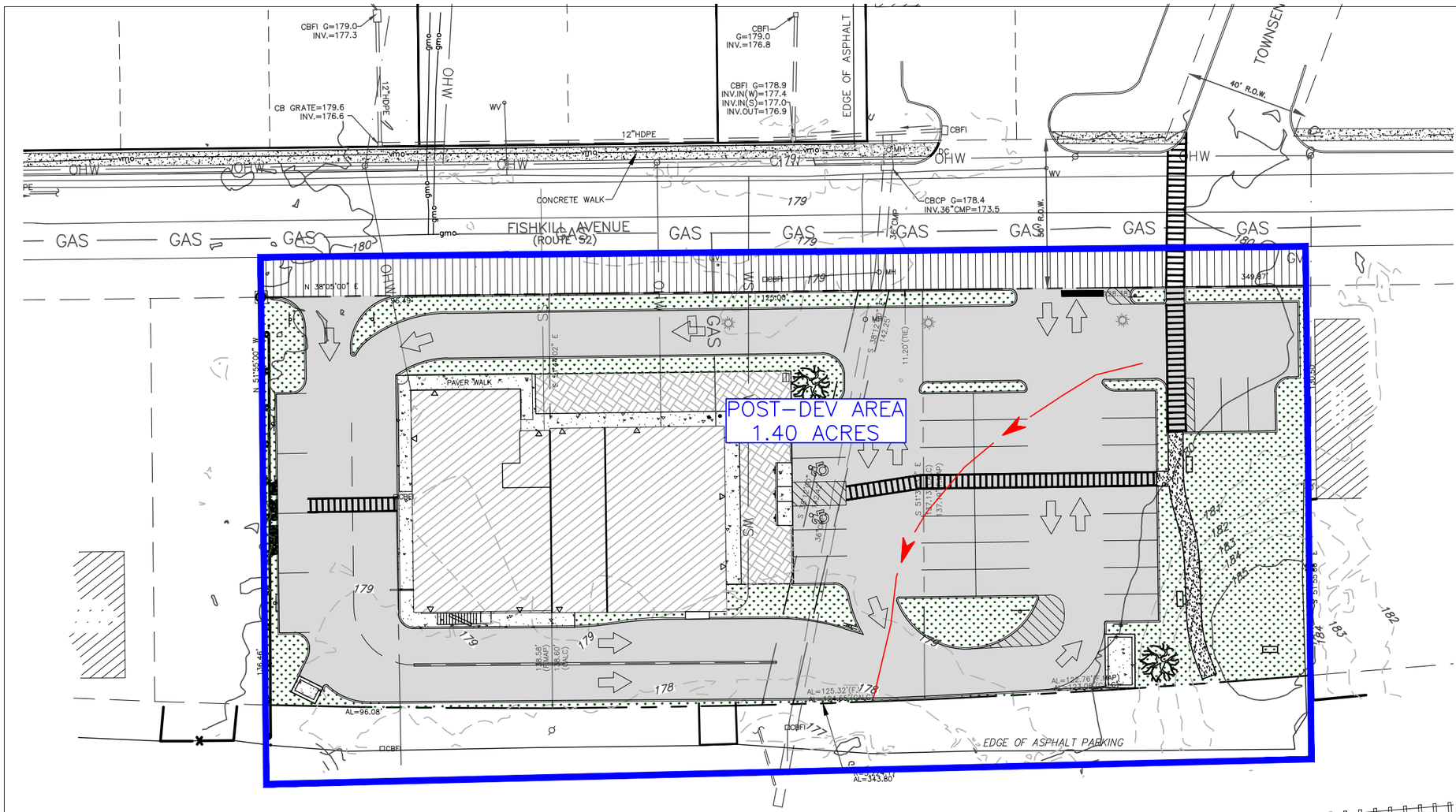
# PRE-DEVELOPMENT CONDITIONS MAP

## 420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455096

JOB #: 2024:013
DATE: 12/24/24
SCALE: 1" = 40'
TITLE: DR-1
SHEET: 1 OF 2

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GRAPHIC SCALE

40 0 20 40 80

( IN FEET )
1 inch = 40 ft.

| DRAWN BY: ESR | CHECKED BY: DGK |
|---|---|

REVISIONS:

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
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174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

# POST-DEVELOPMENT CONDITIONS MAP

## 420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455096

| | |
|---|---|
| JOB #: | 2024:013 |
| DATE: | 12/24/24 |
| SCALE: | 1" = 40' |
| TITLE: | DR-2 |
| SHEET: | 2 OF 2 |

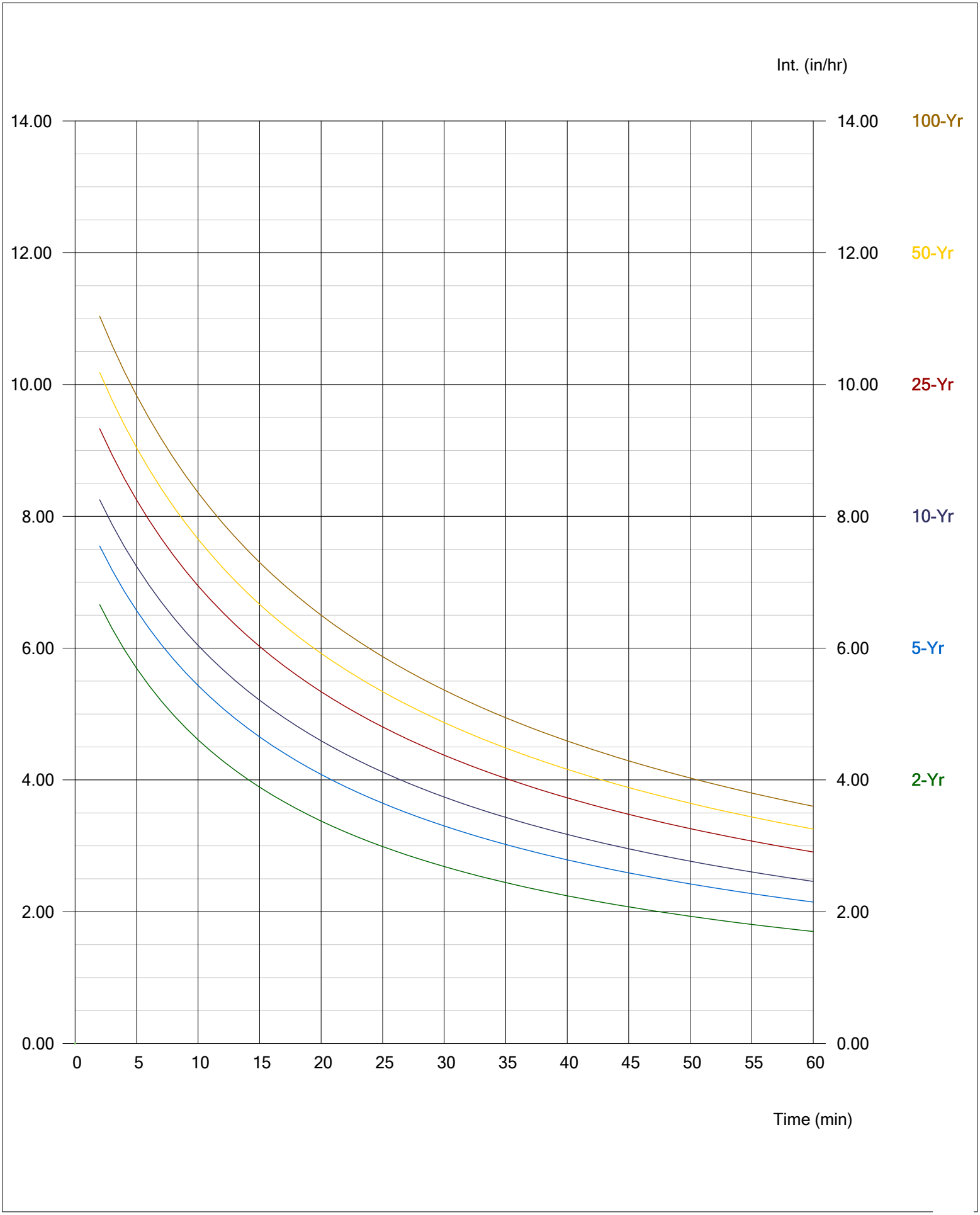
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

# APPENDIX B

# SUPPORTING DATA

# Hydraflow IDF Curves

IDF file: Dutchess County.IDF



Hydrologic Soil Group—Dutchess County, New York
(420 Fishkill Ave)




Map Scale: 1:828 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 10 20 40 60

Feet
0 40 80 160 240

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

## MAP LEGEND

**Area of Interest (AOI)**

Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**

A
A/D
B
B/D
C
C/D
D
Not rated or not available

**Soil Rating Lines**

A
A/D
B
B/D
C
C/D
D
Not rated or not available

**Soil Rating Points**

A
A/D
B
B/D
C
C/D
D
Not rated or not available

**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 1:24,000.

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: Dutchess County, New York
Survey Area Data: Version 21, Aug 29, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 21, 2022—Oct 27, 2022

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.

# Hydrologic Soil Group

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| Ud | Udorthents, smoothed | A | 0.2 | 14.1% |
| Ur | Urban land | | 1.4 | 85.9% |
| **Totals for Area of Interest** | | | **1.6** | **100.0%** |

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Higher

# APPENDIX C

# HYDROLOGIC MODELING

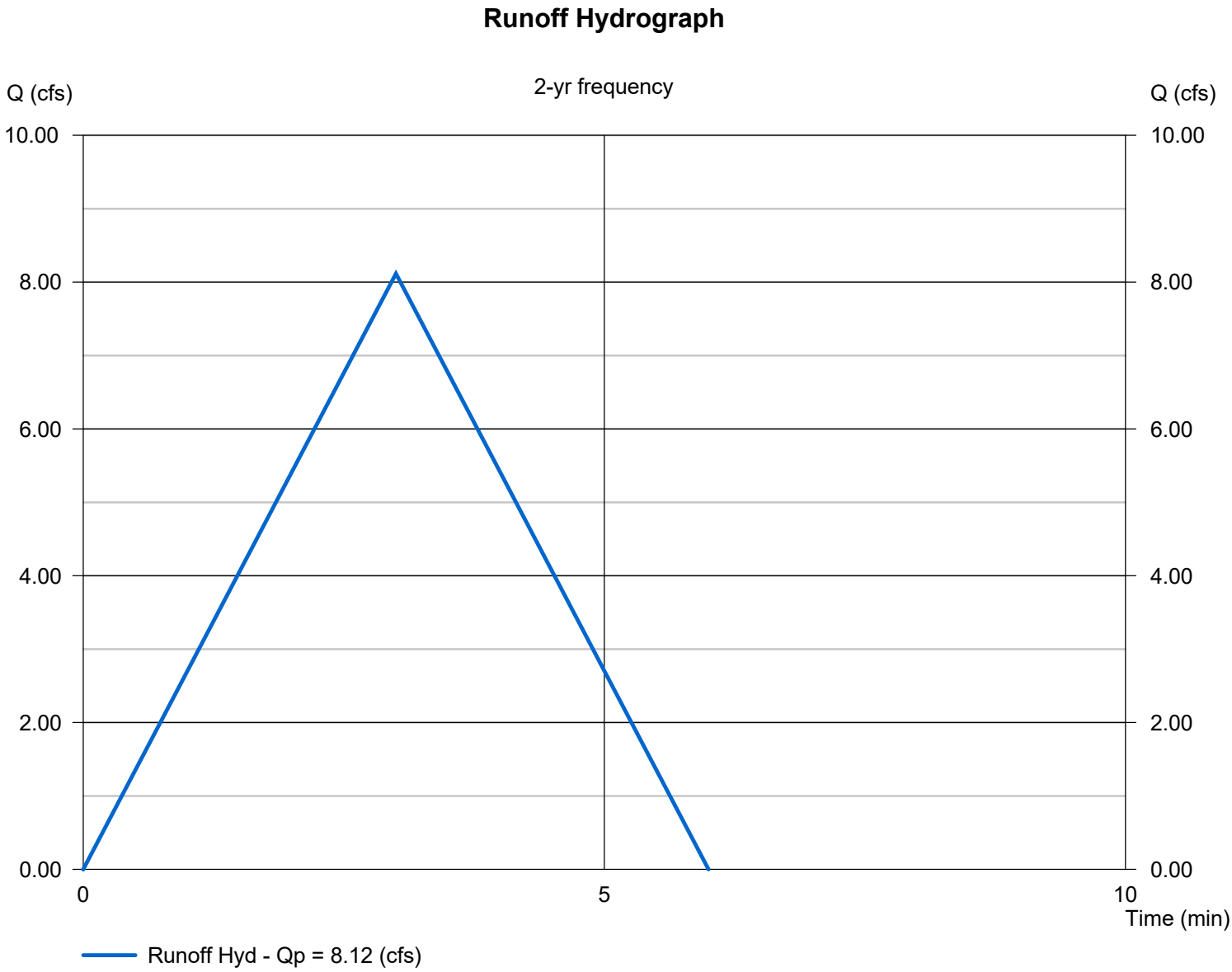
# Hydrology Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Dec 24 2024

## Pre-Development

| | | | |
|---|---|---|---|
| Hydrograph type | = Mod Rational | Peak discharge (cfs) | = 8.115 |
| Storm frequency (yrs) | = 2 | Time interval (min) | = 1 |
| Drainage area (ac) | = 1.400 | Runoff coeff. (C) | = 0.92 |
| Rainfall Inten (in/hr) | = 6.301 | Tc by FAA (min) | = 3 |
| IDF Curve | = Dutchess County.IDF | Storm dur factor | = 1.00 |

Hydrograph Volume = 1,461 (cuft); 0.034 (acft)



# FAA Formula Tc Worksheet

Tc = 1.8(1.1 - C) x Flow length^0.5 / Watercourse slope^0.333 Hydraflow Express by Intelisolve

## Mod Rational

Pre-Development

### Description

| | |
|---|---|
| Flow length (ft) | = 170.00 |
| Watercourse slope (%) | = 2.80 |
| Runoff coefficient (C) | = 0.92 |
| **Time of Conc. (min)** | **= 3** |

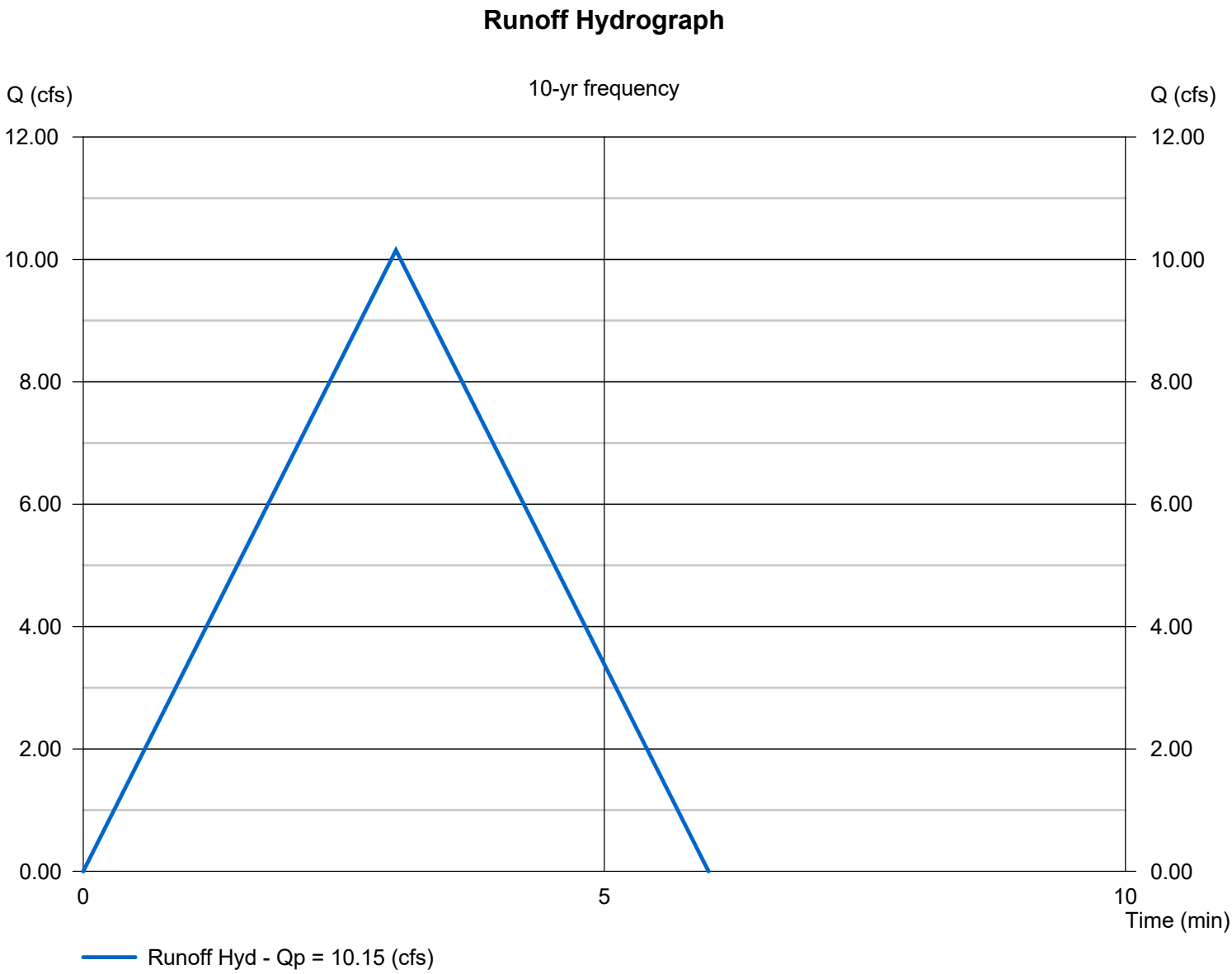
# Hydrology Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Dec 24 2024

## Pre-Development

| | | | |
|---|---|---|---|
| Hydrograph type | = Mod Rational | Peak discharge (cfs) | = 10.15 |
| Storm frequency (yrs) | = 10 | Time interval (min) | = 1 |
| Drainage area (ac) | = 1.400 | Runoff coeff. (C) | = 0.92 |
| Rainfall Inten (in/hr) | = 7.880 | Tc by FAA (min) | = 3 |
| IDF Curve | = Dutchess County.IDF | Storm dur factor | = 1.00 |

Hydrograph Volume = 1,827 (cuft); 0.042 (acft)



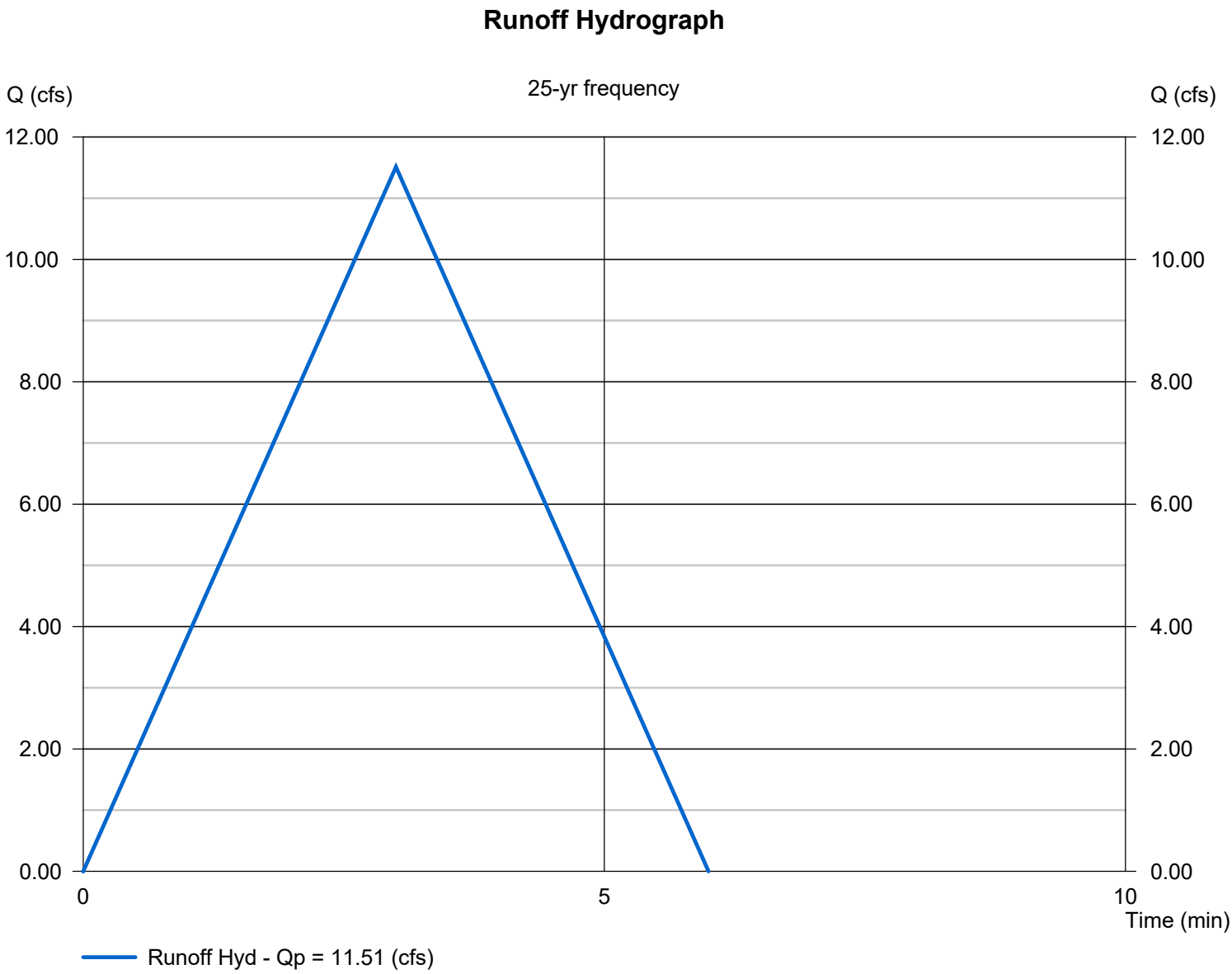
# Hydrology Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Dec 24 2024

## Pre-Development

| | | | |
|---|---|---|---|
| Hydrograph type | = Mod Rational | Peak discharge (cfs) | = 11.51 |
| Storm frequency (yrs) | = 25 | Time interval (min) | = 1 |
| Drainage area (ac) | = 1.400 | Runoff coeff. (C) | = 0.92 |
| Rainfall Inten (in/hr) | = 8.936 | Tc by FAA (min) | = 3 |
| IDF Curve | = Dutchess County.IDF | Storm dur factor | = 1.00 |

Hydrograph Volume = 2,072 (cuft); 0.048 (acft)



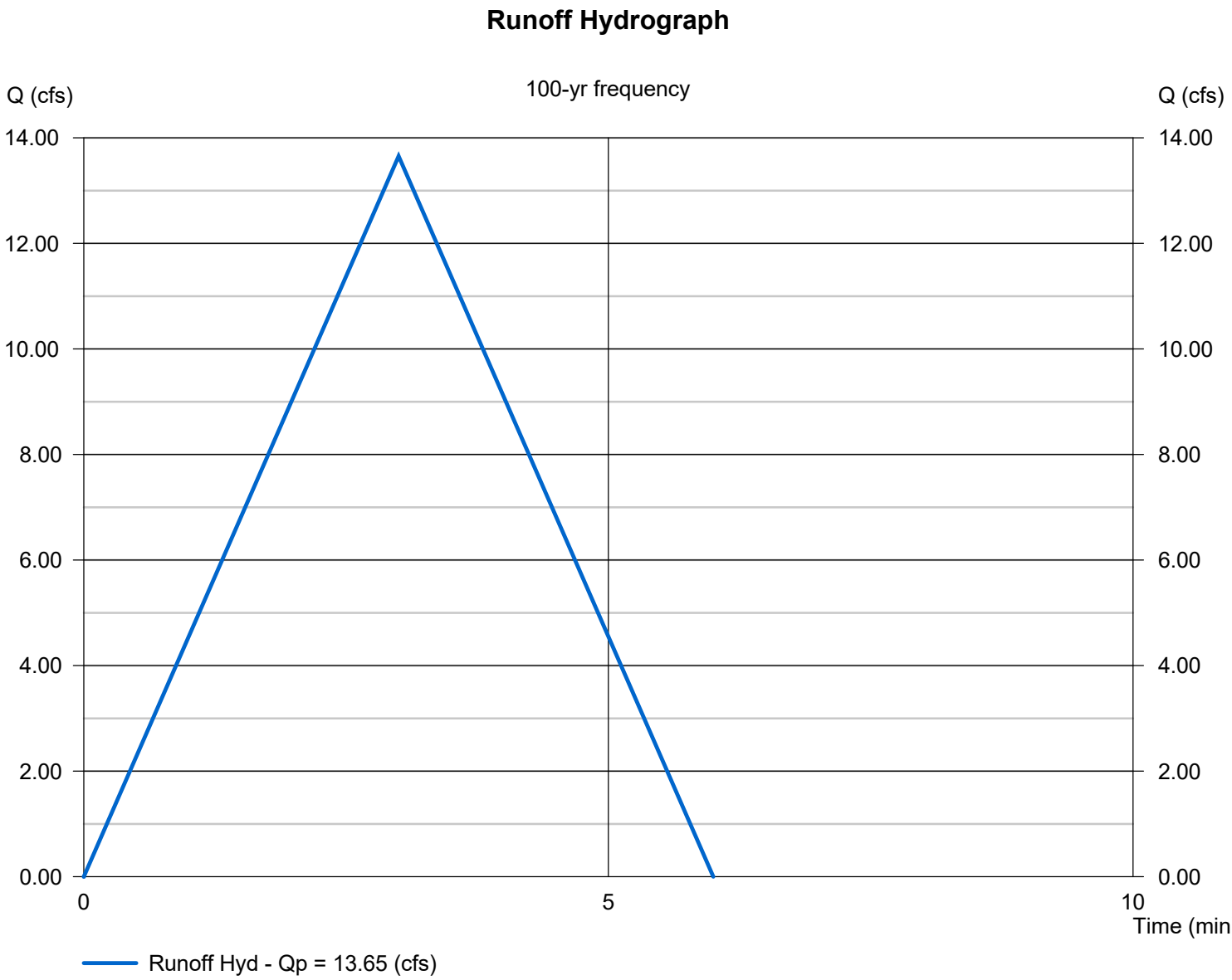
# Hydrology Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Dec 24 2024

## Pre-Development

| | | | |
|---|---|---|---|
| Hydrograph type | = Mod Rational | Peak discharge (cfs) | = 13.65 |
| Storm frequency (yrs) | = 100 | Time interval (min) | = 1 |
| Drainage area (ac) | = 1.400 | Runoff coeff. (C) | = 0.92 |
| Rainfall Inten (in/hr) | = 10.600 | Tc by FAA (min) | = 3 |
| IDF Curve | = Dutchess County.IDF | Storm dur factor | = 1.00 |

Hydrograph Volume = 2,458 (cuft); 0.056 (acft)



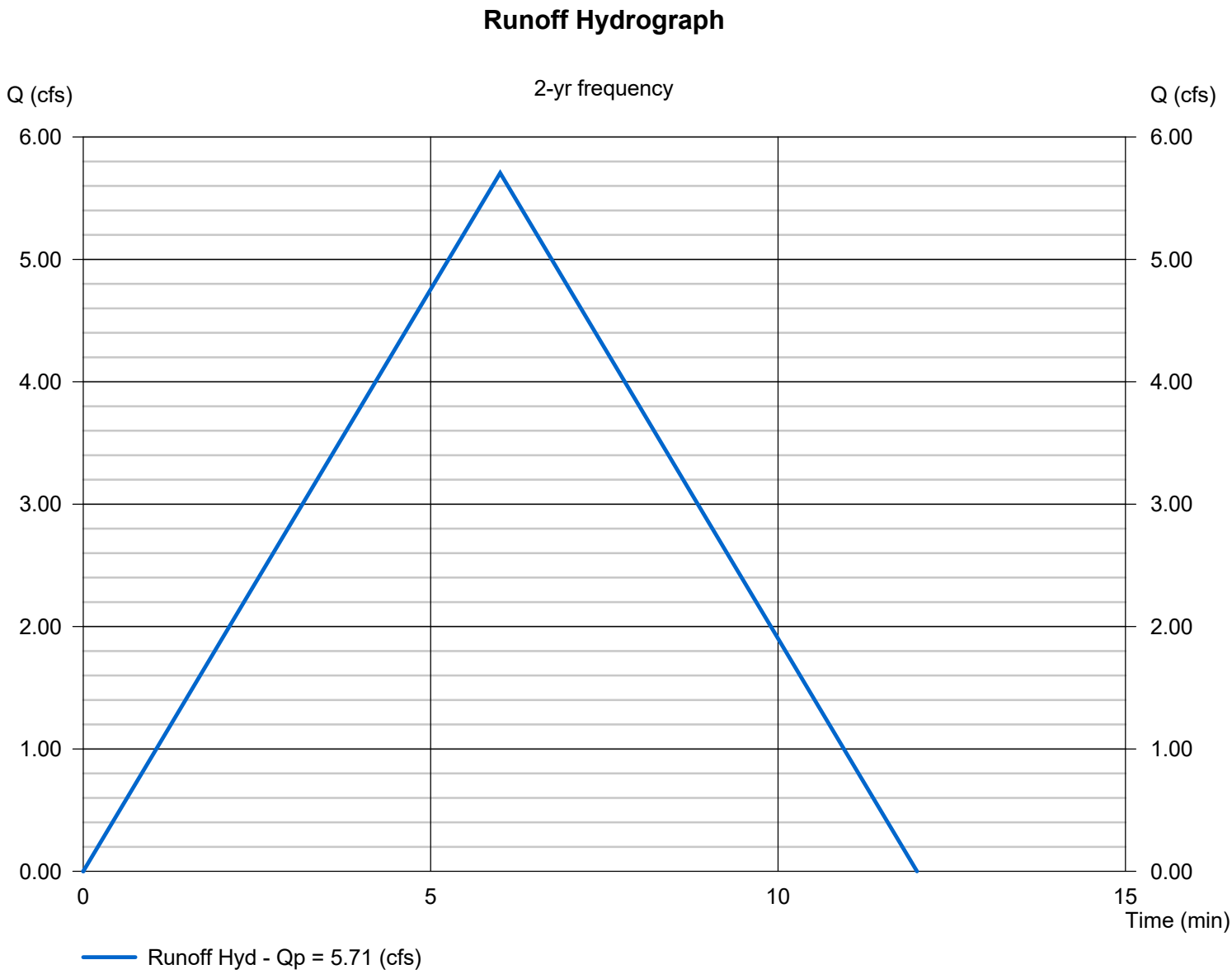
# Hydrology Report



## Post-Development

| | | | |
|---|---|---|---|
| Hydrograph type | = Rational | Peak discharge (cfs) | = 5.706 |
| Storm frequency (yrs) | = 2 | Time interval (min) | = 1 |
| Drainage area (ac) | = 1.400 | Runoff coeff. (C) | = 0.75 |
| Rainfall Inten (in/hr) | = 5.434 | Tc by FAA (min) | = 6 |
| IDF Curve | = Dutchess County.IDF | Rec limb factor | = 1.00 |

Hydrograph Volume = 2,054 (cuft); 0.047 (acft)



# FAA Formula Tc Worksheet

Tc = 1.8(1.1 - C) x Flow length^0.5 / Watercourse slope^0.333 Hydraflow Express by Intelisolve

## Rational

Post-Development

### Description

| | |
|---|---|
| Flow length (ft) | = 154.00 |
| Watercourse slope (%) | = 1.80 |
| Runoff coefficient (C) | = 0.75 |
| **Time of Conc. (min)** | **= 6** |

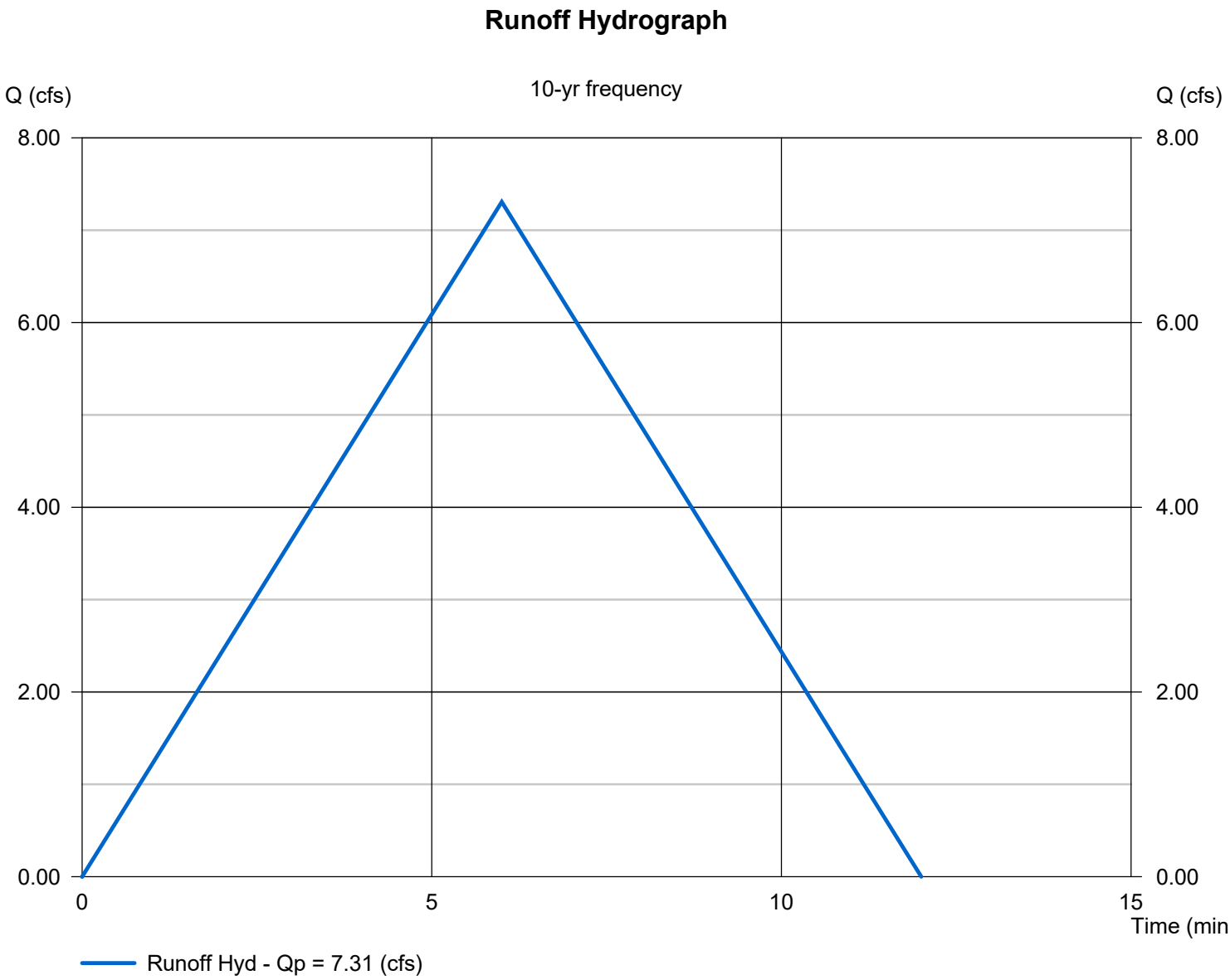
# Hydrology Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Dec 24 2024

## Post-Development

| | | | |
|---|---|---|---|
| Hydrograph type | = Rational | Peak discharge (cfs) | = 7.306 |
| Storm frequency (yrs) | = 10 | Time interval (min) | = 1 |
| Drainage area (ac) | = 1.400 | Runoff coeff. (C) | = 0.75 |
| Rainfall Inten (in/hr) | = 6.958 | Tc by FAA (min) | = 6 |
| IDF Curve | = Dutchess County.IDF | Rec limb factor | = 1.00 |

Hydrograph Volume = 2,630 (cuft); 0.060 (acft)



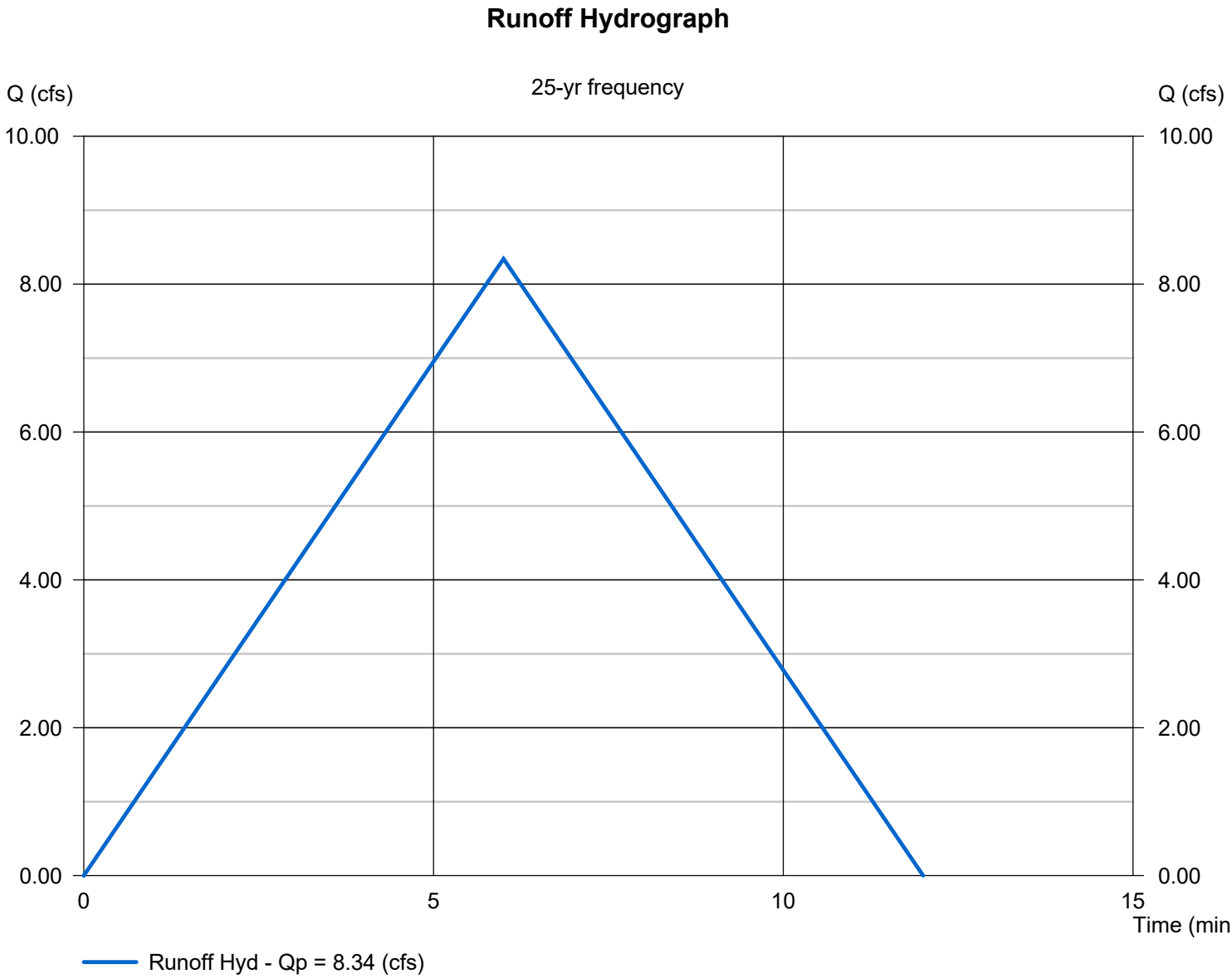
# Hydrology Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Dec 24 2024

## Post-Development

| | | | |
|---|---|---|---|
| Hydrograph type | = Rational | Peak discharge (cfs) | = 8.342 |
| Storm frequency (yrs) | = 25 | Time interval (min) | = 1 |
| Drainage area (ac) | = 1.400 | Runoff coeff. (C) | = 0.75 |
| Rainfall Inten (in/hr) | = 7.945 | Tc by FAA (min) | = 6 |
| IDF Curve | = Dutchess County.IDF | Rec limb factor | = 1.00 |

Hydrograph Volume = 3,003 (cuft); 0.069 (acft)



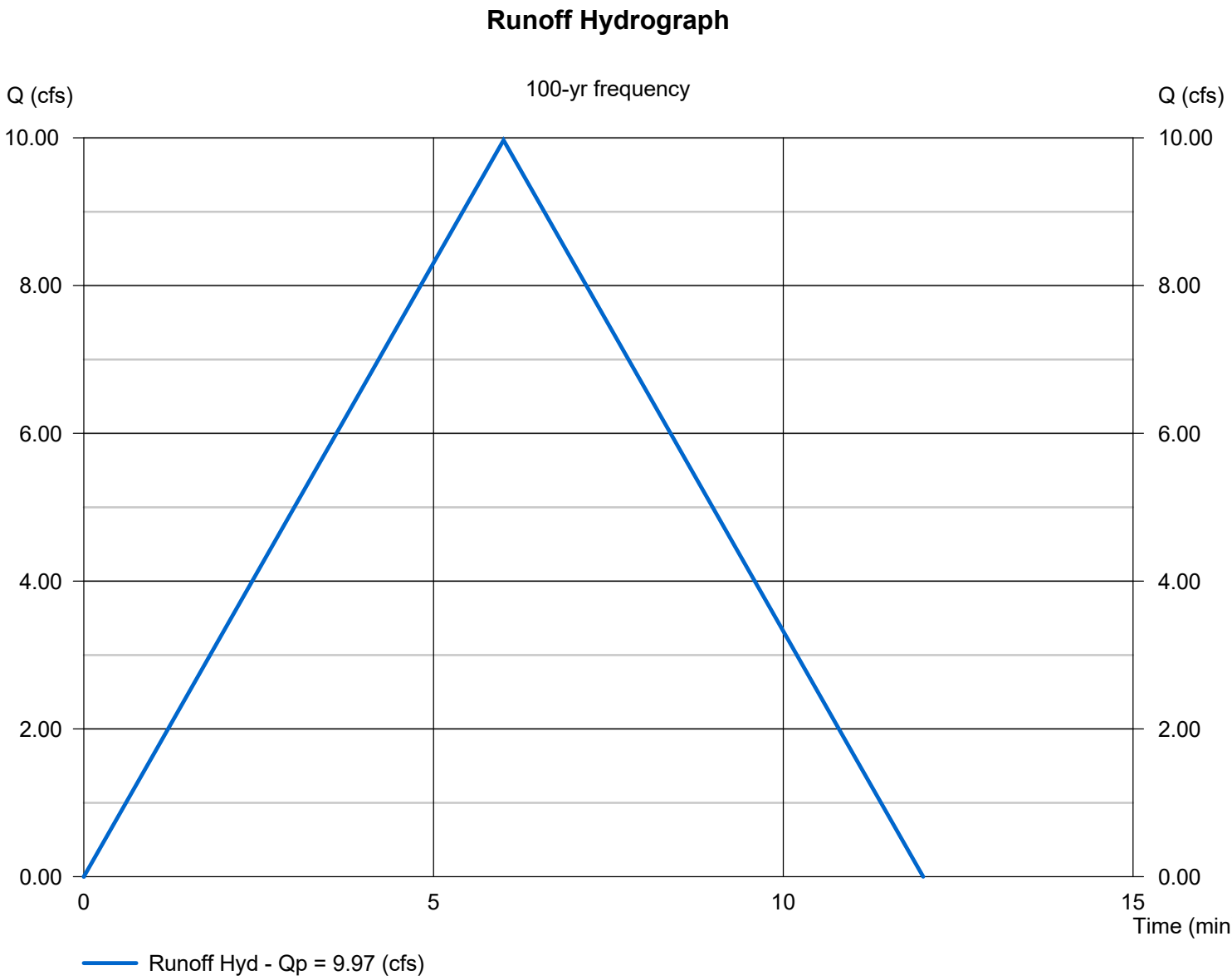
# Hydrology Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Dec 24 2024

## Post-Development

| | | | |
|---|---|---|---|
| Hydrograph type | = Rational | Peak discharge (cfs) | = 9.968 |
| Storm frequency (yrs) | = 100 | Time interval (min) | = 1 |
| Drainage area (ac) | = 1.400 | Runoff coeff. (C) | = 0.75 |
| Rainfall Inten (in/hr) | = 9.493 | Tc by FAA (min) | = 6 |
| IDF Curve | = Dutchess County.IDF | Rec limb factor | = 1.00 |

Hydrograph Volume = 3,588 (cuft); 0.082 (acft)



# APPENDIX D

# GROUND COVER CALCULATIONS

## Cover Calculations

| | C | Pre-Dev | Post-Dev | |
|---|---|---|---|---|
| **Impervious** | 0.95 | 58,056 | 43,062 | SF |
| **Lawn** | 0.25 | 2,830 | 17,824 | SF |
| **Total** | | 60,886 | 60,886 | SF |
| **Weighted C** | | 0.92 | 0.75 | |

# TESSIE

ARCHITECTURAL SCALE, WET-LISTED EXTERIOR WALL SCONCE

alva



Tessie-60 in Enviro Satin Nickel (ESN)



Tessie-30 in Graphite (GR)

ADA COMPLIANT | TITLE 24 | 10YR WARRANTY | UL

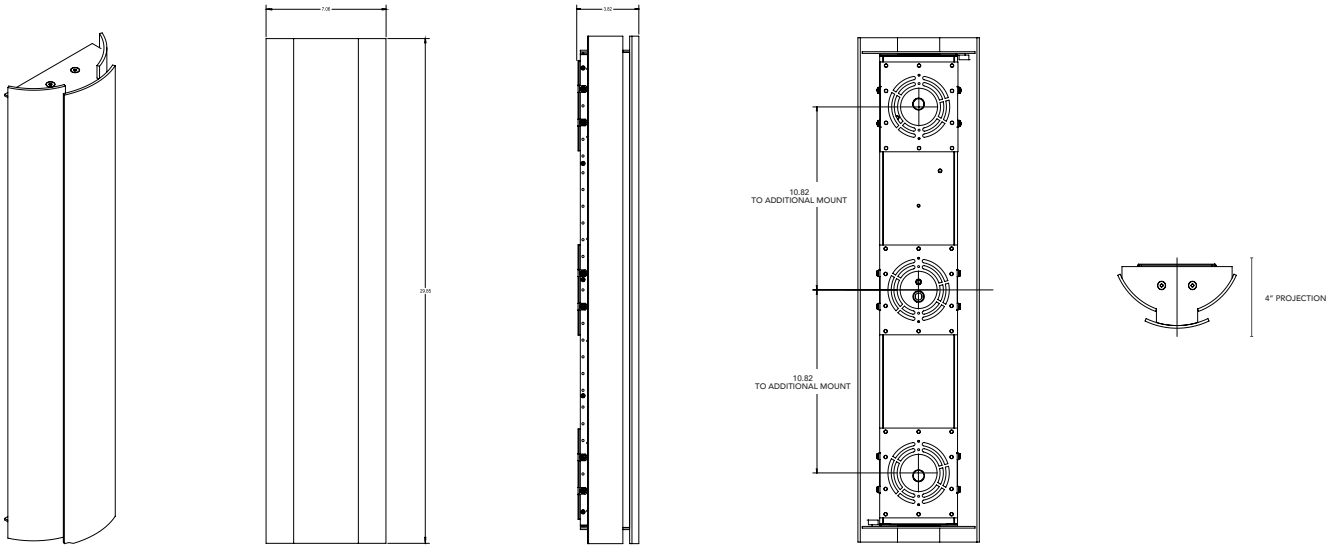
| | |
|---|---|
| **APPLICATIONS** | Direct/Indirect grazing luminaire for exterior/interior use: flanking doors, on columns, on building facades, between windows, and elevator lobbies |
| **SIZES** | • 30" H x 7" W x 4" D, 14 lbs<br>• 45" H x 7" W x 4" D, 21 lbs<br>• 60" H x 7" W x 4" D, 31 lbs<br>• 90" H x 7" W x 4" D, 42 lbs |
| **MOUNTING** | • J-Box 3.0 or 4.0 at center or end of fixture<br>• Steel mounting system with mounting plates for facade<br>• Vertical Mounting only |
| **SPECIFICATIONS** | • High efficiency, fully integrated propietary LED module<br>• UL Wet Listed<br>• 120-277V input<br>• 100,000+ hours rated life time<br>• 10 Year Limited Warranty (excludes shade)<br>• Title 24 Compliant<br>• ADA Compliant |
| **LAMPING** | • 3000K, 3500K, 4000K<br>• Tessie-30 23 watts, 729 delivered lumens<br>• Tessie-45 29 watts, 957 delivered lumens<br>• Tessie-60 37 watts, 1221 delivered lumens<br>• Tessie-90 50 watts, 1914 delivered lumens<br>• 0-10V Dimming (100-10%)<br>• CRI: 80 min (85 Typical) |
| **CONSTRUCTION** | Fixture shell (shade): Heavy gauge aluminum with industrial powder coat finish and high impact acrylic |

# TESSIE

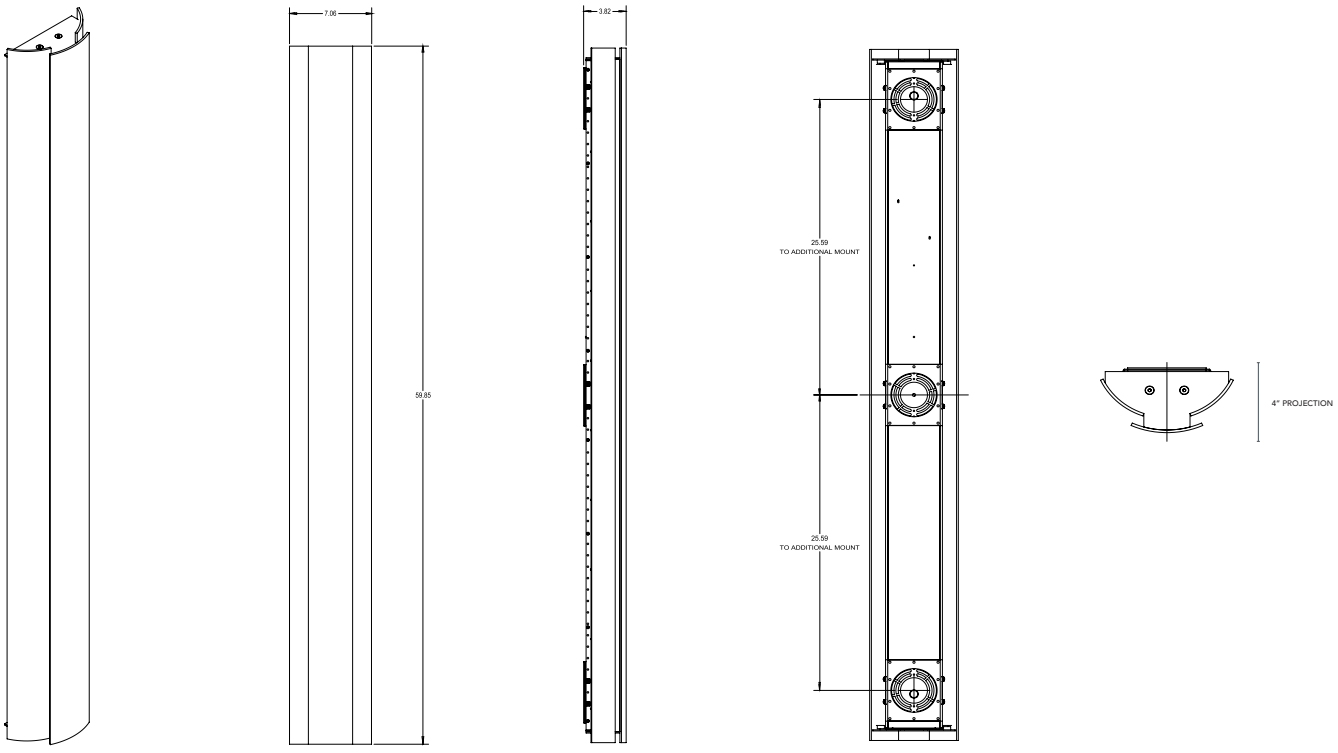
ARCHITECTURAL SCALE, WET-LISTED EXTERIOR WALL SCONCE

## DIMENSIONS

### TESSIE-30




### TESSIE-60



# TESSIE

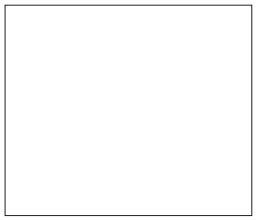
ARCHITECTURAL SCALE, WET-LISTED EXTERIOR WALL SCONCE

alva

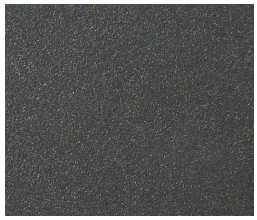
## METAL POWDER COAT FINISH OPTIONS


ESN - Enviro Satin Nickel


EOB - Enviro Oil-Rubbed Bronze


WHT - White


BLK - Black


GR - Graphite


DB - Dark Bronze


Tessie-30 in Enviro Satin Nickel (ESN)




## ORDER CODE:

| TESSIE | | | |
|---|---|---|---|
| MODEL | LENGTH | METAL TRIM | CCT |

**LENGTH**

| | |
|---|---|
| **30** | 30″ |
| **45** | 45″ |
| **60** | 60″ |
| **90** | 90″ |

**METAL TRIM**

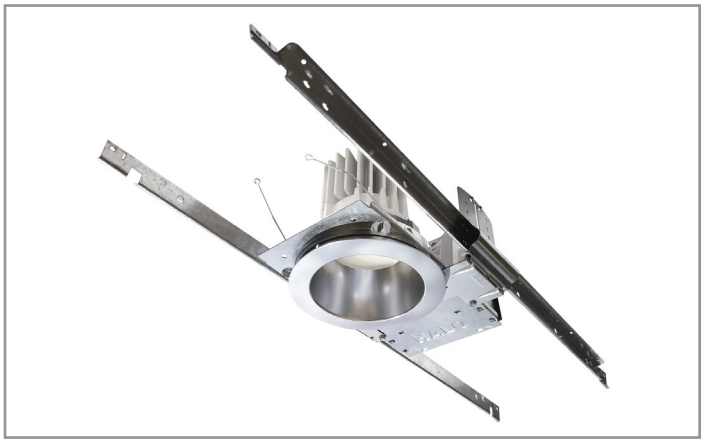
*POWDER COAT FINISH OPTIONS*

| | |
|---|---|
| **ESN** | Enviro Satin Nickel |
| **EOB** | Enviro Oil-Rubbed Bronze |
| **DB** | Dark Bronze |
| **GR** | Graphite |
| **WHT** | White |
| **BLK** | Black |

**CCT**

| | |
|---|---|
| **3000** | 3000K |
| **3500** | 3500K |
| **4000** | 4000K |

| | | | | | |
|---|---|---|---|---|---|
| Project | | Catalog # | | Type | |
| Prepared by | | Notes | | Date | |



# HALO Commercial

## HC4 | HM4 | 41/41PS

4-inch LED downlight and wall wash

**Typical Applications**

Office • Healthcare • Hospitality • Institutional • Mixed-Use/Retail

## Interactive Menu


- Order Information page 2
- Product Specifications page 4
- Photometric Data page 5
- Energy & Performance Data page 8
- Connected Systems page 10
- Product Warranty


## Product Certification

ENERGY STAR · Efficiency Standards T24 Can be used to comply with California Title 24 Non-Residential · wet location · Chicago Plenum Approved · FC · RoHS Compliant · UL Certified

## Product Features

QS Quick Spec · Showerlight

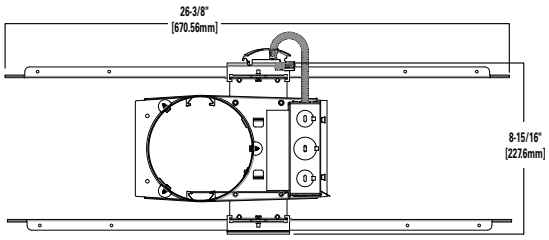
## Control Compatibility

WaveLinx LITE · WaveLinx PRO

## Top Product Features

- New construction/remodel series; 500 to 6,000 lumens
- Narrow, Medium and Wide distributions; Wall wash with rotatable linear spread lens
- 2700K, 3000K, 3500K, 4000K and 5000K CCT; 80 or 90 CRI
- Universal voltage 120V-277V; Standard 0-10V driver dims to 1%
- Mounting frame converts to remodel that installs from below the ceiling
- Quick Spec emergency backup mounting frames - fast delivery option

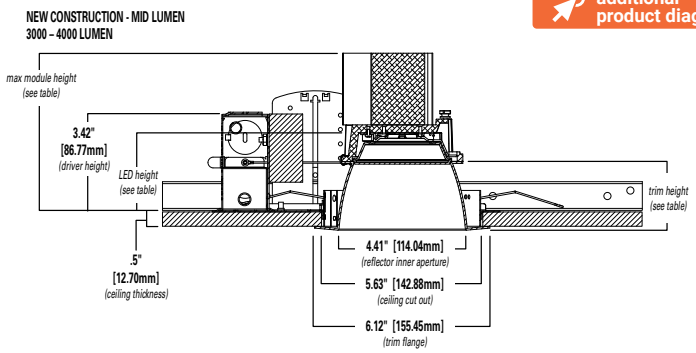
## Dimensional and Mounting Details




Mid Lumen (3000 – 4000 Lumens)

| Distribution | Max. Module Height | Trim Height | LED Height |
|---|---|---|---|
| Narrow | 5.6" | 2.5" | 2.9" |
| Medium | 5.7" | 2.6" | 3.0" |
| Wide | 5.5" | 2.4" | 2.8" |
| Baffle | 5.5" | 2.4" | 2.8" |

additional product diagrams



## Mounting Frame Order Information

**Sample Number : HC420D010REM7 - HM40525930 - 41MDC**

A complete luminaire consists of a housing frame, LED module, and reflector (ordered separately)

| Mounting Frame | Lumens | Driver Options | Factory Installed Emergency & Connected Lighting Options | Accessories (Order & Install Separately) |
|---|---|---|---|---|
| **HC4** = 4" new construction downlight housing<br><br>**HC4CP** = 4" new construction housing, Chicago Plenum - CCEA compliant | **05** = 500 lm<br>**07** = 750 lm<br>**10** = 1000 lm<br>**15** = 1500 lm<br>**20** = 2000 lm<br>**25** = 2500 lm<br>**30** = 3000 lm<br>**35** = 3500 lm<br>**40** = 4000 lm<br>**45** = 4500 lm (7)<br>**50** = 5000 lm (7)<br>**55** = 5500 lm (7)<br>**60** = 6000 lm (7) | **D010**=UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls<br><br>**Canada Option 500-4000 lumens:**<br>**D010347** = 347VAC 50/60Hz 0-10V 1%-100% dimming. For 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000lm models only (1)<br><br>**Canada Option 4500-6000 lumens:**<br>**D010X347** = step down transformer factory installed (with standard "D010" 120V-277V LED driver). For 4500, 5000, 5500, 6000lm models only (1) | **REM7** = 7 watt emergency battery pack with remote test / indicator light, use with D010 only (1) (2) (6)<br>**REM14** = 14 watt emergency battery pack with remote test / indicator light, use with D010 only (1) (2) (6)<br>**IEM7** = 7 watt emergency battery pack with integral test / indicator light, use with D010 only (1) (2) (6) (10)<br>**IEM14** = 14 watt emergency battery pack with integral test / indicator light, use with D010 only (1) (2) (6) (10)<br>**BOD7ST** = 7.5 watt Bodine self-test emergency battery pack with remote test / indicator light, use with D010 only (1) (2) (6)<br>**WTA** = Factory WaveLinx PRO Tilemount Sensor Kit (4)<br>**WTK** = Factory WaveLinx LITE Tilemount Sensor Kit (5)<br>**WPN** = WaveLinx PRO Wireless Node without Sensor (11)<br>**WLN** = WaveLinx LITE Wireless Node without Sensor (12) | **HB128APK** = L channel hanger bar, 26", pair (replacement)<br>**RMB22** = Adjustable wood joist mounting bars, pair, extend to 22" long<br>**H347** = 347 to 120V step down transformer, 75VA<br>**H347200** = 347 to 120V step down transformer, 200VA<br>**WTA** = Field WaveLinx PRO Tilemount Sensor Kit (4)<br>**WTK** = Field WaveLinx LITE Tilemount Sensor Kit (5) |
| | | **DLV** = Distributed Low Voltage dimming driver 1%-100%, 1000-4000 lumens only. For use with DLVP system only, refer to DLVP specifications for details. (1) | **REMV7** = 7 watt emergency battery pack with remote test / indicator light, use with DLV only (1) (2) (3) (6)<br>**REMV14** = 14 watt emergency battery pack with remote test / indicator light, use with DLV only (1) (2) (3) (6)<br>**IEMV7** = 7 watt emergency battery pack with integral test / indicator light, use with DLV only (1) (2) (3) (6) (10)<br>**IEMV14** = 14 watt emergency battery pack with integral test / indicator light, use with DLV only (1) (2) (3) (6) (12) | |
| **Notes** | **Notes** | **Notes** | **Notes** | **Notes** |
| | (7) Marked Spacing:<br>Center to Center of Adjacent Luminaires = 36"<br>Center of Luminaire to Building Member = 18"<br>Minimum overhead = 0.5 | (1) Not available with CP models | (1) Not available with CP models<br>(2) Not available with D010347 (347V models)<br>(3) ULus for U.S. only<br>(4) WTA = WaveLinx tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only (Refer to WaveLinx specifications)<br>(5) WTK = WaveLinx LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only (Refer to WaveLinx LITE specifications)<br>(6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C<br>(10) IEM option requires compatible IEM reflector or baffle trim. See Trim Ordering below.<br>(11) WPN = WaveLinx PRO wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. Not compatible with 347V or Chicago plenum. (Refer to WaveLinx PRO specifications.)<br>(12) WLN = WaveLinx LITE wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. Not compatible with 347V or Chicago plenum. (Refer to WaveLinx LITE specifications.) | (4) WTA = WaveLinx PRO tilemount sensor kit for daylight dimming, PIR motion sensing, and optional RLTS - Real Time Location Services, use with D010 only. (Refer to WaveLinx PRO specifications.)<br>(5) WTK = WaveLinx LITE tilemount sensor kit for daylight dimming, PIR motion sensing, use with D010 only. (Refer to WaveLinx LITE specifications.) |

## Quick Spec Emergency Mounting Frame Order Information

**Sample Number :**

**Quick Spec Emergency Mounting Frame: RR-HC420D010REM7**

LED module and reflectors are ordered separately.

Order separately: LED Module: HM40525835 | Reflector: 41MDC

**Select from the Quick Spec Mounting Frame ordering information to receive the *Fast Delivery* option for the frame.**

| Quick Spec Code | Mounting Frame | Lumens | Driver Options | Factory Installed Emergency Options | Accessories (Order & Install Separately) |
|---|---|---|---|---|---|
| **RR** = East Region<br>**BRR** = West Region | **HC4** = 4" new construction downlight housing | **10** = 1000 lm<br>**15** = 1500 lm<br>**20** = 2000 lm<br>**30** = 3000 lm<br>**40** = 4000 lm | **D010**=UNV 120-277V, 50/60Hz, 0-10V 1%-100% dimming at 120-277V on 0-10V controls | **REM7** = 7 watt emergency battery pack with remote test / indicator light, use with D010 only (2) (6)<br>**REM14** = 14 watt emergency battery pack with remote test / indicator light, use with D010 only (2) (6)<br>**IEM7** = 7 watt emergency battery pack with integral test / indicator light, use with D010 only (2) (6) (10)<br>**IEM14** = 14 watt emergency battery pack with integral test / indicator light, use with D010 only (2) (6) (10) | **HB128APK** = L channel hanger bar, 26", pair (replacement)<br>**RMB22** = Adjustable wood joist mounting bars, pair, extend to 22" long |
| | **Notes** | **Notes** | **Notes** | **Notes** | **Notes** |
| | | | | (2) Not available with D010347 (347V models)<br>(6) Emergency battery backup options are Non-IC only, and rated for a minimum starting temperature of 0°C<br>(10) IEM option requires compatible IEM reflector or baffle trim. See Trim Ordering below. | |

## LED Module Order Information

| LED Module | Lumens | CRI/CCT | |
|---|---|---|---|
| **HM4** = 4" LED module | **0525** = 500 - 2500 lumen<br>**3040** = 3000-4000 lumen<br>**4560** = 4500-6000 lumen | **827** = 80CRI, 2700K<br>**830** = 80CRI, 3000K<br>**835** = 80CRI, 3500K<br>**840** = 80CRI, 4000K<br>**850** = 80CRI, 5000K | **927** = 90CRI, 2700K<br>**930** = 90CRI, 3000K<br>**935** = 90CRI, 3500K<br>**940** = 90CRI, 4000K<br>**950** = 90CRI, 5000K |
| **Notes** | **Notes** | **Notes** | |
| | | | |

## Trim Order Information

| Reflector | Distribution[8] | Finish | Flange | Accessories |
|---|---|---|---|---|
| **41** = 4" conical reflector | **ND** = narrow 50° beam angle 0.84 SC (nominal)<br>**MD** = medium 60° beam angle 1.00 SC (nominal)<br>**WD** = wide 75° beam angle 1.24 SC (nominal)<br>**RWW** = rotatable wall wash with linear spread lens | **C** = Specular clear<br>**H** = Semi-specular clear<br>**W** = White | **Blank** = Polished flange standard with C & H reflectors<br>**Blank** = White flange standard with W reflectors<br>**WF** = White flange option available with C & H reflectors<br>**BF** = Black Flange option available with C, H & W reflectors | **41RWWPK** = Replacement part kit - wall wash lens insert - for use with 41RWW* only. |
| **Notes** | **Notes** | **Notes** | **Notes** | **Notes** |
| | (8) Values are nominal for white reflector, others may vary. | | | |

| Baffle | Distribution[8] | Finish | Flange | Accessories |
|---|---|---|---|---|
| **41** = 4" baffle reflector | **WD** = wide 75° beam angle 1.24 SC (nominal)<br>**RWW** = rotatable wall wash with linear spread lens | **BB** = Black baffle<br>**WB** = White baffle | **Blank** = White flange standard with BB, & WB reflectors<br>**BF** = Black flange option available with BB reflectors | **41RWWPK** = Replacement part kit - wall wash lens insert - for use with 41RWW* only. |
| **Notes** | **Notes** | **Notes** | **Notes** | **Notes** |
| | (8) Values are nominal for white reflector, others may vary. | | | |

| Reflector | Distribution[8] | Finish | Flange |
|---|---|---|---|
| **41PS** = 4" non-conductive polymer 'dead front' conical reflector [9] | **MD** = medium 60° beam angle 1.00 SC (nominal) | **W** = White | **Blank** = White flange standard with W reflectors<br>**BF** = Black Flange option available with W reflectors |
| **Notes** | **Notes** | **Notes** | **Notes** |
| (9) 41PS* is 1000-3000 lumens Non-IC rated. 500 & 750 lumens IC rated. 41PS is not for use over 3000 lumens in Non-IC or over 750 lumens in IC. | (8) Values are nominal for white reflector, others may vary. | | |

| IEM Reflector | Distribution[8] | Finish | Flange | Integral Emergency |
|---|---|---|---|---|
| **41** = 4" conical reflector for integral emergency only | **ND** = narrow 50° beam angle 0.84 SC (nominal)<br>**MD** = medium 60° beam angle 1.00 SC (nominal)<br>**WD** = wide 75° beam angle 1.24 SC (nominal) | **C** = Specular clear<br>**H** = Semi-specular clear<br>**W** = White | **Blank** = Polished flange standard with C & H reflectors<br>**Blank** = White flange standard with W reflectors<br>**WF** = White flange option available with C & H reflectors<br>**BF** = Black flange option available with C, H, & W reflectors | **IEM** = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch. |
| **Notes** | **Notes** | **Notes** | **Notes** | **Notes** |
| | (8) Values are nominal for white reflector, others may vary. | | | |

| IEM Baffle | Distribution[8] | Finish | Flange | Integral Emergency |
|---|---|---|---|---|
| **41** = 4" baffle reflector for integral emergency only | **WD** = wide 75° beam angle 1.24 SC (nominal) | **BB** = Black baffle<br>**WB** = White baffle | **Blank** = White flange standard with BB, & WB reflectors<br>**BF** = Black flange option with BB reflectors | **IEM** = Reflector for use with integral emergency housings only. Provides access hole for integral emergency test switch. |
| **Notes** | **Notes** | **Notes** | **Notes** | **Notes** |
| | (8) Values are nominal for white reflector, others may vary. | | | |

## Product Specifications

### Housing Frame
- Boat shaped galvanized steel plaster frame with adjustable plaster lip
- Accommodates 1/2" to 1-1/2" thick ceilings
- Installs in new construction or from below the finished ceiling (non-accessible) for remodeling
- Provided with two remodel clips to secure the frame to the ceiling

### Universal Mounting Bracket
- Adjusts 2" vertically from above and below the ceiling
- Use with the included mounting bars or with 1/2" Electric Metallic Tube (EMT)
- Removable to facilitate remodeling installation from below the finished ceiling

### Mounting Bars
- Captive pre-installed No Fuss™ mounting bars lock to T-grid with screwdriver or pliers
- Centering detents allow for consistent positioning of fixtures

### LED Module
- Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation
- Available in 80 or 90 color rendering index (CRI)
- Color accuracy within 3 SDCM provides color consistency and uniformity
- 90 CRI option: R9>50 (refer to chromaticity information for details)
- Available in 2700K, 3000K, 3500K, 4000K and 5000K correlated color temperature (CCT)
- Lumen options include 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumens (nominal)
- Passive thermal management achieves 60,000 hours at 70% lumen maintenance (L70) in insulated ceilings (IC) and non-IC applications
- Integral diffuse lens provides visual shielding
- Integral connector allows quick connection to housing flex

### Reflector
- Self-flanged aluminum reflectors available in narrow, medium or wide distribution patterns
- Medium distribution polymer non-conductive matte white reflector may be used to meet local codes for 'dead front' applications (500 & 750 lumen max. in IC and 3000 lumen max. in Non-IC)
- Wall wash reflector features a rotatable linear spread lens for alignment of vertical illumination
- Reflectors attach to LED module with three speed clamps
- Available in multiple painted or plated finishes

### Reflector/Module Retention
- Reflector/module assembly is securely retained in the housing with two torsion springs

### Driver
- Field-replaceable constant current driver provides low noise operation
- Universal 120-277VAC 50/60Hz input standard
- Continuous, 1% to 100% dimming with 0-10V analog control
- Optional low-voltage DC driver for use with Distributed Low Voltage Power (DLVP) system
- Distributed Low Voltage Power (DLVP) system combines power, lighting and controls with ease of installation (refer to DLVP Design Guide at www.cooperlighting.com for details)

### Canada Options
- 347VAC 50/60Hz; 1% dimming on 0 -10V analog control, for 500, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000 lumen models only
- 347V step down transformer factory installed with the standard "D010" 120V-277V, LED driver on 4500, 5000, 5500, 6000 lumen models only

### Emergency Option
- Provides 90 minutes of standby lighting, meeting most life safety codes for egress lighting
- Available with integral or remote charge indicator and test switch
- Available Self-Test (self-diagnostic) with remote charge indicator and test switch
- Quick Spec emergency ordering option for quick-turn projects

### Connected Lighting System
Two WaveLinx connected solutions to choose from. Refer to WaveLinx system specifications and application guides for details.

WaveLinx PRO Tilemount Sensor Kit
- WaveLinx PRO WTA tilemount sensor kit offers daylight dimming, PIR motion sensing, scene and zone configuration, automatic commissioning; and optional RLTS - Real Time Location Services available.

WaveLinx PRO Wireless Node
- WaveLinx PRO WPN wireless node provides luminaire-level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. **Note:** Not compatible with 347V or Chicago plenum.

WaveLinx LITE Tilemount Sensor Kit
- WaveLinx LITE WTK tilemount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

WaveLinx LITE Wireless Node
- WaveLinx LITE WLN wireless node provides luminaire level control with scene and zone configuration without an integrated sensor; Connects wirelessly with daylight dimming sensor and PIR motion sensor if desired. Use with 0-10V driver only. **Note:** Not compatible with 347V or Chicago plenum.

WaveLinx Tilemount Sensor Kits Application
- The WTA and WTK tilemount sensor kits include a control module mounted on the luminaire junction box via 1/2" knock-out, and a tilemount sensor on 54-inch whip; for ceiling installation by direct-mount spring clips or via mounting bracket in octagon ceiling boxes.
- The WTA and WTK tilemount sensor kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.
- **Note: WaveLinx PRO devices are only compatible with the WaveLinx PRO system.**
- **Note: WaveLinx LITE devices are only compatible with the WaveLinx LITE system.**

### Junction Box
- Galvanized steel junction box
- 20 $in^3$ internal volume excluding voltage barrier
- 25 $in^3$ internal total volume
- Voltage barrier for 0-10V dimming wires (occupies one 1/2" pry-out space)
- Listed for eight #12 AWG (four in, four out) 90˚C conductors and feed-thru branch wiring
- Three 1/2" and two 3/4" trade size pry-outs available
- Three 4-port push wire nuts for mains voltage with 1-port for fixture connection

### Compliance
- cULus Certified to UL 1598 / C22.2 No. 250.0, suitable for damp locations and wet locations in covered ceilings only
- Emergency options provided with UL Listed emergency drivers to UL 924 / C22.2 No. 141, suitable for indoor/damp locations
- IP20 - Above finished ceiling; IP64 - Below finished ceiling
- Non-Insulated ceiling (Non-IC) rated for 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000 lumen models (insulation must be kept 3" from top and sides)
- Insulated ceiling (IC) rated for 500, 750, 1000, 1500 lumen models and suitable for direct contact with air permeable insulation* (IC models are also suitable for Non-IC installations)
- Non-IC marked spacing required for 4500, 5000, 5500, 6000 lumen models
  - Marked Spacing Center to Center of Adjacent Luminaires = 36"
  - Center of Luminaire to Building Member = 18"
  - Minimum overhead = 0.5"
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions FCC CFR Title 47 Part 15 Class A at 120/277V
- Contains no mercury or lead and RoHS compliant
- Photometric testing completed in accordance of IES LM-79-08
- Lumen maintenance projection in accordance of IES LM-80-08 and TM-21-11
- 1,000 and 1,500 lumen, 90 CRI, ICAT models may be used to comply with State of California Title 24 residential code, per JA8 certification standards
- May be used to comply with State of California Title 24 non-residential code as a dimmable LED luminaire
- ENERGY STAR® certified, reference certified light fixtures database

*Not for use in direct contact with spray foam insulation, consult NEMA LSD57-2013

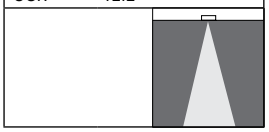
### Warranty
- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

## Photometric Data

View IES files

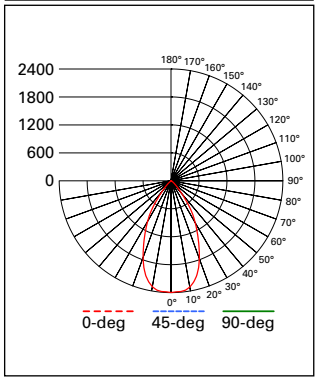
### NARROW DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

| NARROW (50° BEAM*) | |
|---|---|
| Test Number | P571728 |
| Housing | HC420D010 |
| Module | HM40525835 |
| Reflector | 41NDC |
| Lumens | 2010 Lm |
| Efficacy | 100.5 Lm/W |
| SC | 0.84 |
| UGR | 12.2 |

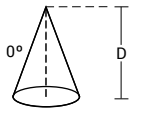


**CANDLEPOWER DISTRIBUTION**

Downlight




**CONE OF LIGHT**




| MH | FC | L | W |
|---|---|---|---|
| 5.5' | 79.3 | 4.6 | 4.6 |
| 7' | 49 | 5.8 | 5.8 |
| 8' | 37.5 | 6.6 | 6.6 |
| 9' | 29.6 | 7.4 | 7.4 |
| 10' | 24 | 8.4 | 8.4 |
| 12' | 16.7 | 10 | 10 |

**CANDELA TABLE**

| Degrees Vertical | Candela |
|---|---|
| 0 | 2400 |
| 5 | 2387 |
| 15 | 2110 |
| 25 | 1368 |
| 35 | 676 |
| 45 | 152 |
| 55 | 23 |
| 65 | 5 |
| 75 | 1 |
| 85 | 0 |
| 90 | 0 |

**ZONAL LUMEN SUMMARY**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0-30 | 1436 | 71.5 |
| 0-40 | 1848 | 92 |
| 0-60 | 2002 | 99.6 |
| 0-90 | 2010 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 2010 | 100 |

**LUMINANCE**

| Average Candela Degrees | Average 0° Luminance |
|---|---|
| 45 | 26514 |
| 55 | 4968 |
| 65 | 1576 |
| 75 | 667 |
| 85 | 0 |

*Value are nominal for specular clear reflectors, other may vary.
SC = Spacing Criteria
UGR = Unified Glare Rating

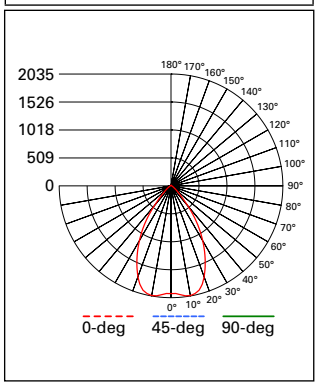
### MEDIUM DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

| MEDIUM (60° BEAM*) | |
|---|---|
| Test Number | P571727 |
| Housing | HC420D010 |
| Module | HM40525835 |
| Reflector | 41MDC |
| Lumens | 2096 Lm |
| Efficacy | 104.8 Lm/W |
| SC | 1.0 |
| UGR | 13.6 |

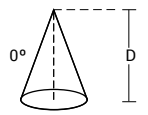


**CANDLEPOWER DISTRIBUTION**

Downlight




**CONE OF LIGHT**




| MH | FC | L | W |
|---|---|---|---|
| 5.5' | 65.3 | 5.4 | 5.4 |
| 7' | 40.3 | 6.8 | 6.8 |
| 8' | 30.9 | 7.8 | 7.8 |
| 9' | 24.4 | 8.8 | 8.8 |
| 10' | 19.8 | 9.8 | 9.8 |
| 12' | 13.7 | 11.8 | 11.8 |

**CANDELA TABLE**

| Degrees Vertical | Candela |
|---|---|
| 0 | 1969 |
| 5 | 1997 |
| 15 | 1974 |
| 25 | 1467 |
| 35 | 800 |
| 45 | 192 |
| 55 | 26 |
| 65 | 4 |
| 75 | 1 |
| 85 | 0 |
| 90 | 0 |

**ZONAL LUMEN SUMMARY**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0-30 | 1408 | 67.1 |
| 0-40 | 1899 | 90.6 |
| 0-60 | 2091 | 99.7 |
| 0-90 | 2096 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 2096 | 100 |

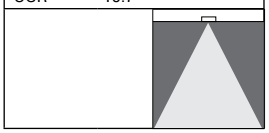
**LUMINANCE**

| Average Candela Degrees | Average 0° Luminance |
|---|---|
| 45 | 33405 |
| 55 | 5548 |
| 65 | 1197 |
| 75 | 667 |
| 85 | 0 |

*Value are nominal for specular clear reflectors, other may vary.
SC = Spacing Criteria
UGR = Unified Glare Rating

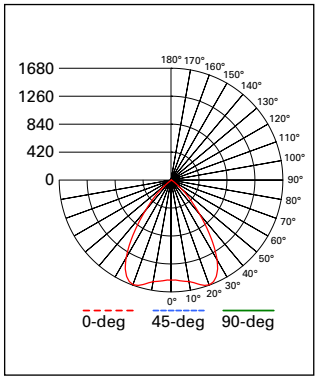
## WIDE DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

| WIDE (75° BEAM*) | |
|---|---|
| Test Number | P571730 |
| Housing | HC420D010 |
| Module | HM40525835 |
| Reflector | 41WDC |
| Lumens | 2304 Lm |
| Efficacy | 115.2 Lm/W |
| SC | 1.25 |
| UGR | 15.7 |

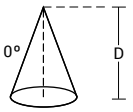


**CANDLEPOWER DISTRIBUTION**

**Downlight**




**CONE OF LIGHT**




| MH | FC | L | W |
|---|---|---|---|
| 5.5' | 49.9 | 6.8 | 6.8 |
| 7' | 30.8 | 8.6 | 8.6 |
| 8' | 23.6 | 9.8 | 9.8 |
| 9' | 18.6 | 11.2 | 11.2 |
| 10' | 15.1 | 12.4 | 12.4 |
| 12' | 10.5 | 14.8 | 14.8 |

**CANDELA TABLE**

| Degrees Vertical | Candela |
|---|---|
| 0 | 1509 |
| 5 | 1525 |
| 15 | 1630 |
| 25 | 1603 |
| 35 | 1012 |
| 45 | 369 |
| 55 | 44 |
| 65 | 5 |
| 75 | 1 |
| 85 | 0 |
| 90 | 0 |

**ZONAL LUMEN SUMMARY**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0-30 | 1334 | 57.9 |
| 0-40 | 1960 | 85.1 |
| 0-60 | 2296 | 99.7 |
| 0-90 | 2304 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 2304 | 100 |

**LUMINANCE**

| Average Candela Degrees | Average 0° Luminance |
|---|---|
| 45 | 64437 |
| 55 | 9355 |
| 65 | 1576 |
| 75 | 667 |
| 85 | 0 |

*Value are nominal for specular clear reflectors, other may vary.
SC = Spacing Criteria
UGR = Unified Glare Rating

### Photometric Multipliers (Nominal Lumen Values)

| 500 Lumen | 750 Lumen | 1000 Lumen | 1500 Lumen | 2000 Lumen | 2500 Lumen | 3000 Lumen | 3500 Lumen |
|---|---|---|---|---|---|---|---|
| 0.33 | 0.44 | 0.54 | 0.74 | 1.00 | 1.24 | 1.54 | 1.85 |

| 4000 Lumen | 4500 Lumen | 5000 Lumen | 5500 Lumen | 6000 Lumen |
|---|---|---|---|---|
| 2.15 | 2.28 | 2.44 | 2.52 | 2.62 |

Multipliers for relative lumen values with other series models.

### Color Finish Multipliers

| Finish code | C | H | W/WB | BB |
|---|---|---|---|---|
| Finish | Specular Clear | Semi-Specular | Matte White White Baffle | Black Baffle |
| Multiplier | 1.00 | 0.94 | 0.88 | 0.76 |

Multipliers for relative lumen values with other color finishes.

### CCT Multipliers – 80CRI

| 2700K | 3000K | 3500K | 4000K | 5000K |
|---|---|---|---|---|
| 0.89 | 0.96 | 1.00 | 1.03 | 1.03 |

Multipliers for relative lumen values with other series color temperatures.

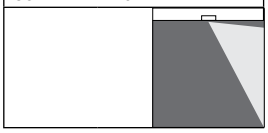
### CCT Multipliers – 90CRI

| 2700K | 3000K | 3500K | 4000K | 5000K |
|---|---|---|---|---|
| 0.76 | 0.85 | 0.89 | 0.93 | 0.93 |

Multipliers for relative lumen values with other series color temperatures.

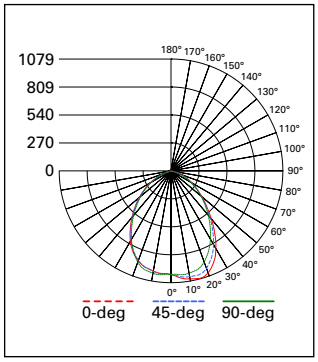
## WALL WASH DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

| WALL WASH | |
|---|---|
| Test Number | P571729 |
| Housing | HC420D010 |
| Module | HM40525835 |
| Reflector | 41RWWC |
| Lumens | 2094 Lm |
| Efficacy | 104.7 Lm/W |
| SC | 1.15 |



**CANDLEPOWER DISTRIBUTION**

**Downlight**




| CANDELA TABLE | |
|---|---|
| Degrees Vertical | Candela |
| 0 | 1005 |
| 5 | 1041 |
| 15 | 1079 |
| 25 | 980 |
| 35 | 743 |
| 45 | 494 |
| 55 | 312 |
| 65 | 180 |
| 75 | 80 |
| 85 | 10 |
| 90 | 0 |

| ZONAL LUMEN SUMMARY | | |
|---|---|---|
| Zone | Lumens | % Fixture |
| 0-30 | 789 | 37.7 |
| 0-40 | 1221 | 58.3 |
| 0-60 | 1872 | 89.4 |
| 0-90 | 2094 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 2094 | 100 |

| LUMINANCE | |
|---|---|
| Average Candela Degrees | Average 0° Luminance |
| 45 | 86207 |
| 55 | 67159 |
| 65 | 52681 |
| 75 | 38173 |
| 85 | 13445 |

SC = Spacing Criteria, nominal for specular clear reflector, other may vary.

**SINGLE UNIT FOOTCANDLES**

| | 2.5' from wall (distance from fixture along wall) | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 18.7 | 13.6 | 6.1 | 2.3 | 0.8 | 0.3 | 0.1 |
| 2 | 28.4 | 22.3 | 12.2 | 5.7 | 2.6 | 1.2 | 0.6 |
| 3 | 25.9 | 21.4 | 13.3 | 7.2 | 3.8 | 2 | 1.1 |
| 4 | 19.6 | 16.9 | 11.6 | 7 | 4.1 | 2.4 | 1.4 |
| 5 | 13.6 | 12.3 | 9.2 | 6.2 | 3.9 | 2.5 | 1.5 |
| 6 | 9.3 | 8.6 | 7 | 5.1 | 3.5 | 2.3 | 1.6 |
| 7 | 6.4 | 6.1 | 5.2 | 4.1 | 3 | 2.1 | 1.5 |
| 8 | 4.6 | 4.4 | 3.9 | 3.2 | 2.5 | 1.8 | 1.3 |
| 9 | 3.3 | 3.2 | 2.9 | 2.5 | 2 | 1.6 | 1.2 |
| 10 | 2.5 | 2.4 | 2.2 | 2 | 1.7 | 1.4 | 1.1 |

**MULTIPLE UNIT FOOTCANDLES**

| | 2.5' from wall (Distance from fixture along wall) 3 | | | 2.5' from wall (Distance from fixture along wall) 4 | | |
|---|---|---|---|---|---|---|
| 1 | 21 | 18.8 | 21 | 19.5 | 12.1 | 19.5 |
| 2 | 34.1 | 34.1 | 34.1 | 31 | 24.4 | 31 |
| 3 | 33.1 | 34.4 | 33.1 | 29.7 | 26.5 | 29.7 |
| 4 | 26.7 | 28.7 | 26.7 | 23.7 | 23.3 | 23.7 |
| 5 | 19.8 | 21.7 | 19.8 | 17.5 | 18.5 | 17.5 |
| 6 | 14.4 | 15.8 | 14.4 | 12.8 | 14 | 12.8 |
| 7 | 10.5 | 11.4 | 10.5 | 9.4 | 10.4 | 9.4 |
| 8 | 7.8 | 8.3 | 7.8 | 7 | 7.7 | 7 |
| 9 | 5.8 | 6.2 | 5.8 | 5.4 | 5.9 | 5.4 |
| 10 | 4.4 | 4.7 | 4.4 | 4.1 | 4.5 | 4.1 |

### Photometric Multipliers (Nominal Lumen Values)

| 500 Lumen | 750 Lumen | 1000 Lumen | 1500 Lumen | 2000 Lumen | 2500 Lumen | 3000 Lumen | 3500 Lumen |
|---|---|---|---|---|---|---|---|
| 0.33 | 0.44 | 0.54 | 0.74 | 1.00 | 1.24 | 1.54 | 1.85 |

| 4000 Lumen | 4500 Lumen | 5000 Lumen | 5500 Lumen | 6000 Lumen |
|---|---|---|---|---|
| 2.15 | 2.28 | 2.44 | 2.52 | 2.62 |

Multipliers for relative lumen values with other series models.

### Color Finish Multipliers

| Finish code | C | H | W/WB | BB |
|---|---|---|---|---|
| Finish | Specular Clear | Semi-Specular | Matte White White Baffle | Black Baffle |
| Multiplier | 1.00 | 0.94 | 0.88 | 0.76 |

Multipliers for relative lumen values with other color finishes.

### CCT Multipliers – 80CRI

| 2700K | 3000K | 3500K | 4000K | 5000K |
|---|---|---|---|---|
| 0.89 | 0.96 | 1.00 | 1.03 | 1.03 |

Multipliers for relative lumen values with other series color temperatures.

### CCT Multipliers – 90CRI

| 2700K | 3000K | 3500K | 4000K | 5000K |
|---|---|---|---|---|
| 0.76 | 0.85 | 0.89 | 0.93 | 0.93 |

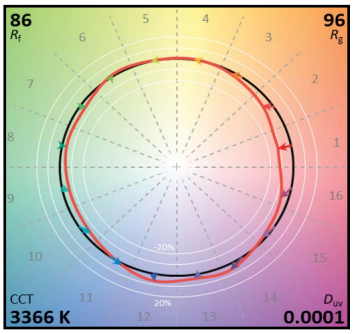
Multipliers for relative lumen values with other series color temperatures.

Note: Refer to IES files for more product data.

## Energy & Performance Data

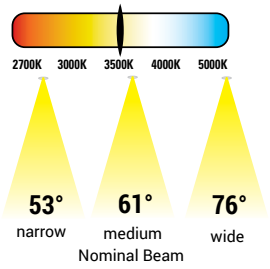
### COLOR METRICS - TM-30-15 & CRI/CIE (3500K)

**80 CRI Color Metric Summary - 3500K***

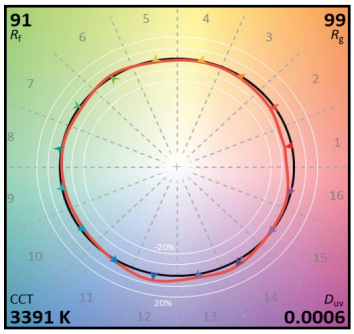



Reference Illuminant — Test Source

| | |
|---|---|
| TM-30-15 | Rf = 86 |
| | Rg = 95.5 |
| CRI/CIE | Ra = 83.8 |
| | R9 = 10.3 |

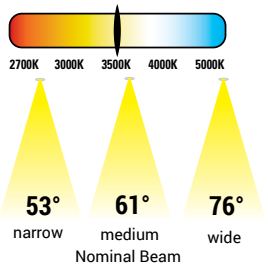



**90 CRI Color Metric Summary - 3500K***




Reference Illuminant — Test Source

| | |
|---|---|
| TM-30-15 | Rf = 91.1 |
| | Rg = 99 |
| CRI/CIE | Ra = 92.4 |
| | R9 = 55.1 |




* Color values are based on 61WDWB reflector, other finishes and field results may vary.

### ENERGY DATA

| Series | 500 lumen | | 750 lumen | | 1000 lumen | | 1500 lumen | | 2000 lumen | |
|---|---|---|---|---|---|---|---|---|---|---|
| Input Voltage 120-277VAC | 120V | 277V | 120V | 277V | 120V | 277V | 120V | 277V | 120V | 277V |
| Input Current (A) | 0.051 | 0.026 | 0.067 | 0.036 | 0.083 | 0.039 | 0.119 | 0.053 | 0.171 | 0.077 |
| Input Power (W) | 6.1 | 6.5 | 7.9 | 8.3 | 10 | 10.4 | 14.5 | 14.5 | 20.9 | 20.6 |
| In-rush (A) | 1.9 | 8.4 | 2 | 8.4 | 2.2 | 8.5 | 2.7 | 8.5 | 2.1 | 9.7 |
| Inrush duration (µs) | 251 | 135 | 237 | 133 | 250 | 134 | 250 | 139 | 245 | 131 |
| THD (%) | 6.2 | 13.5 | 7.4 | 8.8 | 5.4 | 10.3 | 10 | 6.7 | 6.5 | 7.9 |
| PF | ≥ 0.99 | ≥ 0.9 | ≥ 0.98 | ≥ 0.92 | ≥ 0.99 | ≥ 0.95 | ≥ 0.99 | ≥ 0.97 | ≥ 0.99 | ≥ 0.96 |

| Series | 2500 lumen | | 3000 lumen | | 3500 lumen | | 4000 lumen | | 4500 lumen | |
|---|---|---|---|---|---|---|---|---|---|---|
| Input Voltage 120-277VAC | 120V | 277V | 120V | 277V | 120V | 277V | 120V | 277V | 120V | 277V |
| Input Current (A) | 0.23 | 0.103 | 0.24 | 0.107 | 0.292 | 0.152 | 0.351 | 0.159 | 0.384 | 0.172 |
| Input Power (W) | 27.5 | 27.5 | 28.6 | 28.5 | 34.6 | 35.1 | 42.1 | 42.1 | 45.9 | 45.6 |
| In-rush (A) | 2.5 | 5.6 | 2.5 | 11.6 | 3.4 | 13.9 | 3.1 | 14.7 | 3.1 | 14.8 |
| Inrush duration (µs) | 232 | 123 | 216 | 111 | 183 | 95 | 200 | 98 | 202 | 100 |
| THD (%) | 6.5 | 8.1 | 7.8 | 8.3 | 5.6 | 10 | 4.1 | 9.5 | 4.5 | 8.5 |
| PF | ≥ 0.99 | ≥ 0.96 | ≥ 0.99 | ≥ 0.96 | ≥ 0.99 | ≥ 0.93 | ≥ 0.99 | ≥ 0.94 | ≥ 0.99 | ≥ 0.95 |

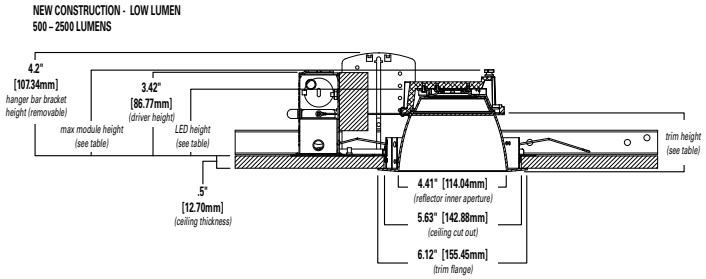
| Series | 5000 lumen | | 5500 lumen | | 6000 lumen | |
|---|---|---|---|---|---|---|
| Input Voltage 120-277VAC | 120V | 277V | 120V | 277V | 120V | 277V |
| Input Current (A) | 0.419 | 0.186 | 0.457 | 0.201 | 0.489 | 0.214 |
| Input Power (W) | 50.1 | 49.5 | 54.6 | 53.7 | 58.4 | 57.4 |
| In-rush (A) | 3.1 | 15 | 3.2 | 14.8 | 3.4 | 14.8 |
| Inrush duration (µs) | 202 | 117 | 196 | 131 | 192 | 121 |
| THD (%) | 5.5 | 7.6 | 7 | 7.2 | 8.1 | 7.2 |
| PF | ≥ 0.99 | ≥ 0.96 | ≥ 0.99 | ≥ 0.96 | ≥ 0.99 | ≥ 0.97 |

| |
|---|
| Minimum starting temperature -30°C (-22°F)*<br>(Nominal input 120-277VAC & 100% of rated output power) |
| Sound Rating: Class A standards |

**Notes:**
* Emergency Battery packs are rated for a minimum starting temperature of 0°C.

## Dimensional and Mounting Details

### NEW CONSTRUCTIONS - LOW LUMEN 500 – 2500 LUMENS




**Low Lumen (500 – 2500 Lumens)***

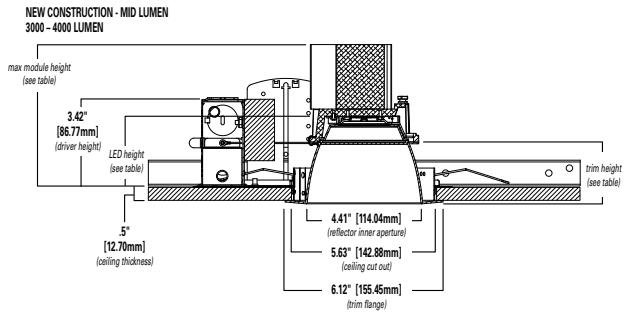
| Distribution | Max. Module Height | Trim Height | LED Height |
|---|---|---|---|
| Narrow | 3.6" | 2.5" | 2.7" |
| Medium | 3.7" | 2.6" | 2.8" |
| Wide | 3.5" | 2.4" | 2.6" |
| Baffle | 3.1" | 2.4" | 2.6" |

*Max. height w/removable hanger bar bracket 4.2"



Low Lumen Module

### NEW CONSTRUCTIONS - MID LUMEN 3000 – 4000 LUMENS



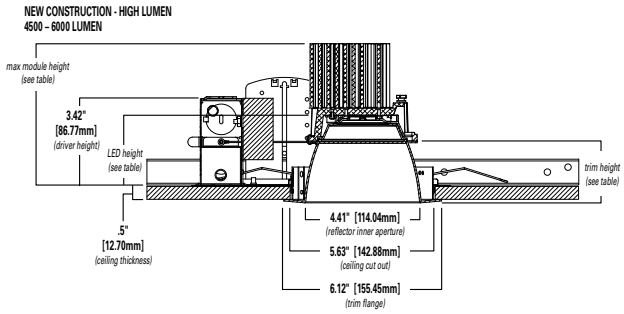

**Mid Lumen (3000 – 4000 Lumens)**

| Distribution | Max. Module Height | Trim Height | LED Height |
|---|---|---|---|
| Narrow | 5.6" | 2.5" | 2.9" |
| Medium | 5.7" | 2.6" | 3.0" |
| Wide | 5.5" | 2.4" | 2.8" |
| Baffle | 5.5" | 2.4" | 2.8" |



Mid Lumen Module

### NEW CONSTRUCTIONS - HIGH LUMEN 4500 – 6000 LUMENS



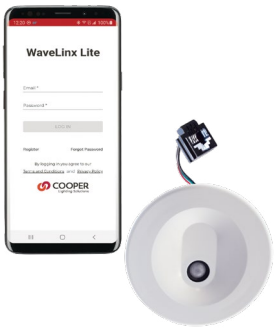

**High Lumen (4500 – 6000 Lumens)**

| Distribution | Max. Module Height | Trim Height | LED Height |
|---|---|---|---|
| Narrow | 5.9" | 2.5" | 2.9" |
| Medium | 6.0" | 2.6" | 3.0" |
| Wide | 5.8" | 2.4" | 2.8" |
| Baffle | 5.8" | 2.4" | 2.8" |



High Lumen Module

## Connected Solutions



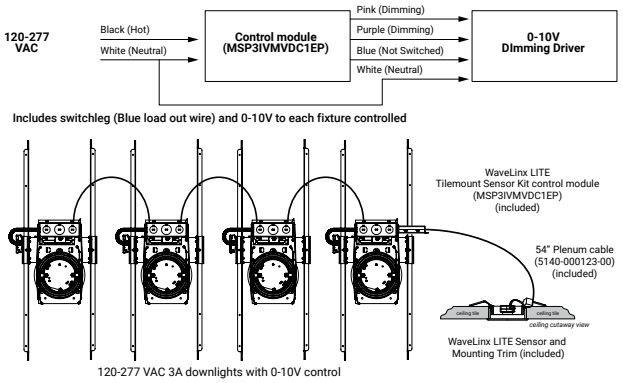

# WaveLinx LITE - WTK Tilemount Sensor

**WaveLinx LITE devices only compatible with the WaveLinx LITE system.**

- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinx LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Automatic occupancy or vacancy, sensor sensitivity, daylight dimming, etc. configurable through the app
- Refer to the WaveLinx system specifications for details

Device Security | Manual Dimmer | Occupancy Sensor | Daylighting Control | Manually Switched ON/OFF | Tuning Control | Lumen Maintenance Control | Scenes

### WaveLinx LITE WTK Tilemount Wiring Diagram

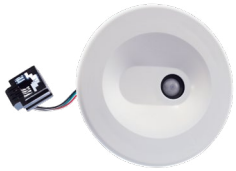



### WaveLinx LITE Bluetooth Enabled System




# WaveLinx PRO – WTA Tilemount Sensor

**WaveLinx PRO devices only compatible with the WaveLinx PRO system.**



- WaveLinx PRO tilemount functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



**Downlights with tilemount sensor wireless communication**
Highly efficient LED fixtures

**WaveLinx Area Controller**
Provides centralized coordination of multiple area control options

**Wireless Wall Station/Receptacle**
Provides customized wireless control of each area

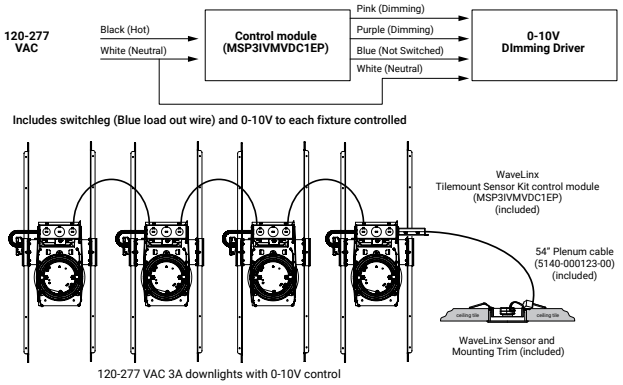
**Mobile Applications**
Provides personalized, local control from a tablet or smartphone

### WaveLinx mobile app settings

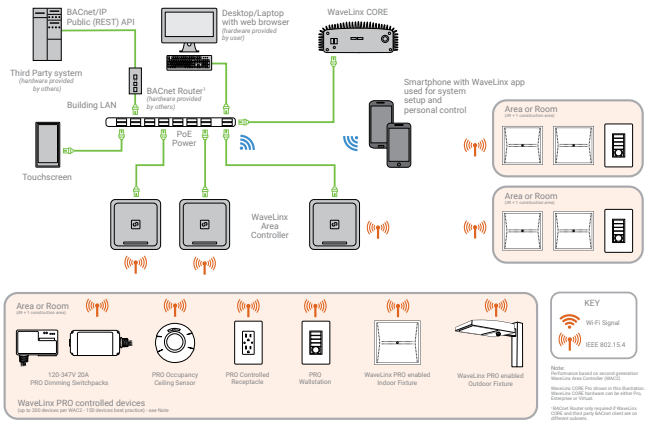
Manual Dimmer | Occupancy Sensor | Lumen Maintenance Control | Daylighting Control

Receptacle Control | Tuning Control | Scheduling | Manually Switched ON/OFF | Demand Response

### WaveLinx WTA Tilemount Wiring Diagram




### WaveLinx CORE Building Management Integration



## Connected Solutions



### WaveLinx LITE Wireless Node - WLN

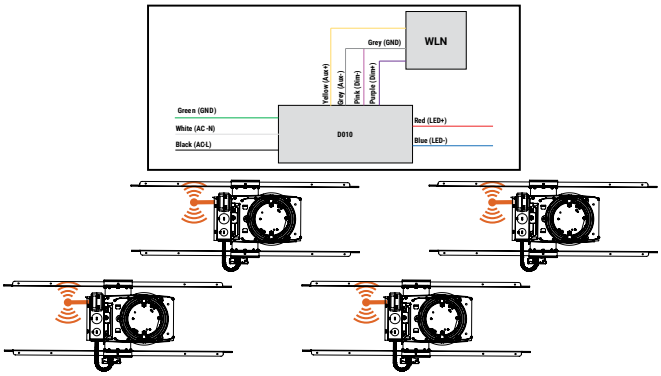
**WaveLinx LITE devices only compatible with the WaveLinx LITE system.**

- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinx LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Refer to the WaveLinx system specifications for details

**WaveLinx mobile app settings**

Device Security · Manual Dimmer · Occupancy Sensor · Daylighting Control · Manually Switched ON/OFF · Tuning Control · Lumen Maintenance Control · Scenes

#### WaveLinx LITE Wireless Node (WLN) Wiring Diagram




#### WaveLinx LITE Bluetooth Enabled System






### WaveLinx PRO Wireless Node - WPN

**WaveLinx PRO devices only compatible with the WaveLinx PRO system.**

- WaveLinx Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with WaveLinx Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



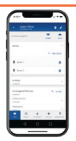
**Downlights with wireless communication**
Highly efficient LED fixtures



**WaveLinx Area Controller**
Provides centralized coordination of multiple area control options



**Wireless Wall Station/Receptacle**
Provides customized wireless control of each area

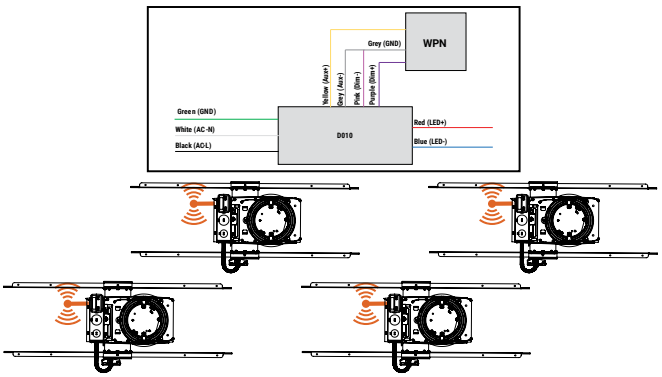


**Mobile Applications**
Provides personalized, local control from a tablet or smartphone

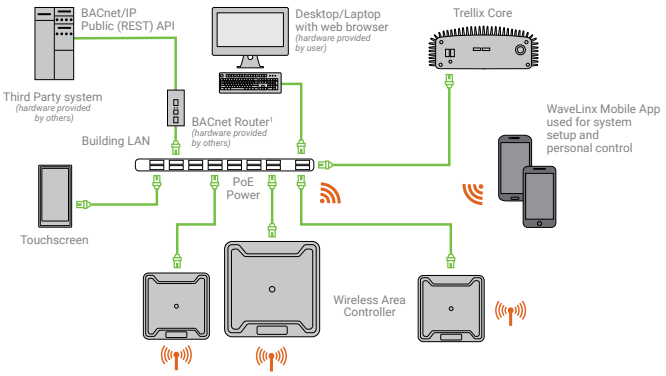
**WaveLinx mobile app settings**

Manual Dimmer · Occupancy Sensor · Lumen Maintenance Control · Daylighting Control · Receptacle Control · Tuning Control · Scheduling · Manually Switched ON/OFF · Demand Response

#### WaveLinx PRO Wireless Node (WPN) Wiring Diagram




#### WaveLinx CORE Building Management Integration






**Cooper Lighting Solutions**
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Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

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Specifications and dimensions subject to change without notice.

HUNZA™ PURE OUTDOOR LIGHTING

# Sign Light
## Pure LED

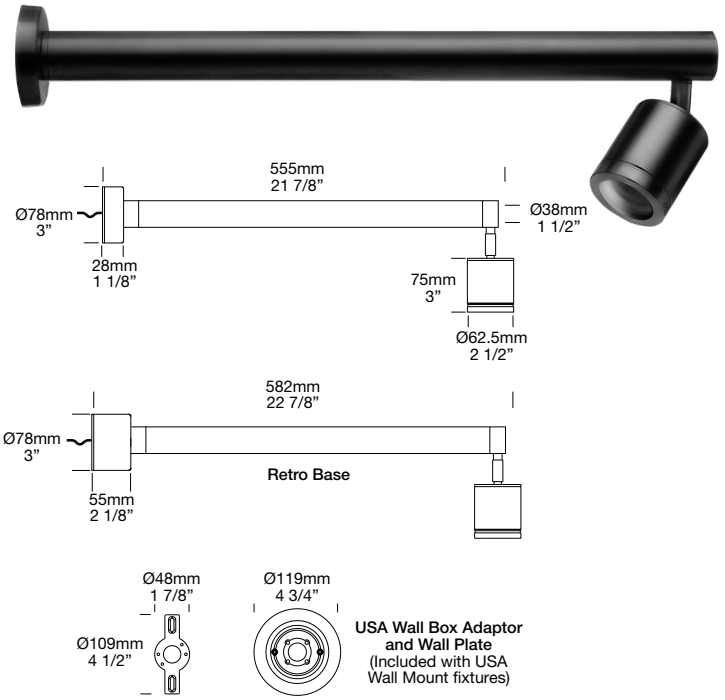
| PROJECT: |
|---|
| TYPE: |
| SOURCE: |
| NOTES: |

IP66 CE c UL us LISTED

## SPECIFICATIONS

| | |
|---|---|
| **LED Chip** | Cree XHP-50-2 Plug and Play field replaceable LED board |
| **Luminaire Output*** | 600 Lumens @ 1050mA (6 watts)<br>420 Lumens @ 700mA (4 watts)<br>240 Lumens @ 350mA (2 watts) |
| **Lumens Per Watt*** | 100 Lumens minimum @ 6 watts |
| **CRI (3000K)** | 86+ Standard, 90+ Optional |
| **LED Life Expectancy** | 50,000 hours L70 |
| **Colour Temperatures** | 2700K, 3000K, 4000K |
| **Beam Angles** | 15, 25, 38, 60 |
| **Ingress Protection** | IP66 |
| **Warranty** | Electronics = 5 years<br>Aluminium Body = 5 years<br>Body Cop/ SS = 10 years |
| **Standards** | IEC/BS/AS/NZ60598,<br>UL 1838, UL 2108, UL 1598<br>CE |

*Delivered from the Luminaire with unobstructed beam




## PRODUCT CONFIGURATION

Please fill in appropriate codes into boxes provided

### Cat. No. SGNL/ L

| Luminaire | Power | Material/Finish | Beam | Colour | Accessories | | |
|---|---|---|---|---|---|---|---|
| SGNL/L | | | | | | | |

**Power**

| | |
|---|---|
| S | 1050mA Input, Series Wired 6W |
| D3 | 12VAC Input, Parallel Wired 2W |
| D7 | 12VAC Input, Parallel Wired 4W |
| D10 | 12VAC Input, Parallel Wired 6W |
| R | Retro, 110/240V Driver |
| D24 | 24VDC Input, Parallel Wired 4W |

**Material/Finish**

ALUMINIUM

| | |
|---|---|
| EBK | BLACK |
| EBZ | BRONZE |
| EOGR | OLIVE GREEN |
| EWH | WHITE |
| EWB | WHITE BIRCH |
| EDG | DARK GREY |
| ESTAR | SILVER STAR |
| ECT | CORTEN |
| COP | Copper |
| SS | Stainless Steel |

**Beam**

| | |
|---|---|
| 15 | 15° |
| 25 | 25° |
| 38 | 38° |
| 60 | 60° |

**Colour**

| | |
|---|---|
| 2 | 2700K |
| 3 | 3000K |
| 4 | 4000K |
| 39 | 3000K, 90+ CRI |

**Accessories**

| | |
|---|---|
| HCL | Hex Cell Louvre |
| GG | Glare Guard |
| SNT | Snoot |
| LF | Frosted Lens |
| WBAP | Wall Box Adaptor |
| LKN | Locking Knuckle |
| CJK | Cable Joint Kit |
| EP | Electro Polish *Only available for Stainless Steel* |

**S - Series Driver**

Constant current driver (REQUIRED, NOT SUPPLIED) individual fixtures require 6VDC @ 1050mA maximum.

**D3 D7 D10**

**12VAC INTEGRAL DRIVER:**

Hunza integrated plug and play driver (included)

Input: 9-15VAC, 7watt total

Output: D3 = 6VDC @ 350m
D7= 6VDC @ 700mA
D10= 6VDC @ 1050mA
(1050mA limited to ≤ 40ºC (104ºF) ambient temperature in stainless steel)

**D24 - 24VDC Driver**

Power Supply: 24VDC Power Supply (Required not supplied)

Fixture Input: 24VDC @4.2W

Fixture Output: 700mA constant current (Non dimming)

**R**

**110/240VAC RETRO DRIVER:**

Input: 120/240VAC, 5 watt total

Output: 6VDC @ 700mA
0-10 volt dimming
(USA - non dimming)

**OTHER LAMP OPTIONS:**

SGNL/MR16 - MR16 12V
SGNL/GU - GU10 120/240V

**Additional Comments:**

*Due to continued product enhancements, specifications may change without notification.

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# LUMINAIRE CONSTRUCTION

**CNC machined from one of the following metals:**

**Aluminium:**
**Body:** solid high corrosion resistant 63.5mm (21/2") x 10mm (3/8") aluminium.
**End cap:** solid aluminium 63.5mm (21/2") rod, with chromate substrate and high UV resistant polyester powder coat.
**Pole:** solid aluminium 500mm (19¾") x 38mm (1½") tube.
**Colours:** Black, Bronze, Silver Star, White, White Birch, Olive Green, Dark Grey, Corten.

**Copper:**
**Body:** 63.5mm (2½") x 10mm (3/8")
**End cap:** solid copper 63.5mm (2½") rod
**Pole:** solid 38mm (1½") tube.

**316 Stainless Steel:**
**Body:** 63.5mm (2½") x 10mm (3/8")
**End cap:** Solid 316 stainless steel 63.5mm (2½") rod.
**Pole:** 316 stainless steel 38mm (1½") tube.

**Knuckles:** Aluminium luminaires - 360° rotation and 0-90° elevation, solid brass with anti rust spring.

**Step Lens:** 10mm (3/8") Extra clear, low iron, shatter resistant glass. Lifetime warranty

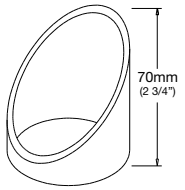
**Gaskets:** Silicone, iron impregnated 220°C (428°F)

**Mounting:** A mounting plate is fixed to the wall using two screws and the luminaire is fitted to the mounting plate.

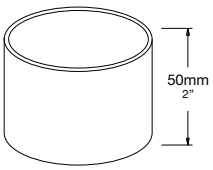
**Luminaire Weight:**

| Low voltage: | Retro™ |
|---|---|
| Alum .870kg (1lb 14oz) | Alum .870kg (1lb 14oz) |
| Cop 2.140kg (4lb 11oz) | Cop 2.140kg (4lb 11oz) |
| SS 1.620kg (3lb 9oz) | SS 2.500kg (5lb 8oz) |

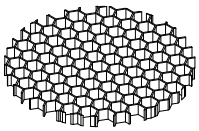
# ACCESSORIES

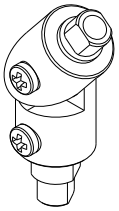


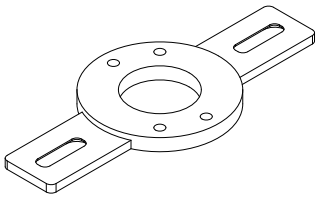
Glare Guard



Snoot


Hex Cell Louvre

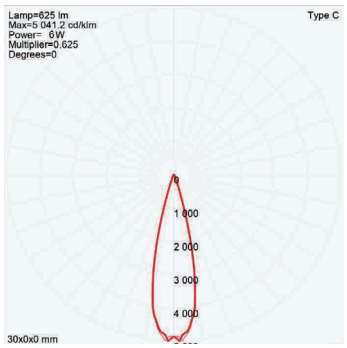

Locking Knuckle


Wall Box Adaptor

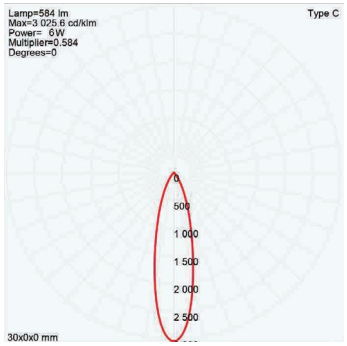
# BEAM ANGLES

IES files available for download: hunzalighting.com/downloads

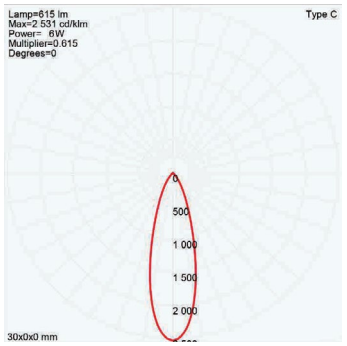
**High efficiency Reflectors. Field replaceable**



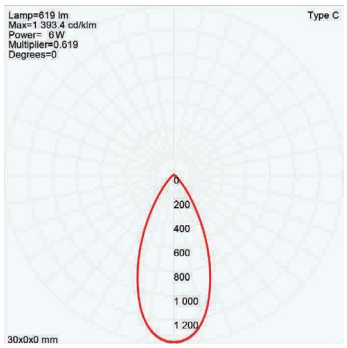
15° FWHM
TIR



25° FWHM
TIR



38° FWHM
TIR



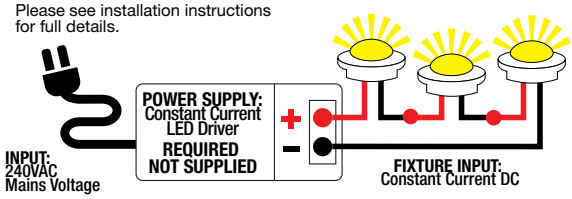
60° FWHM
TIR

# WIRING GUIDE

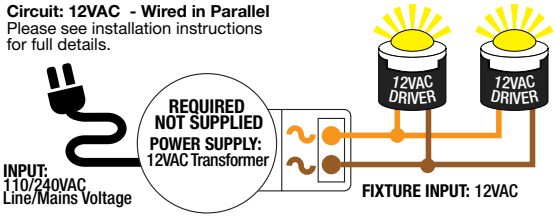
Available for download: hunzalighting.com/downloads

**NOTE: Diagrams are a guide only, wire colours and polarity may change depending on fixture and country.**

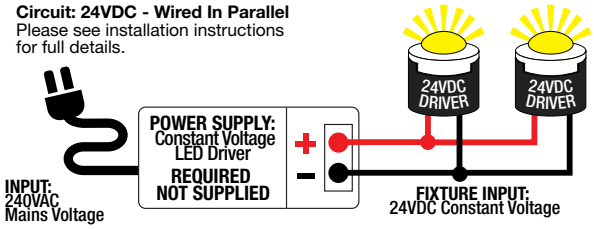
**Circuit: Wired in Series With Remote Driver**
Please see installation instructions for full details.



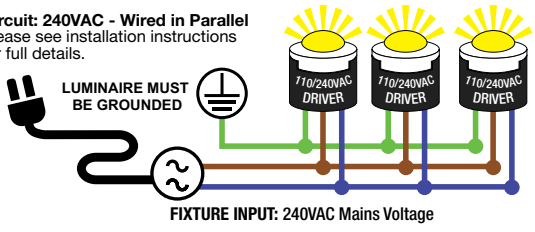

**Circuit: 12VAC - Wired in Parallel**
Please see installation instructions for full details.




**Circuit: 24VDC - Wired In Parallel**
Please see installation instructions for full details.




**Circuit: 240VAC - Wired in Parallel**
Please see installation instructions for full details.




*Due to continued product enhancements, specifications may change without notification.

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| | | | | | |
|---|---|---|---|---|---|
| Project | | Catalog # | | Type | |
| Prepared by | | Notes | | Date | |



# McGraw-Edison

## GPC Galleon Pedestrian Companion

Area / Site Luminaire

### Product Features

Light ARchitect™ | BAA | FADC

### Product Certifications

DLC LISTED [1] | DLC LISTED PREMIUM [1] | TSN CERTIFIED | UL CERTIFIED | FC CLASS A | IP66 | 5 YEAR | ida DARK SKY APPROVED [2]

### Interactive Menu


- Ordering Information page 2
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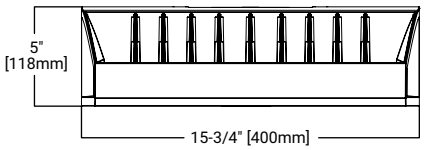

### Connected Systems

- WaveLinx PRO Wireless
- WaveLinx LITE Wireless

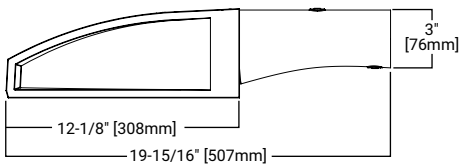
### Quick Facts

- Choice of sixteen high-efficiency, patented AccuLED Optics
- Quick mount pole or mast-arm mounting configurations
- Eight lumen packages from 3,215 up to 17,056 lumens
- IP66 rated housing and LED light squares

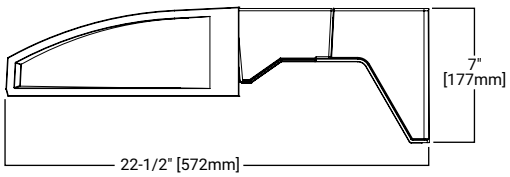
### Dimensional Details



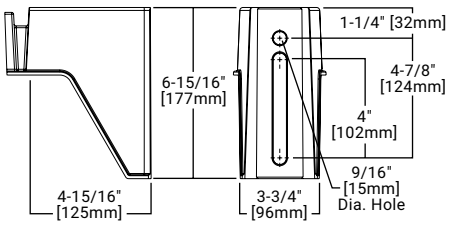

Mast Arm Mount




Quick Mount Arm




Quick Mount Arm (Pole Mounting Details)




**EPA**

| Effective Projected Area (Sq. Ft.) | |
|---|---|
| Quick Mount Arm | 0.73 |
| Mast Arm | 0.62 |

**Weight**

| Approximate Net Weight |
|---|
| 27 lbs. (12.2 kgs.) |

**NOTES:**
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

## Ordering Information

SAMPLE NUMBER: **GPC-SA2C-740-U-T4FT-GM**

| Product Family | Light Engine | | Color Temperature | Voltage | Distribution | Mounting Options | Finish |
|---|---|---|---|---|---|---|---|
| | Configuration | Drive Current | | | | | |
| **GPC**=Galleon Pedestrian Companion<br>**BAA-GPC**=Galleon Pedestrian Companion, Buy American Act Compliant [33]<br>**TAA-GPC**=Galleon Pedestrian Companion, Trade Agreements Act Compliant [33] | **SA1**=1 Square<br>**SA2**=2 Squares [2] | **A**=615mA<br>**B**=800mA<br>**C**=1000mA<br>**D**=1200mA [4]<br>**Z**=Configured [37] | **722**=70CRI, 2200K<br>**727**=70CRI, 2700K<br>**730**=70CRI, 3000K<br>**735**=70CRI, 3500K<br>**740**=70CRI, 4000K<br>**750**=70CRI, 5000K<br>**760**=70CRI, 6000K<br>**827**=80CRI, 2700K<br>**830**=80CRI, 3000K<br>**AMB**=Amber, 590nm [3, 4] | **U**=120-277V<br>**1**=120V<br>**2**=208V<br>**3**=240V<br>**4**=277V<br>**8**=480V [6,7]<br>**9**=347V [6]<br>**DV**=277-480V DuraVolt Drivers [7, 8, 35] | **T2**=Type II<br>**T2R**=Type II Roadway<br>**T3**=Type III<br>**T3R**=Type III Roadway<br>**T4FT**=Type IV Forward Throw<br>**T4W**=Type IV Wide<br>**SL2**=Type II w/Spill Control<br>**SL3**=Type III w/Spill Control<br>**SL4**=Type IV w/Spill Control<br>**SLL**=90° Spill Light Eliminator Left<br>**SLR**=90° Spill Light Eliminator Right<br>**RW**=Rectangular Wide Type I<br>**5NQ**=Type V Square Narrow<br>**5MQ**=Type V Square Medium<br>**5WQ**=Type V Square Wide<br>**AFL**=Automotive Frontline | **QM**=Quick Mount Arm for Round or Square Pole [2,13]<br>**MA**=2-3/8" Mast Arm [2, 14] | **AP**=Grey<br>**BZ**=Bronze<br>**BK**=Black<br>**DP**=Dark Platinum<br>**GM**=Graphite Metallic<br>**WH**=White |

| **Options** (Add as Suffix) [1] | **Controls and Systems Options** (Add as Suffix) | **Accessories** (Order Separately)[33] |
|---|---|---|
| **F**=Single Fused (120, 277 or 347V. Must Specify Voltage)<br>**FF**=Double Fused (208, 240 or 480V. Must Specify Voltage)<br>**10K**=10kV Surge Module<br>**20K**=20kV UL 1449 Fused Surge Protective Device<br>**DIM**=External 0-10V Dimming Leads [9, 10]<br>**L90**=Optics Rotated 90° Left<br>**R90**=Optics Rotated 90° Right<br>**HSS**=Factory Installed House Side Shield [23]<br>**GRSBK**=Factory Installed Glare Shield, BK [4, 27]<br>**GRSWH**=Factory Installed Glare Shield, WH [4, 27]<br>**UPL**=Uplight Housing [13]<br>**HA**=50°C High Ambient [12]<br>**LCF**=Light Square Trim Plate Painted to Match Housing [22]<br>**MT**=Factory Installed Mesh Top<br>**CC**=Coastal Construction finish [5]<br>**CE**=CE Marking and Small Terminal Block [24]<br>**AHD145**=After Hours Dim, 5 Hours [16]<br>**AHD245**=After Hours Dim, 6 Hours [16]<br>**AHD255**=After Hours Dim, 7 Hours [16]<br>**AHD355**=After Hours Dim, 8 Hours [16]<br>**DALI**=DALI Driver [11] | **BPC**=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage)<br>**PR**=NEMA 3-PIN Twistlock Photocontrol Receptacle<br>**PR7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [15]<br>**FADC**=Field Adjustable Dimming Controller [35]<br>**SPB1**=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting [19, 31]<br>**SPB2**=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting [19, 31]<br>**SPB4**=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting [19, 31]<br>**MS-LXX**=Motion Sensor for On/Off Operation [17, 18, 19]<br>**MS/DIM-LXX**=Motion Sensor for Dimming Operation [17, 18, 19]<br>**WPS2XX**=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [29, 30, 37]<br>**WPS4XX**=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [29, 30, 37]<br>**WLS2XX**=WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [30, 37]<br>**WLS4XX**=WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [30, 37]<br>**LWR-LW**=Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height [19, 20, 21]<br>**LWR-LN**=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height [19, 20, 21] | **OA/RA1013**=Photocontrol Shorting Cap<br>**OA/RA1016**=NEMA Photocontrol - Multi-Tap 105-285V<br>**OA/RA1201**=NEMA Photocontrol - 347V<br>**OA/RA1027**=NEMA Photocontrol - 480V<br>**MA1252**=10kV Circuit Module Replacement<br>**MA1059XX**=Thru-branch Back Box (Must Specify Color)<br>**LS/HSS**=Field Installed House Side Shield [23, 25]<br>**LS/GRSBK-2PK**=Glare Shield, Black [8, 25, 27]<br>**LS/GRSWH-2PK**=Glare Shield, White [8, 25, 27]<br>**LS/PFS**=Perimeter Shield, Black<br>**FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [17]<br>**WOLC-7P-10A**=WaveLinx Outdoor Control Module (7-pin) [26, 28] |

**NOTES**:

1. DesignLight Consortium® Qualified. Refer to www.designlights.org, Qualified Products List under Family Models for details.
2. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional information
3. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.
4. Not available with HA option.
5. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
6. Require the use of a step down transformer. Not available in combination with sensor options at 1200mA.
7. 480V not to be used with ungrounded or impedance grounded systems.
8. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
9. Cannot be used with other control options.
10. Low voltage control leads extended 18" from fixture.
11. Not available in 1200mA. When used with CBP or HA options, only available with single light square.
12. Not available in 1200mA, UPL or CBP options. Available with single light square.
13. Quick mount arm adapter is factory installed. Pole mounting bracket shipped in box. Suitable for 1.5G. Fits square and round poles up to 6" O.D.
14. Mast arm adapter factory installed (2-3/8" O.D. arm only). Suitable for 3G vibration.
15. Compatible with standard 3-PIN photocontrols, 5-PIN or 7-PIN ANSI controls.
16. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
17. The FSIR-100 configuration tool is required to adjust parameters such as high and low modes, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information.
18. Replace LXX with L08 (<8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting.)
19. Includes integral photosensor.
20. Enlighted wireless sensors are factory installed requiring network components in appropriate quantities.
21. Bronze sensor is shipped with Bronze fixtures. White sensor shipped on all other housing color options.
22. Not available with HSS or GRS options.
23. Not for use with 5NQ, 5MQ, 5WQ or RW optics. The light square trim plate is painted black when the HSS option is selected.
24. CE is not available with the 1200, DALI, LWR, MS, MS/DIM, BPC, PR or PR7 options. Available in 120-277V only.
25. One required for each light square.
26. Requires PR7.
27. Not for use with T4FT, T4W or SL4 optics.
28. Cannot be used in conjunction with additional photocontrol or other controls systems (BPC, PR, PR7, MS, LWR).
29. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed.
30. Replace XX with sensor color (WH, BZ, or BK).
31. Smart device with mobile application required to change system defaults. See controls section for details.
32. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
33. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirementsConsult factory for further information.
34. Not available in 1 square configuration at 800mA or below. Not available with any control option except SPB.
35. Cannot be used with PR7 or other motion response control options.
36. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc.
37. Controls system is not available with photocontrol receptacles (PR , PR7) or other controls systems (FADC, SPBx).

## Product Specifications

### Construction

- Driver enclosure thermally isolated from optics for optimal thermal performance
- Die-cast aluminum heat sinks
- IP66 rated housing
- 1.5G vibration rated

### Optics

- Patented, high-efficiency injection-molded AccuLED Optics technology
- 13 optical distributions
- Dark Sky Approved (3000K CCT and warmer only)

### Electrical

- LED driver assembly mounted for ease of maintenance
- Standard with 0-10V dimming
- Optional 10kV or 20kV surge module
- Suitable for operation in -40C to 40C ambient environments. Optional 50C high ambient (HA) configuration.
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

### Mounting

- Gasketed and zinc plated rigid steel mounting attachment
- "Hook-N-Lock" mechanism for easy installation

### Finish

- Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Heat sink is powder coated black
- RAL and custom color matches available
- Coastal Construction (CC) option available

### Typical Applications

- Outdoor, Parking Lots, Walkways, Roadways, Building Areas

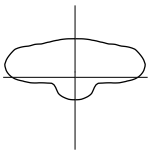
### Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

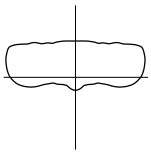
## Optical Distributions

### Asymmetric Area Distributions

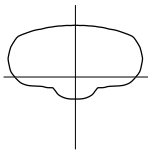
**T2**
(Type II)



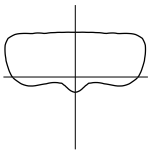
**SL2**
(Type II with Spill Control)



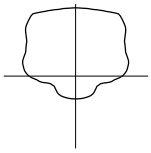
**T3**
(Type III)



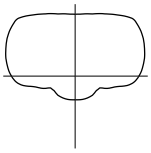
**SL3**
(Type III with Spill Control)



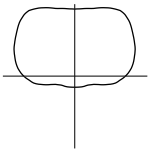
**T4FT**
(Type IV Forward Throw)



**T4W**
(Type IV Wide)

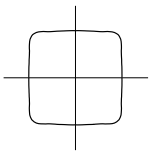


**SL4**
(Type IV with Spill Control)

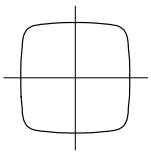


### Symmetric Distributions

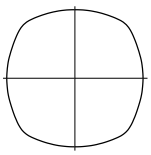
**5NQ**
(Type V Square Narrow)



**5MQ**
(Type V Square Medium)

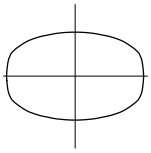


**5WQ**
(Type V Square Wide)

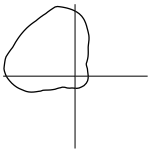


### Specialized Distributions

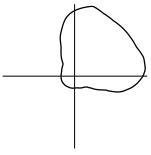
**RW**
(Rectangular Wide Type I)



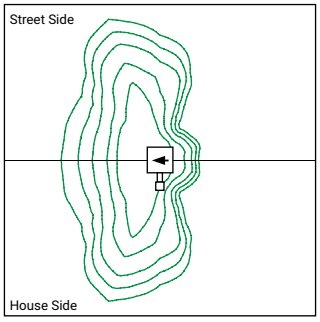
**SLL**
(90° Spill Light Eliminator Left)



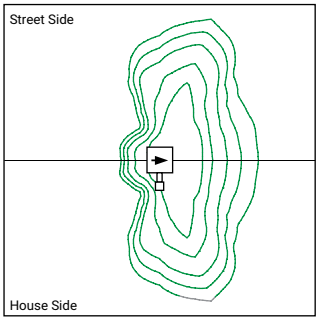
**SLR**
(90° Spill Light Eliminator Right)



## Optic Orientation




**Optics Rotated Left @ 90°** [L90]




**Optics Rotated Right @ 90°** [R90]

## Energy and Performance Data

**Lumen Multiplier**

| Ambient Temperature | Lumen Multiplier |
|---|---|
| 0ºC | 1.02 |
| 10ºC | 1.01 |
| 25ºC | 1.00 |
| 40ºC | 0.99 |
| 50ºC | 0.97 |

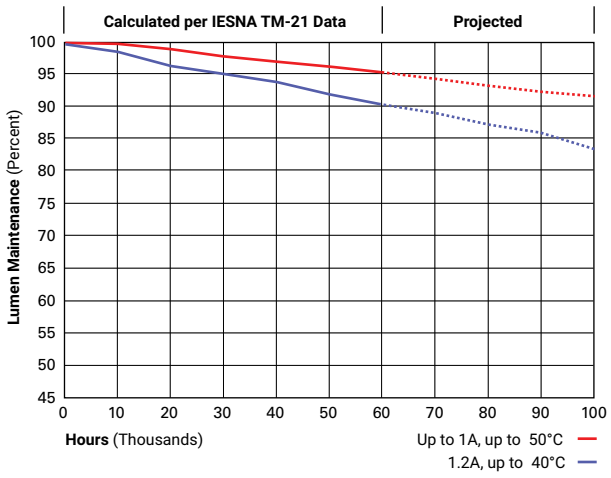
**FADC Settings**

| FADC Position | Lumen Multiplier |
|---|---|
| 1 | 25% |
| 2 | 46% |
| 3 | 55% |
| 4 | 62% |
| 5 | 72% |
| 6 | 77% |
| 7 | 82% |
| 8 | 85% |
| 9 | 90% |
| 10 | 100% |

**Note:** +/-5% typical value

**Lumen Maintenance**

| Drive Current | Ambient Temperature | TM-21 Lumen Maintenance (60,000 Hours) | Projected L70 (Hours) |
|---|---|---|---|
| Up to 1A | Up to 50°C | > 95% | > 416,000 |
| 1.2A | Up to 40°C | > 90% | > 205,000 |



## Energy and Performance Data

View GPC Galleon Pedestrian IES files

**4000K/5000K/6000K CCT, 70 CRI**

| Number of Light Squares | | 1 | | | | 2 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drive Current** | | 615mA | 800mA | 1050mA | 1.2A | 615mA | 800mA | 1050mA | 1.2A |
| **Nominal Power (Watts)** | | 34 | 44 | 59 | 67 | 66 | 86 | 113 | 129 |
| **Input Current @ 120V (A)** | | 0.30 | 0.39 | 0.51 | 0.58 | 0.58 | 0.77 | 1.02 | 1.16 |
| **Input Current @ 208V (A)** | | 0.17 | 0.22 | 0.29 | 0.33 | 0.34 | 0.44 | 0.56 | 0.63 |
| **Input Current @ 240V (A)** | | 0.15 | 0.19 | 0.26 | 0.29 | 0.30 | 0.38 | 0.48 | 0.55 |
| **Input Current @ 277V (A)** | | 0.14 | 0.17 | 0.23 | 0.25 | 0.28 | 0.36 | 0.42 | 0.48 |
| **Input Current @ 347V (A)** | | 0.11 | 0.15 | 0.17 | 0.20 | 0.19 | 0.24 | 0.32 | 0.39 |
| **Input Current @ 480V (A)** | | 0.08 | 0.11 | 0.14 | 0.15 | 0.15 | 0.18 | 0.24 | 0.30 |
| **Optics** | | | | | | | | | |
| **T2** | Lumens | 4,883 | 5,989 | 7,412 | 8,131 | 9,543 | 11,703 | 14,485 | 15,891 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 144 | 136 | 126 | 121 | 145 | 136 | 128 | 123 |
| **T3** | Lumens | 4,978 | 6,105 | 7,556 | 8,288 | 9,729 | 11,929 | 14,764 | 16,196 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 |
| | Lumens per Watt | 146 | 139 | 128 | 124 | 147 | 139 | 131 | 126 |
| **T4FT** | Lumens | 5,008 | 6,140 | 7,599 | 8,337 | 9,783 | 11,998 | 14,850 | 16,290 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 147 | 140 | 129 | 124 | 148 | 140 | 131 | 126 |
| **T4W** | Lumens | 4,942 | 6,060 | 7,502 | 8,229 | 9,658 | 11,843 | 14,658 | 16,080 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G3 |
| | Lumens per Watt | 145 | 138 | 127 | 123 | 146 | 138 | 130 | 125 |
| **SL2** | Lumens | 4,874 | 5,979 | 7,399 | 8,117 | 9,528 | 11,684 | 14,461 | 15,863 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G3 |
| | Lumens per Watt | 143 | 136 | 125 | 121 | 144 | 136 | 128 | 123 |
| **SL3** | Lumens | 4,976 | 6,104 | 7,555 | 8,287 | 9,727 | 11,927 | 14,763 | 16,194 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 146 | 139 | 128 | 124 | 147 | 139 | 131 | 126 |
| **SL4** | Lumens | 4,729 | 5,799 | 7,178 | 7,873 | 9,239 | 11,333 | 14,025 | 15,387 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 | B2-U0-G4 | B2-U0-G4 |
| | Lumens per Watt | 139 | 132 | 122 | 118 | 140 | 132 | 124 | 119 |
| **5NQ** | Lumens | 5,134 | 6,296 | 7,793 | 8,547 | 10,033 | 12,303 | 15,226 | 16,704 |
| | BUG Rating | B2-U0-G1 | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 |
| | Lumens per Watt | 151 | 143 | 132 | 128 | 152 | 143 | 135 | 129 |
| **5MQ** | Lumens | 5,228 | 6,412 | 7,935 | 8,705 | 10,216 | 12,529 | 15,508 | 17,011 |
| | BUG Rating | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | Lumens per Watt | 154 | 146 | 134 | 130 | 155 | 146 | 137 | 132 |
| **5WQ** | Lumens | 5,242 | 6,428 | 7,956 | 8,728 | 10,244 | 12,563 | 15,548 | 17,056 |
| | BUG Rating | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | Lumens per Watt | 154 | 146 | 135 | 130 | 155 | 146 | 138 | 132 |
| **SLL/SLR** | Lumens | 4,373 | 5,365 | 6,640 | 7,283 | 8,547 | 10,481 | 12,973 | 14,231 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 129 | 122 | 113 | 109 | 130 | 122 | 115 | 110 |
| **RW** | Lumens | 5,087 | 6,238 | 7,721 | 8,472 | 9,941 | 12,190 | 15,088 | 16,553 |
| | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | Lumens per Watt | 150 | 142 | 131 | 126 | 151 | 142 | 134 | 128 |

*** Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.**

**3000K CCT, 80 CRI**

| Number of Light Squares | | 1 | | | | 2 | | | |
|---|---|---|---|---|---|---|---|---|---|
| Drive Current | | 615mA | 800mA | 1050mA | 1.2A | 615mA | 800mA | 1050mA | 1.2A |
| Nominal Power (Watts) | | 34 | 44 | 59 | 67 | 66 | 86 | 113 | 129 |
| Input Current @ 120V (A) | | 0.30 | 0.39 | 0.51 | 0.58 | 0.58 | 0.77 | 1.02 | 1.16 |
| Input Current @ 208V (A) | | 0.17 | 0.22 | 0.29 | 0.33 | 0.34 | 0.44 | 0.56 | 0.63 |
| Input Current @ 240V (A) | | 0.15 | 0.19 | 0.26 | 0.29 | 0.30 | 0.38 | 0.48 | 0.55 |
| Input Current @ 277V (A) | | 0.14 | 0.17 | 0.23 | 0.25 | 0.28 | 0.36 | 0.42 | 0.48 |
| Input Current @ 347V (A) | | 0.11 | 0.15 | 0.17 | 0.20 | 0.19 | 0.24 | 0.32 | 0.39 |
| Input Current @ 480V (A) | | 0.08 | 0.11 | 0.14 | 0.15 | 0.15 | 0.18 | 0.24 | 0.30 |
| Optics | | | | | | | | | |
| T2 | Lumens | 3,880 | 4,759 | 5,890 | 6,461 | 7,583 | 9,300 | 11,510 | 12,628 |
| | BUG Rating | B1-U0-G1 | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 |
| | Lumens per Watt | 114 | 108 | 100 | 96 | 115 | 108 | 102 | 98 |
| T3 | Lumens | 3,956 | 4,851 | 6,004 | 6,586 | 7,731 | 9,479 | 11,732 | 12,870 |
| | BUG Rating | B1-U0-G1 | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | Lumens per Watt | 116 | 110 | 102 | 98 | 117 | 110 | 104 | 100 |
| T4FT | Lumens | 3,980 | 4,879 | 6,038 | 6,625 | 7,774 | 9,534 | 11,800 | 12,945 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 117 | 111 | 102 | 99 | 118 | 111 | 104 | 100 |
| T4W | Lumens | 3,927 | 4,816 | 5,961 | 6,539 | 7,675 | 9,411 | 11,648 | 12,778 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 |
| | Lumens per Watt | 116 | 109 | 101 | 98 | 116 | 109 | 103 | 99 |
| SL2 | Lumens | 3,873 | 4,751 | 5,880 | 6,450 | 7,571 | 9,285 | 11,491 | 12,605 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 114 | 108 | 100 | 96 | 115 | 108 | 102 | 98 |
| SL3 | Lumens | 3,954 | 4,851 | 6,004 | 6,585 | 7,729 | 9,478 | 11,731 | 12,868 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 116 | 110 | 102 | 98 | 117 | 110 | 104 | 100 |
| SL4 | Lumens | 3,758 | 4,608 | 5,704 | 6,256 | 7,342 | 9,006 | 11,145 | 12,227 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 |
| | Lumens per Watt | 111 | 105 | 97 | 93 | 111 | 105 | 99 | 95 |
| 5NQ | Lumens | 4,080 | 5,003 | 6,193 | 6,792 | 7,973 | 9,776 | 12,099 | 13,274 |
| | BUG Rating | B2-U0-G0 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 |
| | Lumens per Watt | 120 | 114 | 105 | 101 | 121 | 114 | 107 | 103 |
| 5MQ | Lumens | 4,154 | 5,095 | 6,305 | 6,917 | 8,118 | 9,956 | 12,323 | 13,518 |
| | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | Lumens per Watt | 122 | 116 | 107 | 103 | 123 | 116 | 109 | 105 |
| 5WQ | Lumens | 4,166 | 5,108 | 6,322 | 6,936 | 8,140 | 9,983 | 12,355 | 13,553 |
| | BUG Rating | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | Lumens per Watt | 123 | 116 | 107 | 104 | 123 | 116 | 109 | 105 |
| SLL/SLR | Lumens | 3,475 | 4,263 | 5,276 | 5,787 | 6,792 | 8,329 | 10,309 | 11,309 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 102 | 97 | 89 | 86 | 103 | 97 | 91 | 88 |
| RW | Lumens | 4,042 | 4,957 | 6,135 | 6,732 | 7,900 | 9,687 | 11,990 | 13,154 |
| | BUG Rating | B2-U0-G1 | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 |
| | Lumens per Watt | 119 | 113 | 104 | 100 | 120 | 113 | 106 | 102 |

*** Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.**

## Control Options

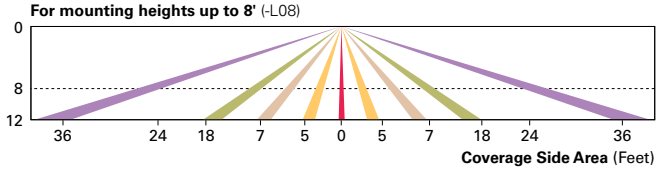
**0-10V** This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

**Photocontrol** (BPC, PR, and PR7) Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

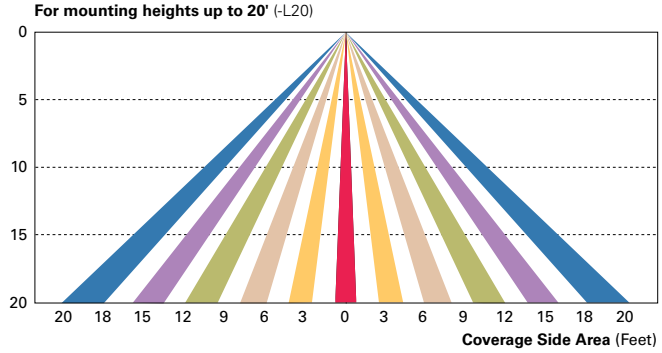
**After Hours Dim** (AHD) This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

**Dimming Occupancy Sensor** (SPB, MS/DIM-LXX and MS-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.

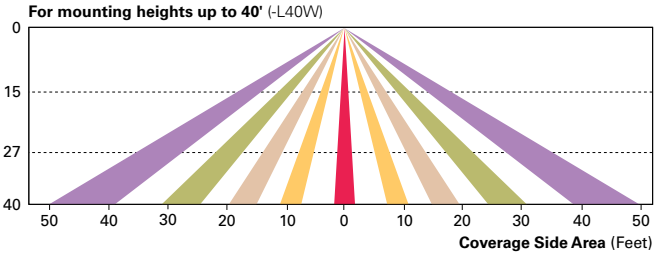
**For mounting heights up to 8'** (-L08)




**For mounting heights up to 20'** (-L20)

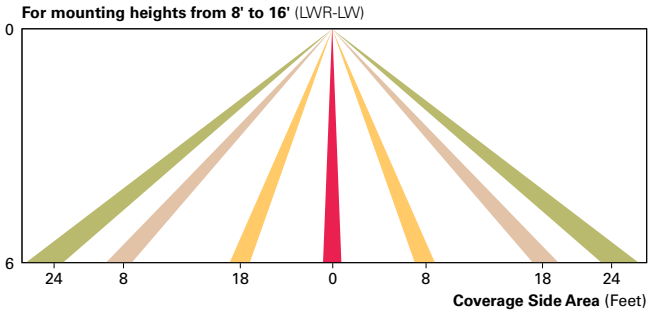



**For mounting heights up to 40'** (-L40W)

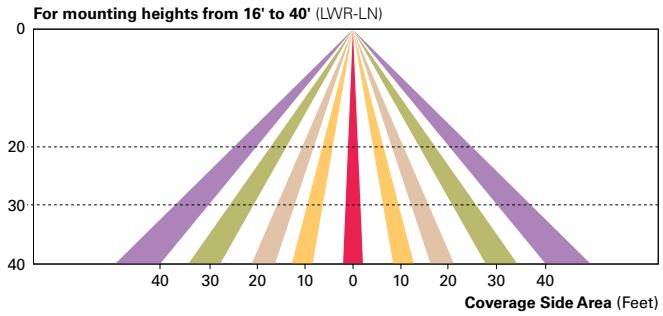



**Enlighted Wireless Control and Monitoring System** (LWR-LW and LWR-LN) The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.

**For mounting heights from 8' to 16'** (LWR-LW)




**For mounting heights from 16' to 40'** (LWR-LN)




**WaveLinx Wireless Outdoor Lighting Control Module** (WOLC-7P-10A) The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.



Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P. 770-486-4800
www.cooperlighting.com

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Specifications and dimensions
subject to change without notice.

| | | | | | |
|---|---|---|---|---|---|
| Project | | Catalog # | | Type | |
| Prepared by | | Notes | | Date | |



# McGraw-Edison

## GWC Galleon Wall

Wall Mount Luminaire

### Product Features

Light ARchitect™ · BAA · FADC

### Product Certifications

DLC LISTED [1] · DLC LISTED PREMIUM [1] · ISTA CERTIFIED · UL CERTIFIED · FC CLASS A · IP66 · ida DARK SKY APPROVED [2] · 5 YEAR LIMITED WARRANTY

### Interactive Menu


- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 3
- Energy and Performance Data page 4
- Control Options page 6


### Quick Facts

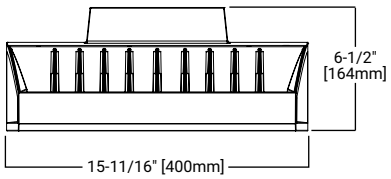
- Choice of thirteen high-efficiency, patented AccuLED Optics
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

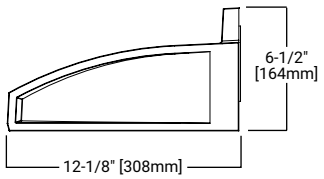
### Connected Systems

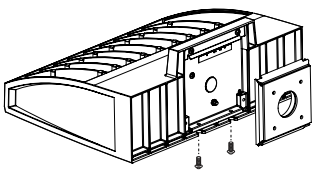
- WaveLinx PRO Wireless
- WaveLinx LITE Wireless
- Enlighted

### Dimensional Details

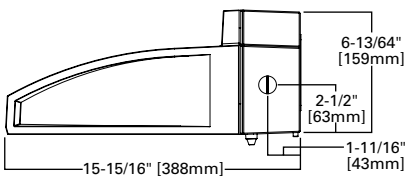
**Net Weight:** 17.0 lbs (7.7 kgs)



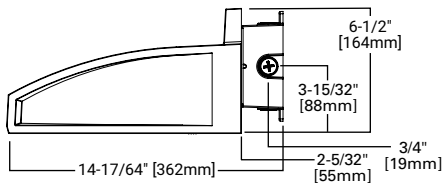



**GWC with CBP option installed**
(Thru-Branch Back Box accessory MA1059XX)




**GWC with accessory BB/GWCXX Back Box installed**




**NOTES:**
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

## Ordering Information

SAMPLE NUMBER: **GWC-SA2C-740-U-T4FT-GM**

| Product Family [1] | Light Engine | | Color Temperature | Voltage | Distribution | Finish |
|---|---|---|---|---|---|---|
| | Configuration | Drive Current | | | | |
| **GWC**=Galleon Wall<br>**BAA-GWC**=Galleon Wall, Buy American Act Compliant [34]<br>**TAA-GWC**=Galleon Wall, Trade Agreements Act Compliant [34] | **SA1**=1 Square<br>**SA2**=2 Squares [2] | **A**=615mA<br>**B**=800mA<br>**C**=1000mA<br>**D**=1200mA [4]<br>**Z**=Configured [40] | **722**=70CRI, 2200K<br>**727**=70CRI, 2700K<br>**730**=70CRI, 3000K<br>**735**=70CRI, 3500K<br>**740**=70CRI, 4000K<br>**750**=70CRI, 5000K<br>**760**=70CRI, 6000K<br>**827**=80CRI, 2700K<br>**830**=80CRI, 3000K<br>**AMB**=Amber, 590nm [3, 4] | **U**=120-277V<br>**1**=120V<br>**2**=208V<br>**3**=240V<br>**4**=277V<br>**8**=480V [6,7]<br>**9**=347V [6]<br>**DV**=277-480V DuraVolt Drivers [7, 8, 36] | **T2**=Type II<br>**T3**=Type III<br>**T4FT**=Type IV Forward Throw<br>**T4W**=Type IV Wide<br>**SL2**=Type II w/Spill Control<br>**SL3**=Type III w/Spill Control<br>**SL4**=Type IV w/Spill Control<br>**SLL**=90° Spill Light Eliminator Left<br>**SLR**=90° Spill Light Eliminator Right<br>**RW**=Rectangular Wide Type I<br>**5NQ**=Type V Square Narrow<br>**5MQ**=Type V Square Medium<br>**5WQ**=Type V Square Wide | **AP**=Grey<br>**BZ**=Bronze<br>**BK**=Black<br>**DP**=Dark Platinum<br>**GM**=Graphite Metallic<br>**WH**=White |

| **Options** (Add as Suffix) | **Controls and Systems Options** (Add as Suffix) | **Accessories** (Order Separately) [35] |
|---|---|---|
| **F**=Single Fused (120, 277 or 347V. Must Specify Voltage)<br>**FF**=Double Fused (208, 240 or 480V. Must Specify Voltage)<br>**10K**=10kV Surge Module<br>**20K**=Series 20kV UL 1449 Surge Protective Device<br>**2L**=Two-Circuit Light Engine [37]<br>**DIM**=External 0-10V Dimming Leads [9, 10]<br>**CBP**=Battery Pack with Back Box, Cold Weather Rated [2, 4, 14, 32]<br>**CBP-CEC**=Battery Pack with Back Box, Cold Weather Rated, CEC compliant [2, 4, 14]<br>**BB**=Shipped with Back Box Accessory [38]<br>**L90**=Optics Rotated 90° Left<br>**R90**=Optics Rotated 90° Right<br>**HSS**=Factory Installed House Side Shield [23]<br>**GRSBK**=Factory Installed Glare Shield, BK [4, 27]<br>**GRSWH**=Factory Installed Glare Shield, WH [4, 27]<br>**UPL**=Uplight Housing [13]<br>**HA**=50°C High Ambient [12]<br>**LCF**=Light Square Trim Plate Painted to Match Housing [22]<br>**MT**=Factory Installed Mesh Top<br>**CC**=Coastal Construction finish [5]<br>**CE**=CE Marking and Small Terminal Block [24]<br>**AHD145**=After Hours Dim, 5 Hours [16]<br>**AHD245**=After Hours Dim, 6 Hours [16]<br>**AHD255**=After Hours Dim, 7 Hours [16]<br>**AHD355**=After Hours Dim, 8 Hours [16]<br>**DALI**=DALI Driver [11] | **BPC**=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage)<br>**PR**=NEMA 3-PIN Twistlock Photocontrol Receptacle<br>**PR7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [15]<br>**FADC**=Field Adjustable Dimming Controller [39]<br>**SPB1**=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting [19, 33]<br>**SPB2**=Dimming Occupancy Sensor with Bluetooth Interface, 8' - 20' Mounting [19, 33]<br>**SPB4**=Dimming Occupancy Sensor with Bluetooth Interface, 21' - 40' Mounting [19, 33]<br>**MS-LXX**=Motion Sensor for On/Off Operation [17, 18, 19]<br>**MS/DIM-LXX**=Motion Sensor for Dimming Operation [17, 18, 19]<br>**WPS2XX**=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [30, 31, 41]<br>**WPS4XX**=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [30, 31, 41]<br>**WLS2XX**=WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [31, 41]<br>**WLS4XX**=WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [31, 41]<br>**LWR-LW**=Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height [19, 20, 21]<br>**LWR-LN**=Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height [19, 20, 21] | **OA/RA1013**=Photocontrol Shorting Cap<br>**OA/RA1016**=NEMA Photocontrol - Multi-Tap 105-285V<br>**OA/RA1201**=NEMA Photocontrol - 347V<br>**OA/RA1027**=NEMA Photocontrol - 480V<br>**MA1252**=10kV Circuit Module Replacement<br>**MA1059XX**=Thru-branch Back Box (Must Specify Color)<br>**BB/GWCXX**=Back Box (Must Specify Color)<br>**LS/HSS**=Field Installed House Side Shield [23, 25]<br>**LS/GRSBK-2PK**=Glare Shield, Black [25, 27]<br>**LS/GRSWH-2PK**=Glare Shield, White [25, 27]<br>**LS/PFS**=Perimeter Shield, Black [28]<br>**FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [17]<br>**WOLC-7P-10A**=WaveLinx Outdoor Control Module (7-pin) [26, 29] |

**NOTES**:

1. DesignLight Consortium® Qualified. Refer to www.designlights.org, Qualified Products List under Family Models for details.
2. Two light squares with CBP options limited to 25°C. CBP not available in combination with sensor options at 1200mA.
3. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only.Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.
4. Not available with HA option.
5. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
6. Require the use of a step down transformer. Not available in combination with sensor options at 1200mA.
7. 480V not to be used with ungrounded or impedance grounded systems.
8. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
9. Cannot be used with other control options.
10. Low voltage control leads extended 18" from fixture.
11. Not available in 1200mA. When used with CBP or HA options, only available with single light square.
12. Not available in 1200mA, UPL or CBP options. Available with single light square.
13. Not available with SL2, SL3, SL4, HA, CBP, PR or PR7 options.
14. Operates a single light square only. Operates at -20°C to +40°C. Backbox is non-IP rated.
15. Compatible with standard 3-PIN photocontrols, 5-PIN or 7-PIN ANSI controls.
16. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
17. The FSIR-100 configuration tool is required to adjust parameters such as high and low modes, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information.
18. Replace LXX with L08 (<8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting.)
19. Includes integral photosensor.
20. Enlighted wireless sensors are factory installed requiring network components in appropriate quantities.
21. White sensor shipped on all housing color options.
22. Not available with HSS or GRS options.
23. Not for use with 5NQ, 5MQ, 5WQ or RW optics. The light square trim plate is painted black when the HSS option is selected.
24. CE is not available with the 1200, DALI, LWR, MS, MS/DIM, BPC, PR or PR7 options. Available in 120-277V only.
25. One required for each light square.
26. Requires PR7.
27. Not for use with T4FT, T4W or SL4 optics.
28. Set of 4 pcs. Once set required per Light Square.
29. Cannot be used in conjunction with additional photocontrol or other controls systems (BPC, PR, PR7, MS, LWR).
30. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed.
31. Replace XX with sensor color (WH, BZ, or BK).
32. Specify 120V or 277V.
33. Smart device with mobile application required to change system defaults. See controls section for details.
34. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
35. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
36. Not available in 1 square configuration at 800mA or below. Not available with any control option except SPB.
37. 2L not available with FF, AHD or DALI options. Controls and/or battery packs operate only one of the two circuits when 2L is specified. 2L with controls options not available with 347V or 480V.
38. Not available with CBP or CBP-CEC options.
39. Cannot be used with PR7 or other motion response control options.
40. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc.
41. Controls system is not available with photocontrol receptacles (PR , PR7) or other controls systems (FADC, SPBx).

## Product Specifications

### Construction

- Driver enclosure thermally isolated from optics for optimal thermal performance
- Die-cast aluminum heat sinks
- IP66 rated housing
- 1.5G vibration rated

### Optics

- Patented, high-efficiency injection-molded AccuLED Optics technology
- 13 optical distributions
- IDA Certified (3000K CCT and warmer only)

### Electrical

- LED driver assembly mounted for ease of maintenance
- Standard with 0-10V dimming
- Optional 10kV or 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments; Optional 50°C high ambient (HA) configuration
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

### Mounting

- Gasketed and zinc plated rigid steel mounting attachment
- "Hook-N-Lock" mechanism for easy installation

### Finish

- Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Heat sink is powder coated black
- RAL and custom color matches available
- Coastal Construction (CC) option available

### Typical Applications

- Exterior Wall, Walkway

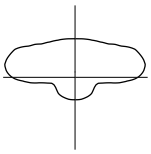
### Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

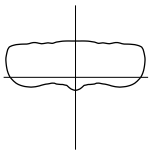
## Optical Distributions

### Asymmetric Area Distributions

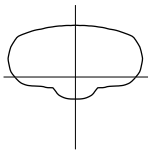
**T2** (Type II)



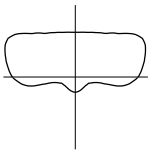
**SL2** (Type II with Spill Control)



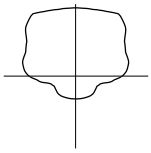
**T3** (Type III)



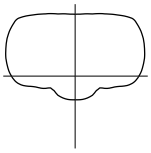
**SL3** (Type III with Spill Control)



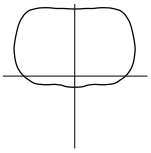
**T4FT** (Type IV Forward Throw)



**T4W** (Type IV Wide)

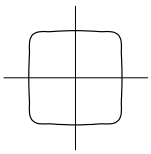


**SL4** (Type IV with Spill Control)

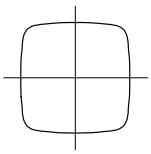


### Symmetric Distributions

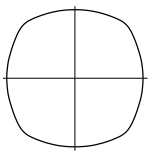
**5NQ** (Type V Square Narrow)



**5MQ** (Type V Square Medium)

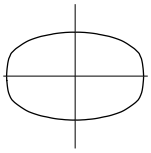


**5WQ** (Type V Square Wide)

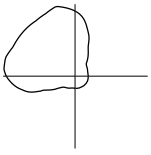


### Specialized Distributions

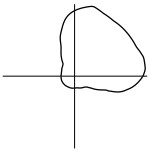
**RW** (Rectangular Wide Type I)



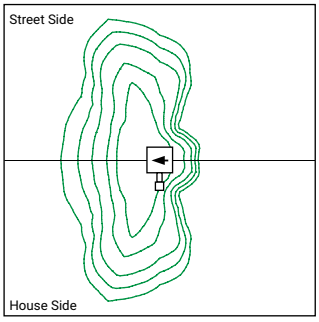
**SLL** (90° Spill Light Eliminator Left)



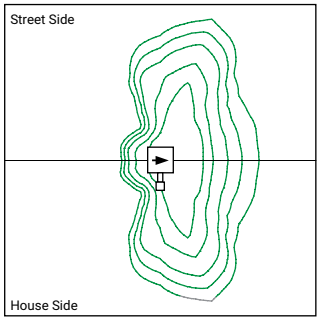
**SLR** (90° Spill Light Eliminator Right)



## Optic Orientation




**Optics Rotated Left @ 90°** [L90]




**Optics Rotated Right @ 90°** [R90]

## Energy and Performance Data

### Lumen Multiplier

| Ambient Temperature | Lumen Multiplier |
|---|---|
| 0ºC | 1.02 |
| 10ºC | 1.01 |
| 25ºC | 1.00 |
| 40ºC | 0.99 |
| 50ºC | 0.97 |

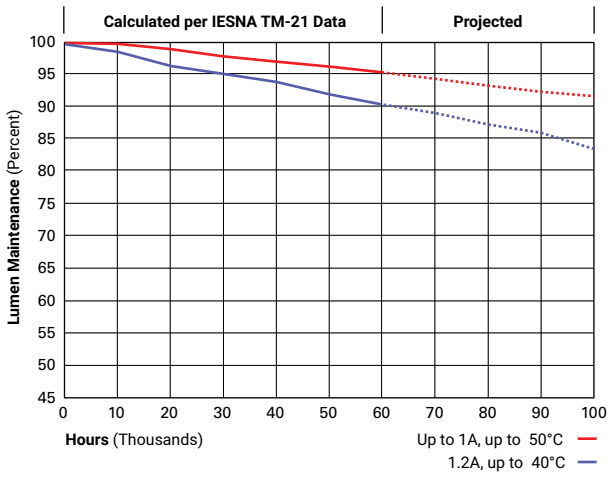
### FADC Settings

| FADC Position | Lumen Multiplier |
|---|---|
| 1 | 25% |
| 2 | 46% |
| 3 | 55% |
| 4 | 62% |
| 5 | 72% |
| 6 | 77% |
| 7 | 82% |
| 8 | 85% |
| 9 | 90% |
| 10 | 100% |

**Note:** +/-5% typical value

### Lumen Maintenance

| Drive Current | Ambient Temperature | TM-21 Lumen Maintenance (60,000 Hours) | Projected L70 (Hours) |
|---|---|---|---|
| Up to 1A | Up to 50°C | > 95% | > 416,000 |
| 1.2A | Up to 40°C | > 90% | > 205,000 |



## Energy and Performance Data

View GWC Galleon Wall IES files

**4000K/5000K/6000K CCT, 70 CRI**

| Number of Light Squares | | 1 | | | | 2 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drive Current** | | 615mA | 800mA | 1050mA | 1.2A | 615mA | 800mA | 1050mA | 1.2A |
| **Nominal Power (Watts)** | | 34 | 44 | 59 | 67 | 66 | 86 | 113 | 129 |
| **Input Current @ 120V (A)** | | 0.30 | 0.39 | 0.51 | 0.58 | 0.58 | 0.77 | 1.02 | 1.16 |
| **Input Current @ 208V (A)** | | 0.17 | 0.22 | 0.29 | 0.33 | 0.34 | 0.44 | 0.56 | 0.63 |
| **Input Current @ 240V (A)** | | 0.15 | 0.19 | 0.26 | 0.29 | 0.30 | 0.38 | 0.48 | 0.55 |
| **Input Current @ 277V (A)** | | 0.14 | 0.17 | 0.23 | 0.25 | 0.28 | 0.36 | 0.42 | 0.48 |
| **Input Current @ 347V (A)** | | 0.11 | 0.15 | 0.17 | 0.20 | 0.19 | 0.24 | 0.32 | 0.39 |
| **Input Current @ 480V (A)** | | 0.08 | 0.11 | 0.14 | 0.15 | 0.15 | 0.18 | 0.24 | 0.30 |
| **Optics** | | | | | | | | | |
| **T2** | Lumens | 4,883 | 5,989 | 7,412 | 8,131 | 9,543 | 11,703 | 14,485 | 15,891 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 144 | 136 | 126 | 121 | 145 | 136 | 128 | 123 |
| **T3** | Lumens | 4,978 | 6,105 | 7,556 | 8,288 | 9,729 | 11,929 | 14,764 | 16,196 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 |
| | Lumens per Watt | 146 | 139 | 128 | 124 | 147 | 139 | 131 | 126 |
| **T4FT** | Lumens | 5,008 | 6,140 | 7,599 | 8,337 | 9,783 | 11,998 | 14,850 | 16,290 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 147 | 140 | 129 | 124 | 148 | 140 | 131 | 126 |
| **T4W** | Lumens | 4,942 | 6,060 | 7,502 | 8,229 | 9,658 | 11,843 | 14,658 | 16,080 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G3 |
| | Lumens per Watt | 145 | 138 | 127 | 123 | 146 | 138 | 130 | 125 |
| **SL2** | Lumens | 4,874 | 5,979 | 7,399 | 8,117 | 9,528 | 11,684 | 14,461 | 15,863 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G3 |
| | Lumens per Watt | 143 | 136 | 125 | 121 | 144 | 136 | 128 | 123 |
| **SL3** | Lumens | 4,976 | 6,104 | 7,555 | 8,287 | 9,727 | 11,927 | 14,763 | 16,194 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 146 | 139 | 128 | 124 | 147 | 139 | 131 | 126 |
| **SL4** | Lumens | 4,729 | 5,799 | 7,178 | 7,873 | 9,239 | 11,333 | 14,025 | 15,387 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 | B2-U0-G4 | B2-U0-G4 |
| | Lumens per Watt | 139 | 132 | 122 | 118 | 140 | 132 | 124 | 119 |
| **5NQ** | Lumens | 5,134 | 6,296 | 7,793 | 8,547 | 10,033 | 12,303 | 15,226 | 16,704 |
| | BUG Rating | B2-U0-G1 | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 |
| | Lumens per Watt | 151 | 143 | 132 | 128 | 152 | 143 | 135 | 129 |
| **5MQ** | Lumens | 5,228 | 6,412 | 7,935 | 8,705 | 10,216 | 12,529 | 15,508 | 17,011 |
| | BUG Rating | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | Lumens per Watt | 154 | 146 | 134 | 130 | 155 | 146 | 137 | 132 |
| **5WQ** | Lumens | 5,242 | 6,428 | 7,956 | 8,728 | 10,244 | 12,563 | 15,548 | 17,056 |
| | BUG Rating | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | Lumens per Watt | 154 | 146 | 135 | 130 | 155 | 146 | 138 | 132 |
| **SLL/SLR** | Lumens | 4,373 | 5,365 | 6,640 | 7,283 | 8,547 | 10,481 | 12,973 | 14,231 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | Lumens per Watt | 129 | 122 | 113 | 109 | 130 | 122 | 115 | 110 |
| **RW** | Lumens | 5,087 | 6,238 | 7,721 | 8,472 | 9,941 | 12,190 | 15,088 | 16,553 |
| | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | Lumens per Watt | 150 | 142 | 131 | 126 | 151 | 142 | 134 | 128 |

*** Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.**

**3000K CCT, 80 CRI**

| Number of Light Squares | | 1 | | | | 2 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Drive Current** | | 615mA | 800mA | 1050mA | 1.2A | 615mA | 800mA | 1050mA | 1.2A |
| **Nominal Power (Watts)** | | 34 | 44 | 59 | 67 | 66 | 86 | 113 | 129 |
| **Input Current @ 120V (A)** | | 0.30 | 0.39 | 0.51 | 0.58 | 0.58 | 0.77 | 1.02 | 1.16 |
| **Input Current @ 208V (A)** | | 0.17 | 0.22 | 0.29 | 0.33 | 0.34 | 0.44 | 0.56 | 0.63 |
| **Input Current @ 240V (A)** | | 0.15 | 0.19 | 0.26 | 0.29 | 0.30 | 0.38 | 0.48 | 0.55 |
| **Input Current @ 277V (A)** | | 0.14 | 0.17 | 0.23 | 0.25 | 0.28 | 0.36 | 0.42 | 0.48 |
| **Input Current @ 347V (A)** | | 0.11 | 0.15 | 0.17 | 0.20 | 0.19 | 0.24 | 0.32 | 0.39 |
| **Input Current @ 480V (A)** | | 0.08 | 0.11 | 0.14 | 0.15 | 0.15 | 0.18 | 0.24 | 0.30 |
| **Optics** | | | | | | | | | |
| **T2** | **Lumens** | 3,880 | 4,759 | 5,890 | 6,461 | 7,583 | 9,300 | 11,510 | 12,628 |
| | **BUG Rating** | B1-U0-G1 | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 |
| | **Lumens per Watt** | 114 | 108 | 100 | 96 | 115 | 108 | 102 | 98 |
| **T3** | **Lumens** | 3,956 | 4,851 | 6,004 | 6,586 | 7,731 | 9,479 | 11,732 | 12,870 |
| | **BUG Rating** | B1-U0-G1 | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| | **Lumens per Watt** | 116 | 110 | 102 | 98 | 117 | 110 | 104 | 100 |
| **T4FT** | **Lumens** | 3,980 | 4,879 | 6,038 | 6,625 | 7,774 | 9,534 | 11,800 | 12,945 |
| | **BUG Rating** | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | **Lumens per Watt** | 117 | 111 | 102 | 99 | 118 | 111 | 104 | 100 |
| **T4W** | **Lumens** | 3,927 | 4,816 | 5,961 | 6,539 | 7,675 | 9,411 | 11,648 | 12,778 |
| | **BUG Rating** | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 |
| | **Lumens per Watt** | 116 | 109 | 101 | 98 | 116 | 109 | 103 | 99 |
| **SL2** | **Lumens** | 3,873 | 4,751 | 5,880 | 6,450 | 7,571 | 9,285 | 11,491 | 12,605 |
| | **BUG Rating** | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | **Lumens per Watt** | 114 | 108 | 100 | 96 | 115 | 108 | 102 | 98 |
| **SL3** | **Lumens** | 3,954 | 4,851 | 6,004 | 6,585 | 7,729 | 9,478 | 11,731 | 12,868 |
| | **BUG Rating** | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | **Lumens per Watt** | 116 | 110 | 102 | 98 | 117 | 110 | 104 | 100 |
| **SL4** | **Lumens** | 3,758 | 4,608 | 5,704 | 6,256 | 7,342 | 9,006 | 11,145 | 12,227 |
| | **BUG Rating** | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 | B1-U0-G3 |
| | **Lumens per Watt** | 111 | 105 | 97 | 93 | 111 | 105 | 99 | 95 |
| **5NQ** | **Lumens** | 4,080 | 5,003 | 6,193 | 6,792 | 7,973 | 9,776 | 12,099 | 13,274 |
| | **BUG Rating** | B2-U0-G0 | B2-U0-G1 | B2-U0-G1 | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 |
| | **Lumens per Watt** | 120 | 114 | 105 | 101 | 121 | 114 | 107 | 103 |
| **5MQ** | **Lumens** | 4,154 | 5,095 | 6,305 | 6,917 | 8,118 | 9,956 | 12,323 | 13,518 |
| | **BUG Rating** | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | **Lumens per Watt** | 122 | 116 | 107 | 103 | 123 | 116 | 109 | 105 |
| **5WQ** | **Lumens** | 4,166 | 5,108 | 6,322 | 6,936 | 8,140 | 9,983 | 12,355 | 13,553 |
| | **BUG Rating** | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| | **Lumens per Watt** | 123 | 116 | 107 | 104 | 123 | 116 | 109 | 105 |
| **SLL/SLR** | **Lumens** | 3,475 | 4,263 | 5,276 | 5,787 | 6,792 | 8,329 | 10,309 | 11,309 |
| | **BUG Rating** | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| | **Lumens per Watt** | 102 | 97 | 89 | 86 | 103 | 97 | 91 | 88 |
| **RW** | **Lumens** | 4,042 | 4,957 | 6,135 | 6,732 | 7,900 | 9,687 | 11,990 | 13,154 |
| | **BUG Rating** | B2-U0-G1 | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 |
| | **Lumens per Watt** | 119 | 113 | 104 | 100 | 120 | 113 | 106 | 102 |

*** Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.**

## Control Options

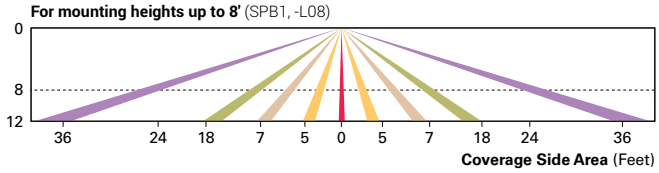
**0-10V** This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

**Photocontrol** (BPC, PR, and PR7) Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

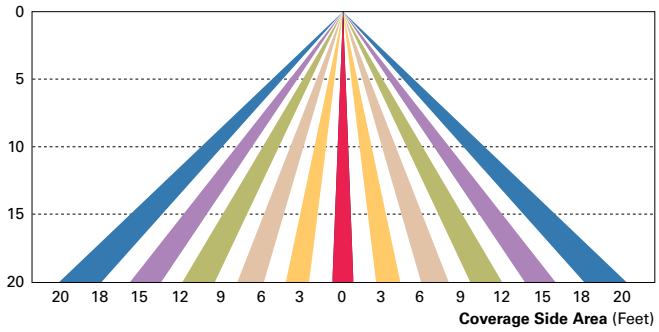
**After Hours Dim** (AHD) This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

**Dimming Occupancy Sensor** (SPB, MS/DIM-LXX and MS-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.

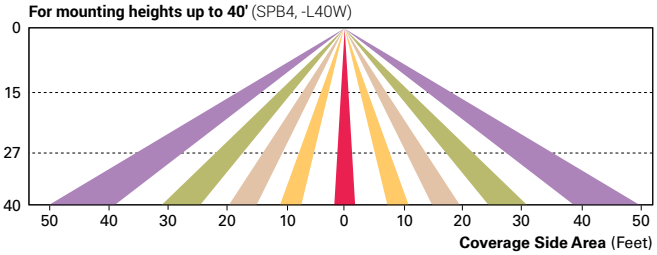
**For mounting heights up to 8'** (SPB1, -L08)




**For mounting heights up to 20'** (SPB2, -L20)

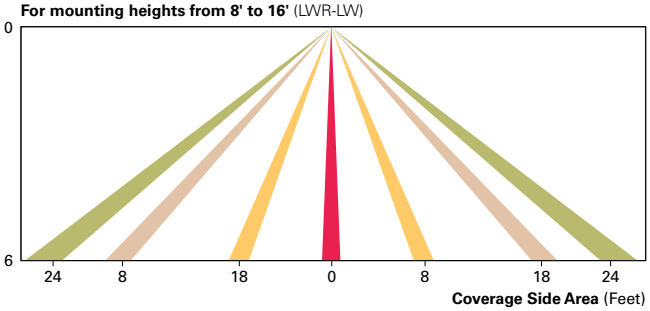



**For mounting heights up to 40'** (SPB4, -L40W)

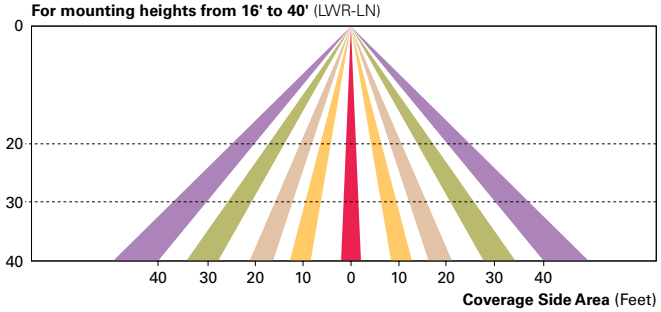



**Enlighted Wireless Control and Monitoring System** (LWR-LW and LWR-LN) The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.

**For mounting heights from 8' to 16'** (LWR-LW)




**For mounting heights from 16' to 40'** (LWR-LN)




**WaveLinx Wireless Outdoor Lighting Control Module** (WOLC-7P-10A) The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.



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Specifications and dimensions
subject to change without notice.

studio ARCHITECTURE
STUDIO ARCHITECTURE, DPC
297 KNOLLWOOD RD. - SUITE 209
WHITE PLAINS, NEW YORK 10607
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914.266.8930

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## DRAWING RELEASE:

- 2024-10-29 ISSUED FOR PLANNING BOARD SUBMISSION
- 2024-11-12 ISSUED FOR PLANNING BOARD SUBMISSION
- 2024-11-26 ISSUED FOR PLANNING BOARD SUBMISSION
- 2024-12-10 ISSUED FOR PLANNING BOARD SUBMISSION
- 2024-12-30 ISSUED FOR PLANNING BOARD SUBMISSION
- 2025-01-02 ISSUED FOR PLANNING BOARD SUBMISSION




# FLOOR PLAN

SCALE: 3/16" = 1'-0"

# HEALEY RENOVATION

420 FISHKILL AVE
BEACON, NY, 12508

| | |
|---|---|
| DATE: | 01/02/2025 |
| JOB NUMBER: | 24042.01 |
| SCALE: | AS NOTED |
| DRAWN BY: | YH |

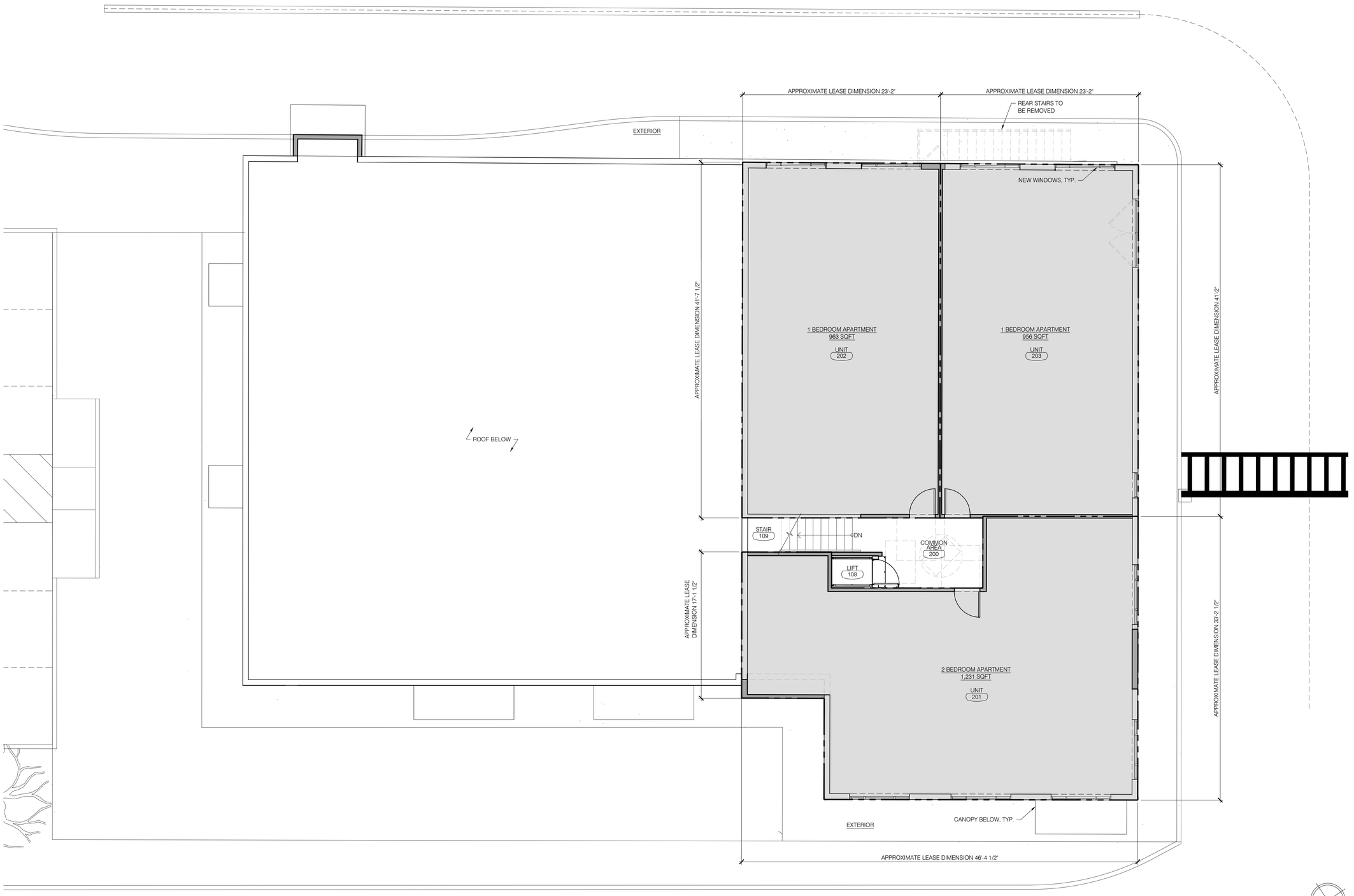
FLOOR PLAN

LAYOUT 5.1

A110

SCHEMATIC DESIGN

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# HEALEY RENOVATION

420 FISHKILL AVE
BEACON, NY, 12508

| | |
|---|---|
| DATE: | 01/02/2025 |
| JOB NUMBER: | 24042.01 |
| SCALE: | AS NOTED |
| DRAWN BY: | YH |

## SECOND FLOOR PLAN

LAYOUT 5.1

# A120

SCHEMATIC DESIGN




PROPOSED RENDERING

SCALE: NTS




EXISTING CONDITIONS

SCALE: NTS

studio
ARCHITECTURE
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WHITE PLAINS, NEW YORK 10607
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914.244.8930

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| 2025-01-02 ISSUED FOR PLANNING BOARD SUBMISSION |

# HEALEY RENOVATION

420 FISHKILL AVE
BEACON, NY, 12508

| | |
|---|---|
| DATE: | 01/02/2025 |
| JOB NUMBER: | 24042.01 |
| SCALE: | AS NOTED |
| DRAWN BY: | YH |

RENDERING

LAYOUT 5.1

R001

SCHEMATIC DESIGN




PROPOSED RENDERING

SCALE: NTS




EXISTING CONDITIONS

SCALE: NTS

studio
ARCHITECTURE
STUDIO ARCHITECTURE, DPC
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INFO@STUDIO-ARCH.NET
914.266.8930

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- 2025-01-02 ISSUED FOR PLANNING BOARD SUBMISSION

# HEALEY RENOVATION

420 FISHKILL AVE
BEACON, NY, 12508

| | |
|---|---|
| DATE: | 01/02/2025 |
| JOB NUMBER: | 24042.01 |
| SCALE: | AS NOTED |
| DRAWN BY: | YH |

RENDERING

LAYOUT 5.1

R002

SCHEMATIC DESIGN




PROPOSED RENDERING

SCALE: NTS



EXISTING CONDITIONS

SCALE: NTS

studio
ARCHITECTURE

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914.266.8930

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# HEALEY RENOVATION

420 FISHKILL AVE
BEACON, NY, 12508

| | |
|---|---|
| DATE: | 01/02/2025 |
| JOB NUMBER: | 24042.01 |
| SCALE: | AS NOTED |
| DRAWN BY: | YH |

RENDERING

LAYOUT 5.1

R003

SCHEMATIC DESIGN

# 420 FISHKILL AVE
## SITE REDEVELOPMENT

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

PARCEL INFORMATION:
TAX ID: 6055-80-443078 (±0.304 AC), 450087 (±0.396 AC), & 455098 (±0.395 AC)
TOTAL LOT AREA: ±1.095 ACRES
ZONING DISTRICT: GB (GENERAL BUSINESS)




SITE LOCATION MAP SCALE: 1" = 400'

ADJOINING OWNERS WITHIN 200':

| PARCEL: OWNER & ADDRESS |
|---|
| 1. AUDREY HENDERSON LT, 22 MEAD AVE, BEACON NY 12508 |
| 2. AARON YERKS, 26 MEAD AVE, BEACON NY 12508 |
| 3. BRENT STAPLETON, 30 MEAD AVE, BEACON NY 12508 |
| 4. PETER NETTLETON, 34 MEAD AVE, BEACON NY 12508 |
| 5. JOSEPH POWERS, 40 MEAD AVE, BEACON NY 12508 |
| 6. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924 |
| 7. JAMVIR BEACON INC, 425 FISHKILL AVE, BEACON NY 12508 |
| 8. BRYAN SACHS II, 8 TOWNSEND STREET, BEACON NY 12508 |
| 9. STUART WETHERBEE, 66 MEAD AVE, BEACON NY 12508 |
| 10. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924 |
| 11. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924 |
| 12. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924 |
| 13. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924 |
| 14. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924 |
| 15. MARENE MANAGEMENT GROUP INC, PO BOX 462, HOPEWELL JUNCTION NY 12533 |
| 16. MARENE MANAGEMENT GROUP INC, PO BOX 462, HOPEWELL JUNCTION NY 12533 |
| 17. DENNIS MORONEY, 10 MACKIN AVE, BEACON NY 12508 |
| 18. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924 |
| 19. DKH REALTY LLC, PO BOX 859, GOSHEN NY 10924 |
| 20. BEACON COMMERCIAL REALTY PROP, 25 DIANA RIDGE ROAD, HIGHLAND NY 12528 |
| 21. FPGU INC, 6 SCHNABL CT, WAPPINGERS FALLS NY 12590 |
| 22. TGS ASSOCIATES INC, 7509 NORTH BROADWAY, RED HOOK NY 12571 |
| 23. METROPOLITAN TRANSPORTATION, 2 BROADWAY, NEW YORK NY 10004 |
| 24. LANDGROVE REALTY INC, 29 LYDIA DRIVE, BEACON NY 12508 |

PROPERTY OWNER:
DKH REALTY, LLC
PO BOX 859
GOSHEN, NY 10924
PH: 845-291-1998

APPLICANT:
DKH REALTY, LLC
PO BOX 859
GOSHEN, NY 10924
PH: 845-291-1998

DRAWING INDEX:
SHEET 1: COVER SHEET (CV-1)
SHEET 2: EXISTING CONDITIONS & REMOVALS PLAN (XC-1)
SHEET 3: SITE PLAN (SP-1)
SHEET 4: GRADING & UTILITY PLAN (GU-1)
SHEET 5: EROSION & SEDIMENT CONTROL PLAN (EC-1)
SHEET 6: LIGHTING PLAN (LT-1)
SHEET 7: CONSTRUCTION DETAILS (CD-1)
SHEET 8: CONSTRUCTION DETAILS (CD-2)

PROJECT ENGINEER:
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN STREET
BEACON, NEW YORK 12508
PH: 845-440-6926

PROJECT SURVEYOR:
CV ASSOCIATES NY, PE, LS, PC
148 ROUTE 17M SUITE 2
HARRIMAN, NY 10926
PH: 845-774-1075

PROJECT ARCHITECT:
STUDIO ARCHITECTURE, DPC
297 KNOLLWOOD ROAD SUITE 209
WHITE PLAINS, NY 10607
PH: 914-266-8903

APPLICANT'S CONSENT:
THE UNDERSIGNED APPLICANT OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY,LLC DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 11/26/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |
| 2 | 12/31/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York. Call 811 before you dig

STATE OF NEW YORK DANIEL G. KOERTE 082716 LICENSED PROFESSIONAL ENGINEER
SEAL

HUDSON LAND DESIGN
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

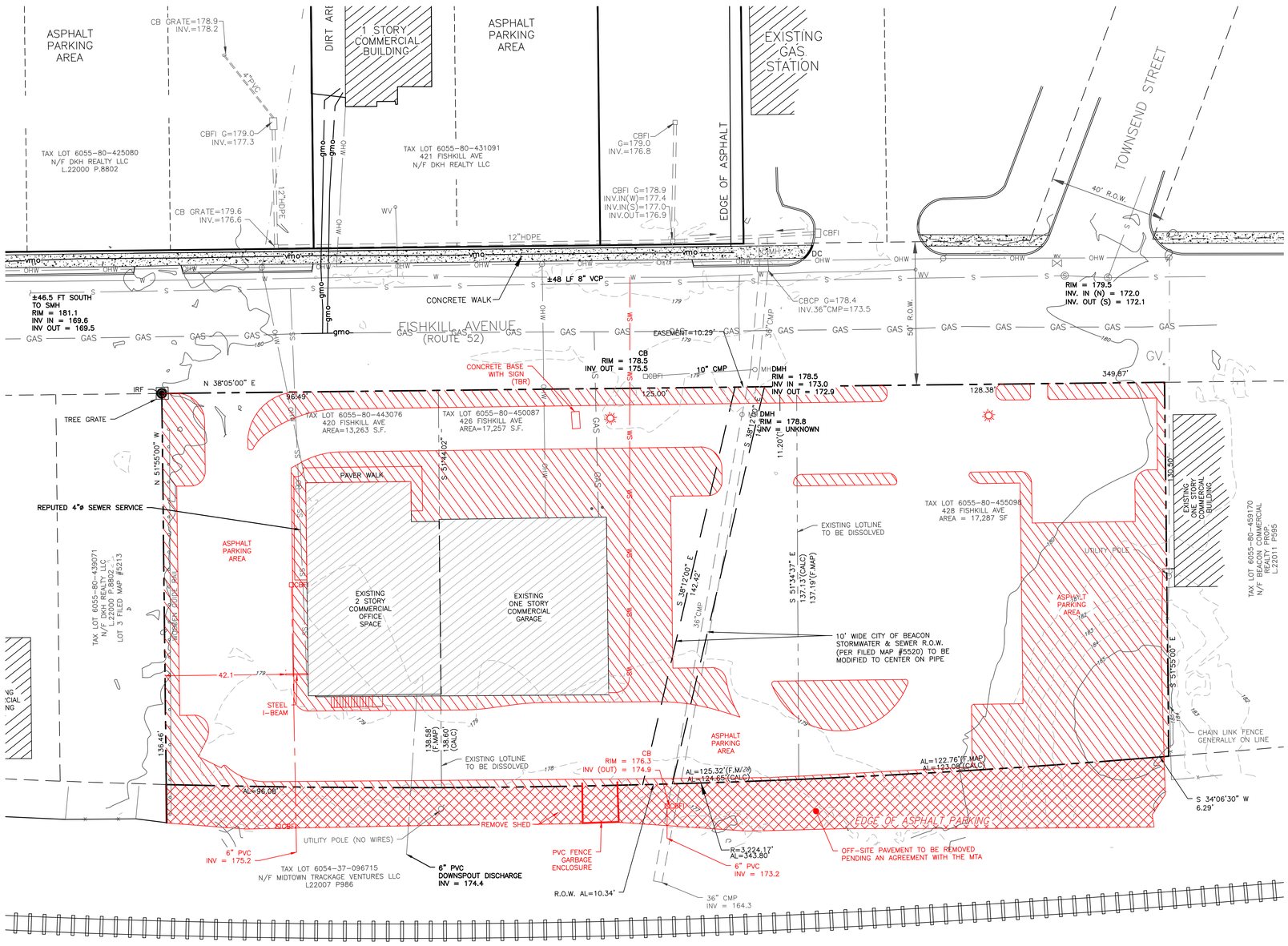
COVER SHEET

420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455098

JOB #: 2024:013
DATE: 10/29/24
SCALE: AS SHOWN
TITLE: CV-1
SHEET: 1 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW




## LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- SS EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- EXISTING ROOF LEADER
- EXISTING CATCH BASIN
- TO BE REMOVED

## SCHEDULE OF REGULATIONS (GB ZONING DISTRICT):

| PARAMETER | REQUIREMENT |
|---|---|
| LOT AREA: | N/A |
| LOT AREA PER UNIT: | 1,500 SQFT MINIMUM |
| LOT WIDTH: | N/A |
| LOT DEPTH: | 100 FEET MINIMUM |
| YARD SETBACKS (RESIDENTIAL USE): | |
| FRONT YARD: | 15 FEET MINIMUM |
| SIDE YARD: | 20 FEET MINIMUM |
| REAR YARD: | 25 FEET MINIMUM |
| MAX. BUILDING HEIGHT: | 35 FT MAX. |
| MAX. BUILDING COVERAGE: | N/A |
| MAX. UNITS/BUILDING: | N/A |

## SURVEY REFERENCE:

1. REFERENCE IS HEREBY MADE TO SURVEY ENTITLED "LANDS OF DKH REALTY LLC" DATED APRIL 3, 2024 AND PREPARED BY CV ASSOCIATES NY, P.E. L.S., P.C..
2. EXISTING TOPOGRAPHY TAKEN FROM RECENT AERIAL PHOTOGRAPHY FLOWN IN OCTOBER 2024.

## SURVEY NOTES:

1. EXISTING BUILDINGS SHOWN ON SUBJECT PARCELS ARE IN GOOD EXTERIOR CONDITION.
2. ASPHALT PARKING AREA ON 415, 420, 426 & 428 FISHKILL AVENUE IS SUBSTANTIALLY OVER THE PROPERTY LINE.
3. OVERHEAD WIRES ARE CONNECTED TO THE BUILDINGS ON 420 AND 421 FISHKILL AVENUE.
4. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WERE OBSERVED DURING THE PROCESS OF CONDUCTING THE FIELD WORK.
5. NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIR WAS OBSERVED DURING THE PROCESS OF CONDUCTING THE FIELD WORK.
6. EXISTING 36" CORRUGATED METAL DRAINAGE PIPE APPEARS TO BE PARTIALLY OUTSIDE OF THE 10' WIDE RIGHT-OF-WAY.
7. ALL STREETS SHOWN HEREON ARE PUBLIC STREETS.
8. THESE PARCELS ARE IN ZONE X (AREA OF MINIMAL FLOOD HAZARD) AS SHOWN ON FIRM FLOOD INSURANCE RATE MAP "CITY OF BEACON – 36027c0464E, EFFECTIVE DATE 5/2/2012.
9. NO WETLANDS EXISTING ON ANY OF THE PARCELS BASED ON AVAILABLE ONLINE DATA AND VISUAL INSPECTION.

## LOT CONSOLIDATION & EASEMENT NOTES:

1. THE INTENT OF THIS PLAN IS TO CONSOLIDATE THE THREE EXISTING TAX PARCELS INTO A SINGLE TAX PARCEL BY REMOVING ALL INTERIOR LOT LINES, CONCURRENT WITH A SITE PLAN APPLICATION BEFORE THE CITY OF BEACON PLANNING BOARD.
2. THE EXISTING DRAINAGE EASEMENT IS TO BE MODIFIED TO FULLY CONTAIN THE EXISTING STORM INFRASTRUCTURE.

## DEMOLITION NOTES:

1. PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS.
2. CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
3. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
4. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
5. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
6. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
7. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
8. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
9. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
10. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
11. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS.
12. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
13. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
14. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
15. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATION.
16. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
17. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
18. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS ICE, FLOODING, AND POLLUTION.
19. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
20. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITIONS.
21. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.

## APPLICANT'S CONSENT:

THE UNDERSIGNED APPLICANT OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY, LLC DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

DRAWN BY: CMB | CHECKED BY: DGK

REVISIONS:

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 11/26/24 | PER PLANNING BOARD COMMENTS | CMB |
| 2 | 12/31/24 | PER PLANNING BOARD COMMENTS | CMB |

REVISIONS:

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|

GRAPHIC SCALE

20 0 10 20 40 80

( IN FEET )
1 inch = 20 ft.

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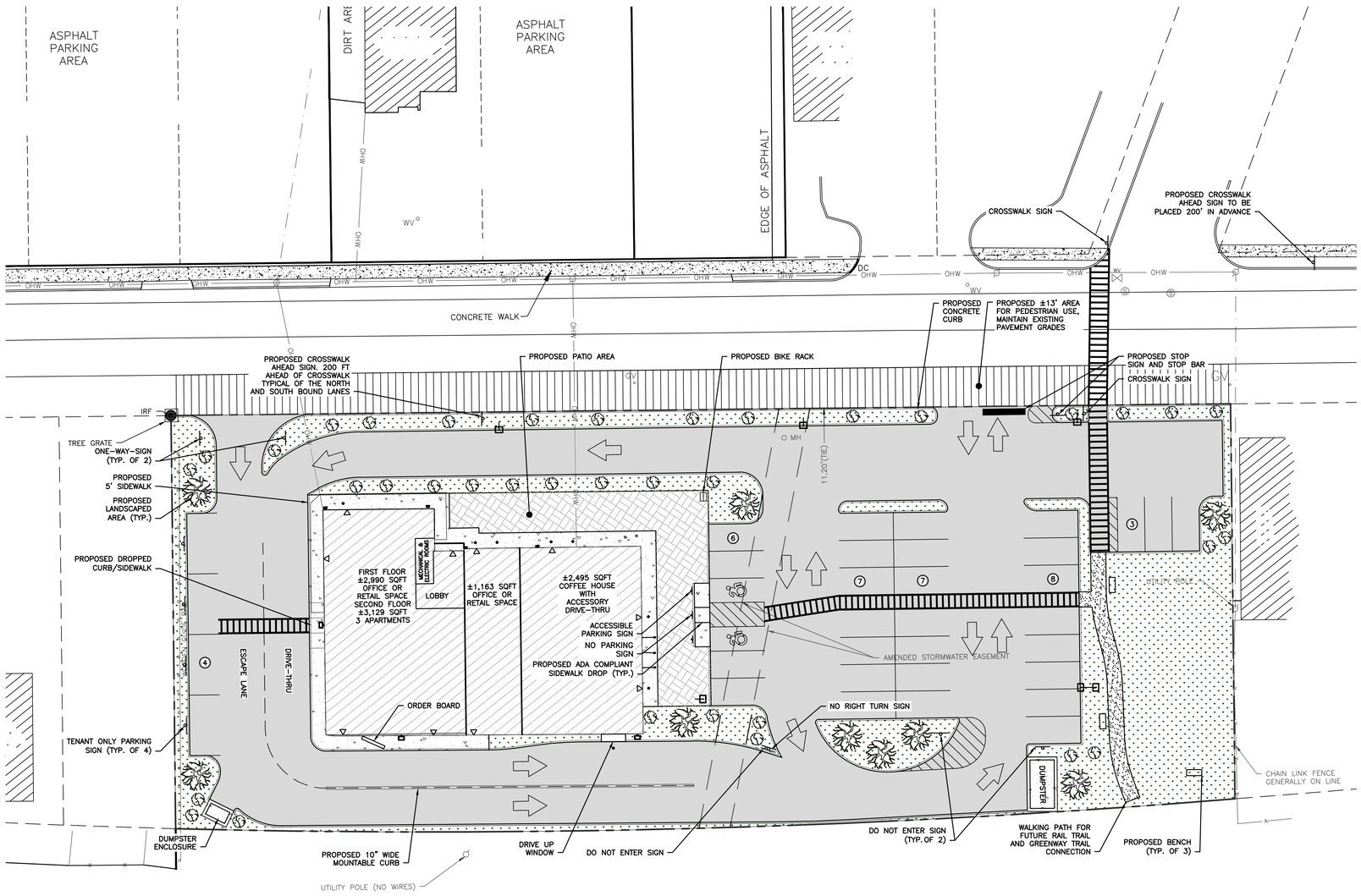
EXISTING CONDITIONS & REMOVALS PLAN

# 420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455098

| | |
|---|---|
| JOB #: | 2024:013 |
| DATE: | 10/29/24 |
| SCALE: | 1" = 20' |
| TITLE: | XC-1 |
| SHEET: | 2 OF 8 |

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW




## SCHEDULE OF REGULATIONS (GB ZONING DISTRICT) AND LOT CONFORMANCE TABLE:

| PARAMETER | REQUIREMENT | EXISTING | PROVIDED |
|---|---|---|---|
| LOT AREA: | N/A (2) | ±47,807 SQFT | ±47,807 SQFT |
| LOT AREA PER UNIT: (2) | 1,500 SQFT MIN. / 31 UNITS | 0 UNITS | ±15,936 SQFT / 3 UNITS |
| LOT WIDTH: | N/A | ±221.5 FEET | ±221.5 FEET |
| LOT DEPTH: | 100 FEET MINIMUM | ±130.5 FEET | ±130.5 FEET |
| YARD SETBACKS: | | | |
| FRONT YARD: | 15 FEET MINIMUM | ±31.7 FEET | ±31.7 FEET |
| SIDE YARD: | 20 FEET MINIMUM | ±42.1 FEET | ±42.1 FEET |
| REAR YARD: | 25 FEET MINIMUM | ±31.6 FEET | ±31.6 FEET |
| MAX. BUILDING HEIGHT: | 35 FT MAX. | ±27.7 FEET | ±32.9 FEET |

**NOTE:**
1. THE EXISTING AND PROVIDED MEASUREMENTS CONSIDERS THE REDEVELOPMENT ON THE COMBINED SINGLE PARCEL.
2. PER RESIDENTIAL UNIT.

## LEGEND:

EXISTING PROPERTY LINE
ADJOINING PROPERTY LINE
EXISTING EASEMENT LINE
EXISTING STREAM
EXISTING WETLAND BOUNDARY
100' WETLAND BUFFER
EXISTING MAJOR CONTOUR
EXISTING MINOR CONTOUR
EXISTING TREE LINE
EXISTING OVER HEAD WIRE
EXISTING UTILITY POLE
EXISTING LIGHT POLE
EXISTING SEWER SERVICE LINE
EXISTING SEWER LINE
EXISTING SEWER MANHOLE
EXISTING SEWER CLEAN OUT
EXISTING WATER LINE
EXISTING WATER SERVICE LINE
EXISTING WELL
EXISTING HYDRANT
EXISTING WATER SHUT OFF VALVE
EXISTING WATER VALVE
EXISTING STORM WATER LINE
EXISTING ROOF LEADER
EXISTING CATCH BASIN

PROPOSED PROPERTY LINE
PROPOSED SET BACK LINE
PROPOSED MAJOR CONTOUR
PROPOSED MINOR CONTOUR
PROPOSED EASEMENT
PROPOSED TREE LINE
PROPOSED SEWER LINE
PROPOSED SEWER SERVICE LINE
PROPOSED SEWER MANHOLE
PROPOSED SEWER CLEAN OUT
PROPOSED SDS LATERAL
PROPOSED SDS SOLID LINE
PROPOSED STORM WATER LINE
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PROPOSED ROOF LEADER
PROPOSED WATER LINE
PROPOSED WATER SERVICE LINE
PROPOSED WELL
PROPOSED HYDRANT
PROPOSED WATER SHUT OFF VALVE
PROPOSED WATER VALVE

## PARKING NOTES:

1. REFER TO TRAFFIC IMPACT STUDY PREPARED BY COLLIERS ENGINEER AND DESIGN, DATED NOVEMBER 26, 2024 FOR PARKING CALCULATIONS AND SITE DISTANCE MEASUREMENTS.
2. PROVIDED PARKING:
   a. 35 PARKING SPACES, INCLUDING 2 ADA ACCESSIBLE PARKING SPACES PROVIDED.

## SITE PLAN NOTES:

1. THE PROJECT PROPOSES AN ADAPTIVE REUSE OF EXISTING AUTOMOBILE DEALERSHIP LOCATED ON THE SUBJECT PROPERTY, WITH NO INCREASE TO THE BUILDING SIZE. THE BUILDING WILL PROVIDE A ±2,495 SQUARE FOOT COFFEE HOUSE, ±4,153 SQUARE FEET OF OFFICE/RETAIL SPACE, AND THREE RESIDENTIAL APARTMENT UNITS ON THE SECOND FLOOR.
2. THERE ARE NO WETLANDS OR FLOODPLAINS ASSOCIATED WITH THE PROJECT SITE.
3. TOTAL SITE IMPERVIOUS COVERAGE REDUCED FROM 100% TO 80%.
4. THE APPLICANT WILL BE REQUIRED TO OBTAIN A HIGHWAY WORK PERMIT FROM THE CITY OF BEACON FOR WORK WITHIN THE FISHKILL AVENUE RIGHT-OF-WAY.

## SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE AND DRAINAGE LINES.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL DRAINAGE, SANITARY SEWER, WATER AND GAS LINES AND STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
3. THE EXISTING BUILDING AND SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES VIA EXISTING WATER AND SANITARY SEWER SERVICE LINES.
4. STREET CLOSURE FOR DRIVEWAY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS. A PLAN SHALL BE IN PLACE FOR MAINTENANCE AND PROTECTION OF TRAFFIC.
5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. FISHKILL AVENUE SHALL BE KEPT CLEAN AND SWEPT DURING CONSTRUCTION.
6. THE BUILDING DEPARTMENT SHALL HAVE THE RIGHT TO INSPECT THE EXISTING BUILDING TO CONFIRM THAT THERE ARE NOT EXISTING STORMWATER CONNECTIONS TO THE CITY'S SANITARY SEWER SYSTEM PRIOR TO THE MAP BEING SIGNED. AN INFLOW & INFILTRATION (I&I) STUDY WAS CONDUCTED FOR THE PROJECT, WITH NO ILLICIT CONNECTIONS FOUND.
7. A ROAD OPENING PERMIT SHALL BE OBTAINED FROM THE CITY OF BEACON.

## APPLICANT'S CONSENT:

THE UNDERSIGNED APPLICANT OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY, LLC DATE

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SIGNED THIS _____ DAY OF _____, 20_____, BY

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_____ SECRETARY

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GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )
1 inch = 20 ft.

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SEAL

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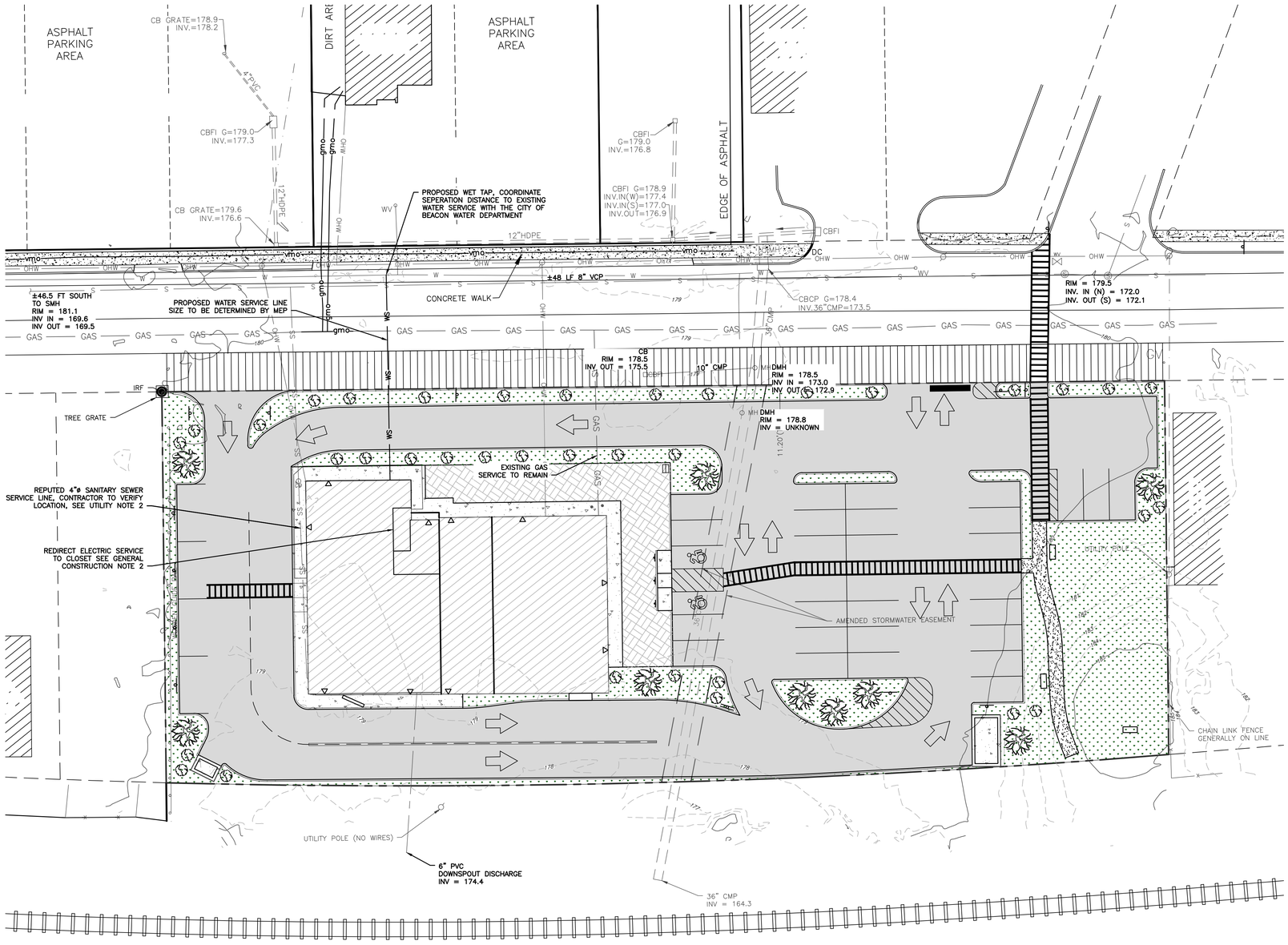
SITE PLAN

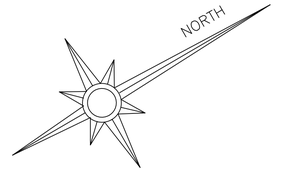
# 420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455098

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|---|---|
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| SHEET: | 3 OF 8 |

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW




## LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- SS EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- WV EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- RL EXISTING ROOF LEADER
- EXISTING CATCH BASIN

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- S PROPOSED SEWER LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- PROPOSED SDS LATERAL
- PROPOSED SDS SOLID LINE
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- W PROPOSED WATER LINE
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

## UTILITY NOTES:

1. ALL WATER & SEWER CONNECTIONS SHALL COMPLY WITH CITY WATER AND SEWER DISTRICT REQUIREMENTS.
2. THE CONFIGURATION OF INTERNAL WASTE LINES SHALL BE SET AT SUCH ELEVATION TO ENSURE GRAVITY FLOW FROM THE RAW SEWER LINE TO THE POINT OF CONNECTION WITH THE EXISTING SEWER MAIN, WHILE MAINTAINING PROPER EARTH COVER ABOVE ALL PIPING. CONTRACTOR TO NOTIFY ENGINEER IF THE RAW LINE INVERT IS TOO HIGH TO SERVE THE RENOVATIONS.
3. NO CELLAR, ROOF, OR FOOTING DRAINS SHALL BE DISCHARGED INTO THE SANITARY SEWER SYSTEM.

## GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
2. WATER, SEWER AND STORM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED FOLLOWING SITE PLAN APPROVAL. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COORDINATION WITH THE RESPECTIVE UTILITY COMPANIES.
3. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE, LOCATION, DEPTH AND CONDITION OF ALL UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
4. THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS AS SHOWN ON PLANS. ANY FIELD CONDITIONS THAT MAY RESULT IN A VARIATION FROM THE PLAN SET SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IN WRITING. VARIATIONS FROM THE PLAN WITHOUT APPROVAL FROM THE ENGINEER WILL BE CONSIDERED DEFICIENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ON-SITE OR OFF-SITE DAMAGES TO VEGETATION OR PROPERTY CAUSED BY HIS OPERATIONS. SUCH DAMAGES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS COST TO THE SATISFACTION OF THE ENGINEER, PROPERTY OWNER OR AGENCY HAVING JURISDICTION.
6. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL KEEP THE SITE IN A CLEAN AND ORDERLY MANNER.

## ADA CONSTRUCTION NOTES:

1. ADA ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE MUST COMPLY WITH ALL APPLICABLE STATE AND LOCAL ACCESSIBILITY LAWS AND REGULATIONS AND THE CURRENT ADA STANDARDS. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE FROM PARKING SPACE OR PEDESTRIAN ACCESS TO POINTS OF ACCESSIBLE BUILDING INGRESS/OR EGRESS, MUST COMPLY WITH ADA REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   - 1.1. PARKING SPACES AND PARKING AISLES – SLOPE SHALL NOT EXCEED 1:48 IN ANY DIRECTION.
   - 1.2. CURB RAMPS – SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
   - 1.3. LANDINGS – MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:48 IN ANY DIRECTION.
   - 1.4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE – MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL. THE SLOPE MUST BE NO GREATER THAN 1:20 IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:48 IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20, ADA RAMP STANDARDS MUST BE MET WITH A MAXIMUM SLOPE OF 1:12, FOR A MAXIMUM RISE OF 30 INCHES. RAMPS MUST HAVE ADA HAND RAILS AND LANDINGS AT BOTH THE TOP AND BOTTOM OF EACH RAMP, WITH CROSS SLOPES NO MORE THAN 1:48 IN ANY DIRECTION.
   - 1.5. DOORWAYS – MUST HAVE A LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:48 AND MUST BE NO LESS THAN 60 INCHES LONG.
2. WHEN THE PROPOSED CONSTRUCTION INCLUDES CONNECTION TO EXISTING ADA COMPONENTS, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN. NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF THERE ARE ANY DISCREPANCIES OR FIELD CONDITIONS THAT DIFFER FROM WHAT IS SHOWN BEFORE COMMENCING WORK. CONSTRUCTED IMPROVEMENTS MUST COMPLY WITH THE MAXIMUM AND MINIMUM ADA REQUIREMENTS.
3. THE CONTRACTOR MUST VERIFY THE SLOPES OF THE FORMWORK PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

## INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

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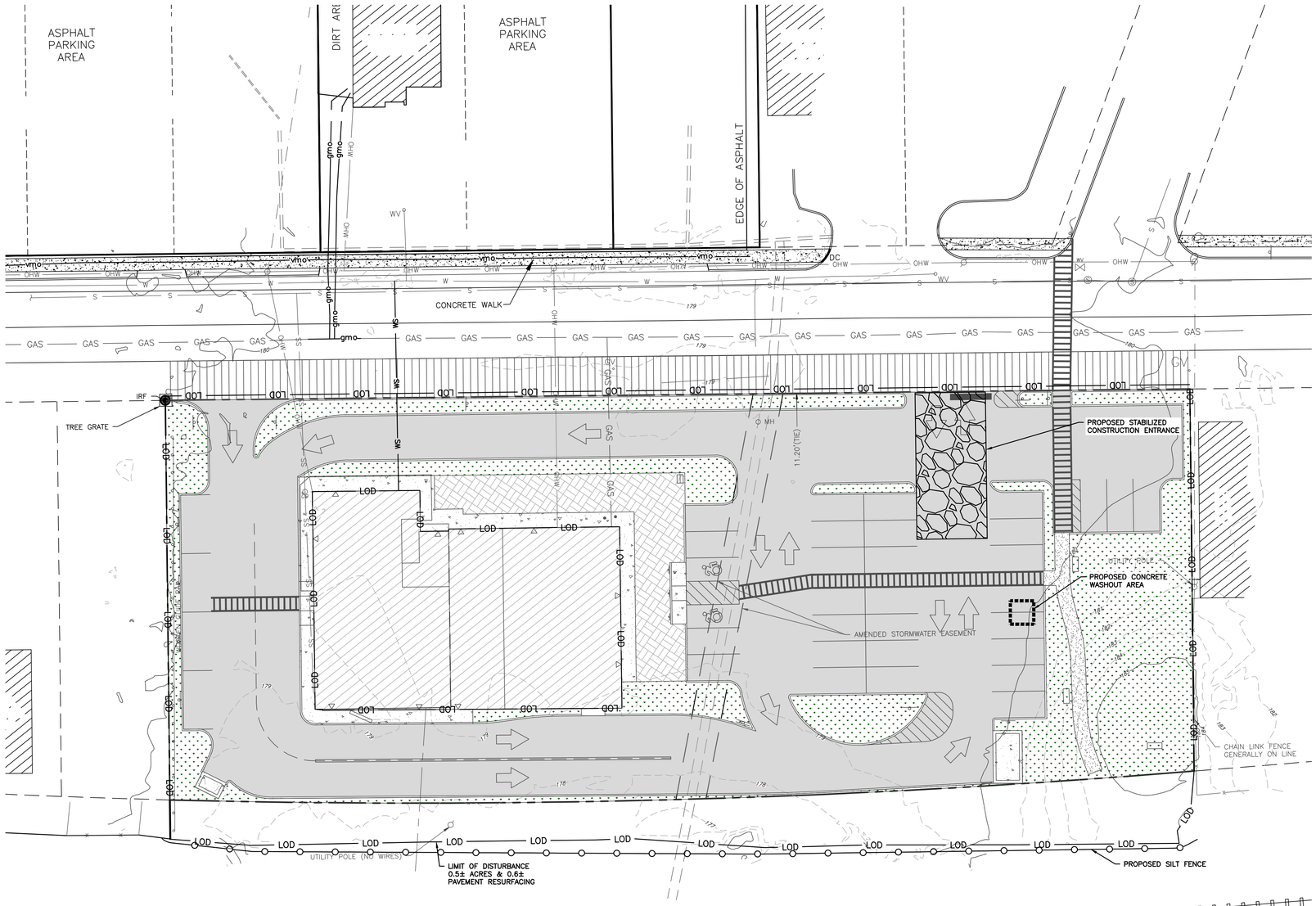
GRADING & UTILITY PLAN

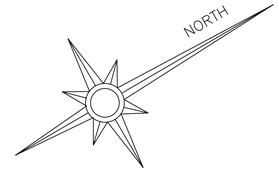
# 420 FISHKILL AVE

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- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED SILT FENCE
- LOD PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE

## INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. REGRADE PAD AS NEEDED FOR RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE AS DIRECTED BY PROJECT ENGINEER.

SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCKPILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

DEWATERING PITS:
(IF REQUIRED) – INSPECT DAILY DURING OPERATION FOR CLOGGING OR OVERFLOW. CLEAR INLET AND DISCHARGE PIPES OF OBSTRUCTIONS. IF A FILTER MATERIAL BECOMES CLOGGED WITH SEDIMENT, PIT SHALL BE DISMANTLED AND NEW PITS SHALL BE CONSTRUCTED AS NEEDED.

CATCH BASINS:
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

## APPLICANT'S CONSENT:

THE UNDERSIGNED APPLICANT OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY, LLC DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 11/26/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |
| 2 | 12/31/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )
1 inch = 20 ft.

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SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

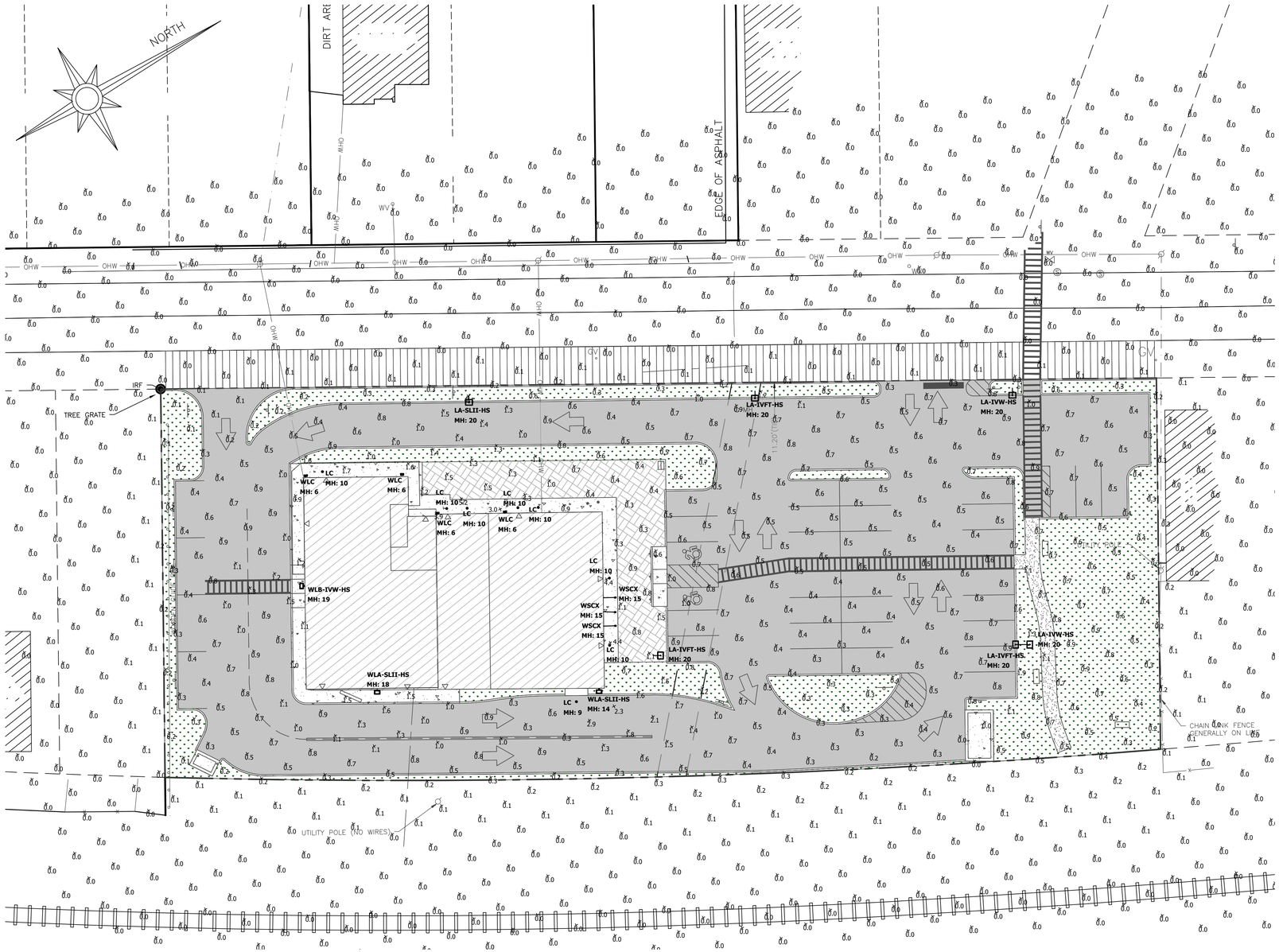
EROSION & SEDIMENT CONTROL PLAN

# 420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455098

| | |
|---|---|
| JOB #: | 2024:013 |
| DATE: | 10/29/24 |
| SCALE: | 1" = 20' |
| TITLE: | EC-1 |
| SHEET: | 5 OF 8 |

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW




## LIGHTING NOTES:

1. ALL LIGHTING SHALL BE DARK SKY COMPLIANT WITH CUTOFF SHIELDS AS NOTED.
2. ILLUMINATION IN FOOT-CANDLES, ONLY CONSIDERS PROPOSED LIGHTING.
3. EXISTING LIGHTING LEVELS ALONG FISHKILL AVENUE NOT MODELED.
4. LIGHTING DESIGN FROM QUALITY LIGHTING SYSTEMS, INC., 7489 HENRY CLAY BOULEVARD, LIVERPOOL, NY 13088, CONTACT ROGER W GARCIA: 315-453-9277 EXT 306.

| Calculation Summary | | | | | | | |
|---|---|---|---|---|---|---|---|
| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
| 420-430 Fishkill Ave_Planar | Illuminance | Fc | 0.25 | 5.2 | 0.0 | N.A. | N.A. |
| Coffee Shop Parking | Illuminance | Fc | 0.60 | 1.1 | 0.3 | 2.00 | 3.67 |
| Drive Thru Lane | Illuminance | Fc | 0.90 | 2.9 | 0.3 | 3.00 | 9.67 |
| Tenant Parking | Illuminance | Fc | 0.44 | 0.6 | 0.3 | 1.47 | 2.00 |



PROPOSED LIGHT "LA-"
NOT TO SCALE



PROPOSED LIGHT "WLA-" & "WLB-"
NOT TO SCALE



PROPOSED LIGHT "WSCX"
NOT TO SCALE



PROPOSED LIGHT "LC"
NOT TO SCALE



PROPOSED LIGHT "WLC"
NOT TO SCALE

| Luminaire Schedule | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Symbol | Qty | Label | Arrangement | Lum Lumens | Arrgmt Lum Lumens | Lum Watts | Arrgmt Watts | Total Watts | LLD | LDD | BF | LLF | BUG Rating | Description |
| | 3 | LA-IVFT-HS | Single | 3444 | 3444 | 44 | 44 | 132 | 0.950 | 0.950 | 1.000 | 0.903 | B1-U0-G1 | GPC-SA1B-830-U-T4FT-HSS |
| | 2 | LA-IVW-HS | Single | 3514 | 3514 | 44 | 44 | 88 | 0.950 | 0.950 | 1.000 | 0.903 | B0-U0-G1 | GPC-SA1B-830-U-T4W-HSS |
| | 1 | LA-SLII-HS | Single | 4017 | 4017 | 44 | 44 | 44 | 0.950 | 0.950 | 1.000 | 0.903 | B1-U0-G1 | GPC-SA1B-830-U-SL2-HSS |
| | 8 | LC | Single | 644 | 644 | 6 | 6 | 48 | 0.950 | 0.950 | 1.000 | 0.903 | B1-U0-G0 | HC405D010-HM40525830-41WDW |
| | 2 | WLA-SLII-HS | Single | 3276 | 3276 | 34 | 34 | 68 | 0.950 | 0.950 | 1.000 | 0.903 | B1-U0-G1 | GWC-SA1A-830-U-SL2-HSS |
| | 1 | WLB-IVW-HS | Single | 4351 | 4351 | 58 | 58 | 58 | 0.950 | 0.950 | 1.000 | 0.903 | B1-U0-G2 | GWC-SA1C-830-U-T4W-HSS |
| | 4 | WLC | Single | 729 | 729 | 22.15 | 22.15 | 88.6 | 1.000 | 1.000 | 1.000 | 1.000 | B1-U3-G1 | TESS-30 |
| | 3 | WSCX | Single | 515 | 515 | 6.3 | 6.3 | 18.9 | 0.950 | 0.950 | 1.000 | 0.903 | B1-U2-G0 | SGNL-L-S-60-3 |

## APPLICANT'S CONSENT:

THE UNDERSIGNED APPLICANT OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY, LLC DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
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GRAPHIC SCALE
20 0 10 20 40 60
( IN FEET )
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SEAL

HUDSON LAND DESIGN
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174 MAIN ST., BEACON, NEW YORK 12508
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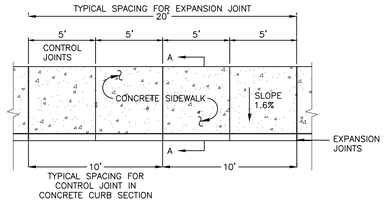
LIGHTING PLAN

# 420 FISHKILL AVE

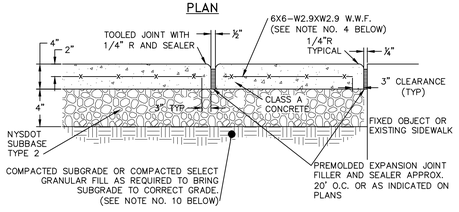
420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455098

| | |
|---|---|
| JOB #: | 2024:013 |
| DATE: | 10/29/24 |
| SCALE: | 1" = 20' |
| TITLE: | LT-1 |
| SHEET: | 6 OF 8 |

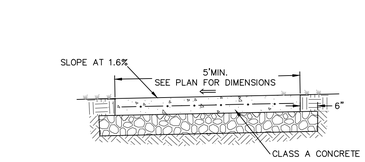
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



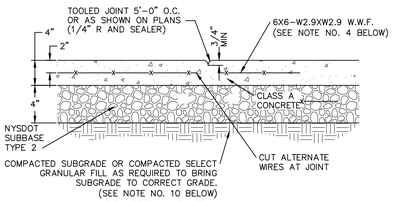

PLAN




EXPANSION JOINT




SECTION A–A

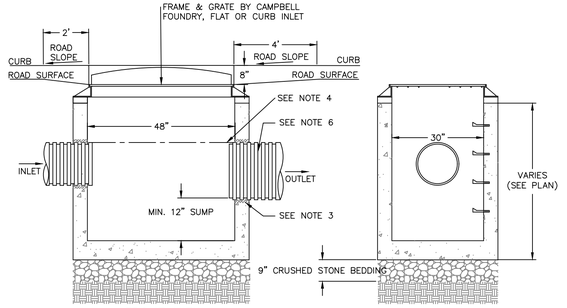



CONTROL JOINT

NOTES:

1. 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
2. MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
3. ALL CONCRETE SHALL BE 4,000 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5. ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6. EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7. JOINTS SHALL NOT BE SAW CUT.
8. EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND" SB–7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
9. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11. ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
12. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

## CONCRETE SIDEWALK DETAIL
NOT TO SCALE

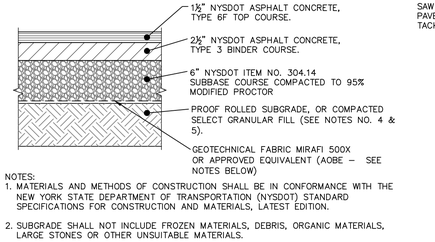



FRONT VIEW SIDE VIEW

NOTES:

1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
6. HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.

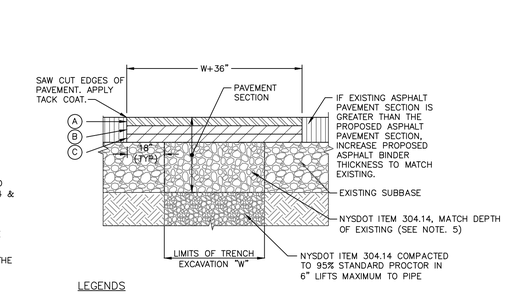
## CATCH BASIN DETAIL
NOT TO SCALE




NOTES:

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION.
2. SUBGRADE SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS.
3. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407–TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
5. IF UNSUITABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR POSSIBLE MODIFICATIONS TO THE PAVEMENT DETAIL.

## PAVEMENT SECTION DETAIL
NOT TO SCALE




LEGENDS

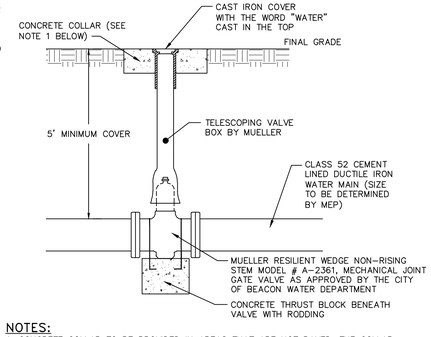
FISHKILL AVENUE RESTORATION COURSES:

- (A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
- (B) 2–1/2" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
- (C) 8" ASPHALTIC BASE COURSE– NYSDOT TYPE 1 (4" LIFTS)

NOTES:

1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE IN TWO 4" LIFTS.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.
5. PROVIDE 10" GRANULAR SUBBASE COURSE – NYSDOT ITEM 304.14 FOR FISHKILL AVENUE RESTORATION.

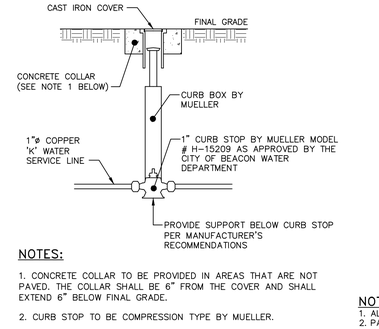
## PAVEMENT RESTORATION DETAIL
NOT TO SCALE




NOTES:

1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
2. ALL VALVE BOXES LOCATED IN THE CITY RIGHT–OF–WAY SHALL BE DOMESTICALLY MADE.

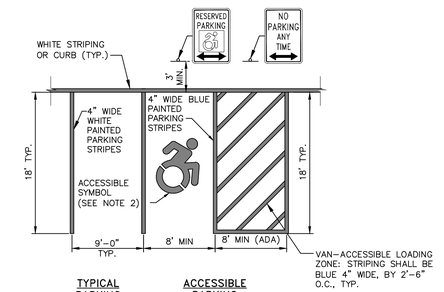
## GATE VALVE DETAIL
NOT TO SCALE




NOTES:

1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

## WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE

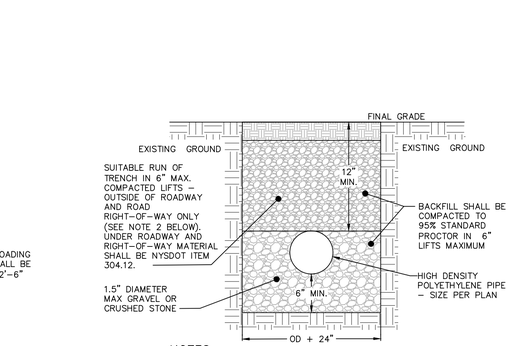



TYPICAL PARKING STRIPING ACCESSIBLE PARKING STRIPING

NOTES:

1. ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS.
2. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH NYSDOT AND ADA STANDARDS.
3. IF PARKING ABUTS A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK.
4. PARALLEL SPACES SHALL BE 10'W X 20'L.

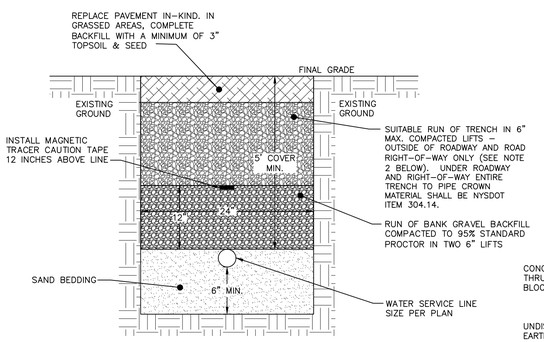
## PARKING AND STRIPING DETAIL
NOT TO SCALE




NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

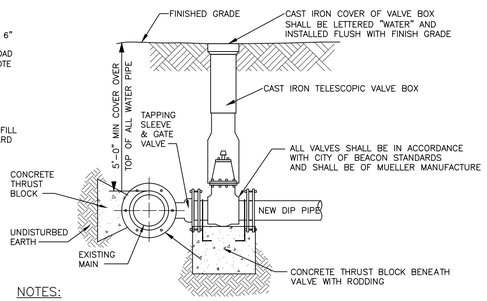
## STORM LINE TRENCH DETAIL
NOT TO SCALE




NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.

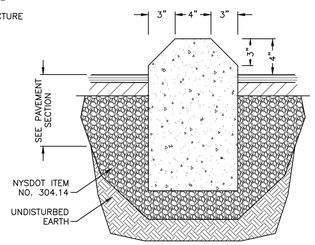
## WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



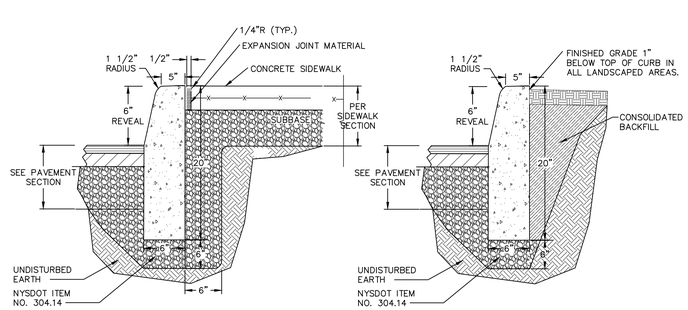

NOTES:

1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2–INCH SQUARE–OPERATING NUT PAINTED RED.
2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H–615, AND T–2631 RESPECTIVELY.
4. ALL VALVE BOXES LOCATED IN THE CITY RIGHT–OF–WAY SHALL BE DOMESTICALLY MADE.

## TAPPING SLEEVE DETAIL
NOT TO SCALE




## MOUNTABLE CURB DETAIL
NOT TO SCALE




NOTES:

1. CONCRETE CURB SHALL BE 4,000 PSI CAST–IN–PLACE, AND IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 609.
2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT 10 FOOT INTERVALS.
3. FOR MOUNTABLE CURBS ABUTTING SIDEWALK OR OTHER HARDSCAPE, REFER TO "ABUTTING SIDEWALK" DETAIL.
4. CONCRETE SHALL BE SEALED WITH A SALT RESISTANT SEALER.

## CAST–IN–PLACE CONCRETE CURB DETAIL
NOT TO SCALE

## APPLICANT'S CONSENT:

THE UNDERSIGNED APPLICANT OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY, LLC DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 11/26/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |
| 2 | 12/31/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York. Call 811 before you dig

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926

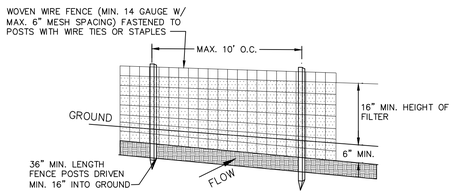
CONSTRUCTION DETAILS

# 420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055–80–443076, 450087 & 455098

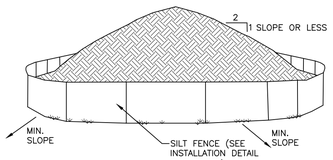
| | |
|---|---|
| JOB #: | 2024:013 |
| DATE: | 10/29/24 |
| SCALE: | AS SHOWN |
| TITLE: | CD–1 |
| SHEET: | 7 OF 8 |

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW




NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

## SILT FENCE DETAIL
NOT TO SCALE

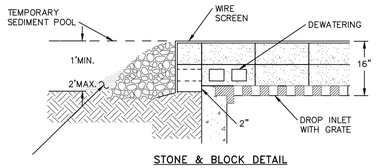



NOTES:
1. 1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

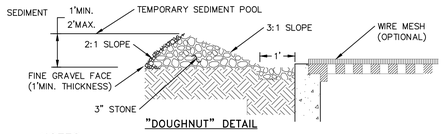
## TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE




STONE & BLOCK PLAN VIEW



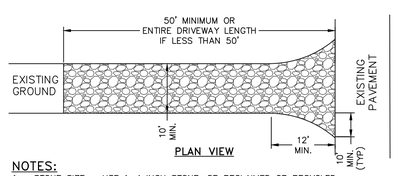

STONE & BLOCK DETAIL




"DOUGHNUT" DETAIL

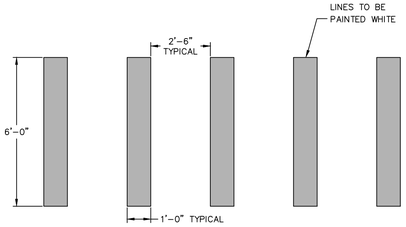
NOTES:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

## CATCH BASIN INLET PROTECTION DETAIL
NOT TO SCALE

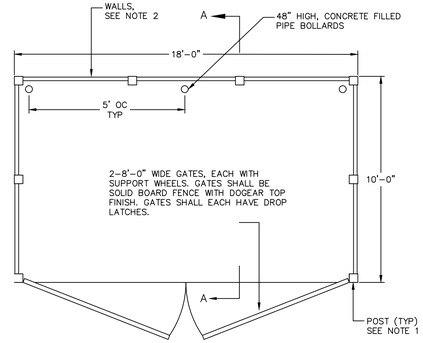



NOTES:
1. STONE SIZE – USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS – NOT LESS THAN SIX (6) INCHES.
3. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
4. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
5. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE, IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

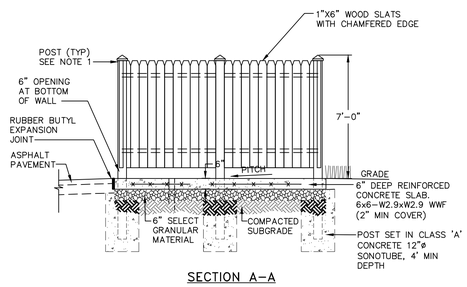
## STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE




## PAINTED CROSSWALK DETAIL
NOT TO SCALE



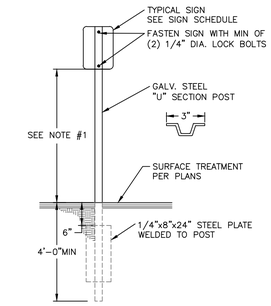

## TRASH ENCLOSURE DETAILS
NOT TO SCALE




NOTES

1. POSTS SHALL HAVE A DECORATIVE CAP, CONSISTENT WITH THE ARTS & CRAFTS STYLE, AS APPROVED BY OWNER. POST SPACING SHALL BE AS REQUIRED BY WALL CONSTRUCTION.

2. WALLS OF DUMPSTER ENCLOSURE SHALL BE A SOLID WOOD PRIVACY FENCING NATURAL STAIN OR PAINT TO COMPLEMENT BUILDING.




NOTE:
1. SIGN MOUNTING HEIGHT SHALL BE A MINIMUM OF 7'. MINIMUM MOUNTING HEIGHT MAY BE ADJUSTED ONLY IN ACCORDANCE WITH PROVISIONS OUTLINED IN "NYCRR, UNIFORM TRAFFIC CONTROL DEVICES."
2. SIGN POST SHALL BE IN ACCORDANCE W/ NYSDOT STANDARD SPECS SECTION 730.

## TYPICAL SIGN DETAIL
NOT TO SCALE



NOTES:
1. 1, WASHOUT STATION SHALL BE LOCATED 100' FROM ANY STORMWATER FEATURE ON SITE OR NATURAL WATERWAYS OR WETLANDS.
2. INSPECT WASHOUT STATION DAILY AND REPLACE PLASTIC LINER WHEN ANY RIPS OR TEARS ARE OBSERVED.
3. REPLACE WASHOUT STATION WHEN IT IS AT 75% OF ITS CAPACITY WITH HARDENED MATERIAL.
4. WATER ACCUMULATION IN WASHOUT AREA FROM RAINWATER SHALL BE PUMPED FROM THE STATION INTO A GRASSED AREA.

## BICYCLE RACK DETAIL
NOT TO SCALE




R5-1

DO NOT ENTER: 30" X 30"



R3-1

NO RIGHT TURN: 30" X 30"




R7-8

ADA PARKING: 30" X 30"




R7-1

NO PARKING ANYTIME: 12" X 18"

## SIGN SCHEDULE
NOT TO SCALE



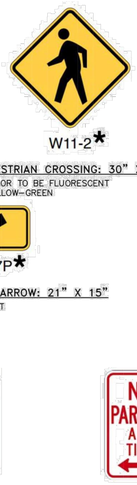

R1-1

STOP SIGN: 30" X 30"




R6-2

ONE WAY: 24" X 30"



W11-2*

PEDESTRIAN CROSSING: 30" X 30"
* COLOR TO BE FLUORESCENT YELLOW-GREEN



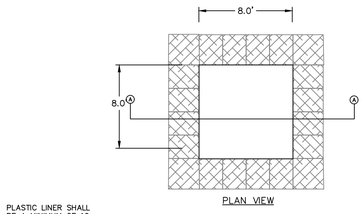

W16-9P*

PEDESTRIAN CROSSING AHEAD: 24" X 12"
* COLOR TO BE FLUORESCENT YELLOW-GREEN



W16-7P*

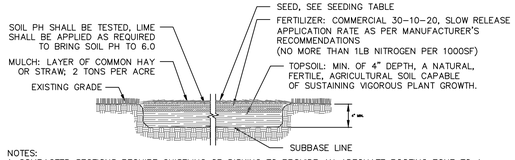
PEDESTRIAN CROSSING ARROW: 21" X 15"
* COLOR TO BE FLUORESCENT YELLOW-GREEN




## CONCRETE WASHOUT STATION DETAIL
NOT TO SCALE

| SEEDING TABLE | | | | |
|---|---|---|---|---|
| TYPE | SUNNY SITE: | SUNNY DROUGHTY SITE: | SHADY DRY SITE: | SHADY WET SITE: |
| OPTION A | 65% CREEPING RED FESCUE<br>20% PERENNIAL RYE GRASS<br>15% FINE FESCUE<br>175 LBS PER ACRE | 65% FINE FESCUE<br>15% PERENNIAL RYE GRASS<br>20% CREEPING FESCUE<br>220 LBS PER ACRE | 65% FINE FESCUE<br>15% PERENNIAL RYE GRASS<br>20% CREEPING FESCUE<br>220 LBS PER ACRE | 70% CREEPING RED FESCUE<br>30% BLEND OF SHADE-TOLERANT HARD FESCUE<br>130 POUNDS PER ACRE |
| OPTION B | 100% CREEPING RED FESCUE<br>200 LBS PER ACRE | 100% CREEPING RED FESCUE<br>200 LBS PER ACRE | 80% BLEND OF SHADE-TOLERANT CEREAL RYE<br>20% PERENNIAL RYE<br>175 LBS PER ACRE | 100% CHEWINGS FESCUE<br>200 LBS PER ACRE |
| OPTION C | | | 100% CREEPING RED FESCUE<br>200 LBS PER ACRE | |

## TOPSOIL SEED, FERTILIZER AND MULCH DETAIL
NOT TO SCALE




NOTES:
1. COMPACTED SECTIONS REQUIRE CHISELING OR DISKING TO PROVIDE AN ADEQUATE ROOTING ZONE TO A MINIMUM DEPTH OF 12"

2. SOIL AMENDMENTS SHOULD BE INCORPORATED INTO THE UPPER 2" OF SOILS BASED ON SOIL TESTING. IF SOIL MUST BE FERTILIZED BEFORE RESULTS OF A SOIL TEST CAN BE OBTAINED TO DETERMINE FERTILIZER NEEDS, APPLY COMMERCIAL FERTILIZER AT 600 POUNDS PER ACRE 5-5-10 OR EQUIVALENT.

3. PERMANENT SEEDINGS MAY BE MADE ANY TIME OF YEAR IF PROPERLY MULCHED AND ADEQUATE MOISTURE IS PROVIDED. LATE JUNE THROUGH EARLY AUGUST IS NOT OPTIMAL SEEDING PERIOD AS PORTIONS OF THE SEEDING MAY FAIL DUE TO DROUGHT AND HEAT. THESE AREAS MAY NEED RESEEDING IN LATE SUMMER/FALL OR THE FOLLOWING SPRING.

4. WATERING MAY BE ESSENTIAL TO ESTABLISH A NEW SEEDING WHEN A DROUGHT CONDITION OCCURS SHORTLY AFTER A NEW SEEDING EMERGES. DO NOT EXCEED THE APPLICATION RATE FOR THE SEED OR SUBSOIL.

5. SEEDING OPTION A FOR A SUNNY SITE TO BE USED, UNLESS OTHERWISE NOTED.

## APPLICANT'S CONSENT:

THE UNDERSIGNED APPLICANT OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY, LLC DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 11/26/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |
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SEAL

HUDSON LAND DESIGN
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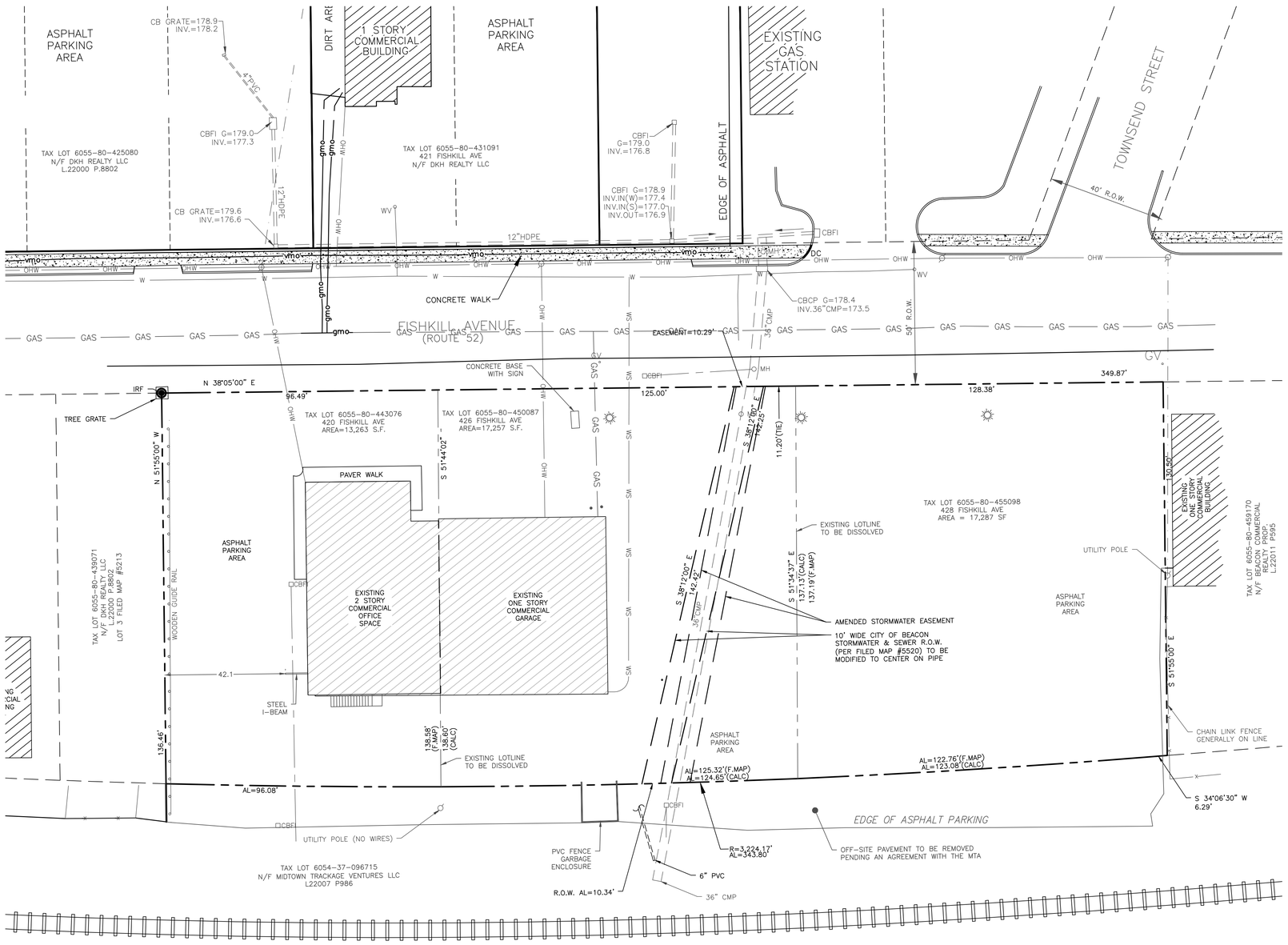
CONSTRUCTION DETAILS

# 420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455098

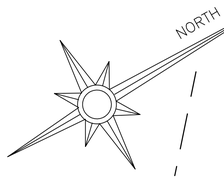
JOB #: 2024:013
DATE: 10/29/24
SCALE: AS SHOWN
TITLE: CD-2
SHEET: 8 OF 8

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW




**LEGEND:**

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING STREAM
- EXISTING WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- SS EXISTING SEWER SERVICE LINE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING STORM WATER LINE
- RL EXISTING ROOF LEADER
- EXISTING CATCH BASIN







SITE LOCATION MAP SCALE: 1" = 400'

## SCHEDULE OF REGULATIONS (GB ZONING DISTRICT):

| PARAMETER | REQUIREMENT |
|---|---|
| LOT AREA: | N/A |
| LOT AREA PER UNIT: | 1,500 SQFT MINIMUM |
| LOT WIDTH: | N/A |
| LOT DEPTH: | 100 FEET MINIMUM |
| YARD SETBACKS (RESIDENTIAL USE): | |
| FRONT YARD: | 15 FEET MINIMUM |
| SIDE YARD: | 20 FEET MINIMUM |
| REAR YARD: | 25 FEET MINIMUM |
| MAX. BUILDING HEIGHT: | 35 FT MAX. |
| MAX. BUILDING COVERAGE: | N/A |
| MAX. UNITS/BUILDING: | N/A |

## PROJECT INFORMATION:

| | |
|---|---|
| PARCEL OWNER: | DKH REALTY, LLC PO BOX 859 GOSHEN, NY 10924 |
| PROJECT ENGINEER: | HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508 |
| PROJECT SURVEYOR: | CV ASSOCIATES NY, 148 RT 17M STE 2, HARRIMAN NY 10926 |
| PROJECT ARCHITECT: | STUDIO ARCHITECTURE, DPC, 297 KNOLLWOOD RD STE 209 WHITE PLAINS NY 10607 |
| PARCEL LOCATION: | 420 FISHKILL AVE, BEACON NY 12508 |
| TAX PARCEL ID: | 6055-80-443078 (0.304 AC) & 450087 (0.396 AC) & 455098 (0.395 AC) |
| PARCEL AREA: | ±1.095-ACRES TOTAL |
| WATER SUPPLY: | MUNICIPAL – CITY OF BEACON |
| SEWAGE DISPOSAL: | MUNICIPAL – CITY OF BEACON |

## SURVEY REFERENCE:

1. REFERENCE IS HEREBY MADE TO SURVEY ENTITLED "LANDS OF DKH REALTY LLC" DATED APRIL 3, 2024 AND PREPARED BY CV ASSOCIATES NY, P.E. L.S., P.C..
2. EXISTING TOPOGRAPHY TAKEN FROM RECENT AERIAL PHOTOGRAPHY FLOWN IN OCTOBER 2024.

## SURVEY NOTES:

1. EXISTING BUILDINGS SHOWN ON SUBJECT PARCELS ARE IN GOOD EXTERIOR CONDITION.
2. ASPHALT PARKING AREA ON 415, 420, 426 & 428 FISHKILL AVENUE IS SUBSTANTIALLY OVER THE PROPERTY LINE.
3. OVERHEAD WIRES ARE CONNECTED TO THE BUILDINGS ON 420 AND 421 FISHKILL AVENUE.
4. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WERE OBSERVED DURING THE PROCESS OF CONDUCTING THE FIELD WORK.
5. NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIR WAS OBSERVED DURING THE PROCESS OF CONDUCTING THE FIELD WORK.
6. EXISTING 36" CORRUGATED METAL DRAINAGE PIPE APPEARS TO BE PARTIALLY OUTSIDE OF THE 10' WIDE RIGHT-OF-WAY.
7. ALL STREETS SHOWN HEREON ARE PUBLIC STREETS.
8. THESE PARCELS ARE IN ZONE X (AREA OF MINIMAL FLOOD HAZARD) AS SHOWN ON FIRM FLOOD INSURANCE RATE MAP "CITY OF BEACON – 36027c0464E, EFFECTIVE DATE 5/2/2012.
9. NO WETLANDS EXISTING ON ANY OF THE PARCELS BASED ON AVAILABLE ONLINE DATA AND VISUAL INSPECTION.

## LOT CONSOLIDATION & EASEMENT NOTES:

1. THE INTENT OF THIS PLAN IS TO CONSOLIDATE THE THREE EXISTING TAX PARCELS INTO A SINGLE TAX PARCEL BY REMOVING ALL INTERIOR LOT LINES, CONCURRENT WITH A SITE PLAN APPLICATION BEFORE THE CITY OF BEACON PLANNING BOARD.
2. THE EXISTING DRAINAGE EASEMENT IS TO BE MODIFIED TO FULLY CONTAIN THE EXISTING STORM INFRASTRUCTURE.

## APPLICANT'S CONSENT:

THE UNDERSIGNED APPLICANT OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY, LLC DATE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

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SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

## OWNER'S CONSENT:

THE UNDERSIGNED OWNER OF THE PROPERTY HEREON STATES THAT HE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

_____ _____
DKH REALTY, LLC DATE

## SURVEYOR CERTIFICATION:

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON APRIL 3, 2024.

BY: _____
DARREN J. STRIDIRON, P.L.S.
148 ROUTE 17M SUITE 2
HARRIMAN, NY 10926

PLS#050487

## DCDOH STANDARD NOTE:

FOR PERMISSION TO FILE

THIS PLAN DOES NOT CONSTITUTE A REALTY SUBDIVISION AS DEFINED BY ARTICLE XI, TITLE II, SECTION 1115 OF THE PUBLIC HEALTH LAW OF THE STATE OF NEW YORK, AND ARTICLE XI OF THE DUTCHESS COUNTY SANITARY CODE. PERMISSION IS HEREBY GRANTED FOR THE FILING OF THIS MAP WITH THE CLERK OF DUTCHESS COUNTY. APPROVAL FOR ARRANGEMENTS FOR WATER SUPPLY AND/OR SEWAGE DISPOSAL IS NEITHER SOUGHT NOR GRANTED.

_____ _____
AUTHORIZED REPRESENTATIVE OF THE COMMISSIONER OF HEALTH DATE

| DRAWN BY: CMB | | | | CHECKED BY: DGK | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 11/26/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )
1 inch = 20 ft.

Dig Safely. New York. Call 811 before you dig

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

LOTLINE REMOVAL PLAT
REVISION TO FILED MAP 5520
420 FISHKILL AVE

420 FISHKILL AVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6055-80-443076, 450087 & 455098

| | |
|---|---|
| JOB #: | 2024:013 |
| DATE: | 10/29/24 |
| SCALE: | 1" = 20' |
| TITLE: | PT-1 |
| SHEET: | 1 OF 1 |

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

LANC & TULLY
Engineering and Surveying, P.C.

January 12, 2025

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: 420-430 Fishkill Ave.
Tax Nos. 6055-80-443076, 450087, & 455098
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding the proposed lot-merger and site plan to be located at 420-430 Fishkill Avenue:

- Correspondence dated January 2, 2025, from Cuddy & Feder, LLP.
- Response correspondence dated December 30, 2024, from Colliers Engineering & Design.
- Response correspondence dated January 2, 2025, from Hudson land Design.
- Correspondence dated January 2, 2025, from Landscape Restorations.
- Report titled "Drainage Report for 420 Fishkill Avenue", dated December 24, 2024, as prepared by Hudson Land Design.
- Architectural plans titled "Healey Renovation – 420 Fishkill Ave", with the latest date of January 2, 2025, and consisting of 5 sheets reflecting floor plans and renderings, as prepared by Studio Architecture, DPC.
- Plan titled "Lot Line Removal Plat – Revision to Filed Map 5520 – 420 Fishkill Ave", with the latest revision date of November 26, 2024, as prepared by Hudson Land Design.
- Plan set titled "420 Fishkill Ave – Site Re-Development", consisting of sheets 1 of 8 through 8 of 8 with the latest revision date of December 31, 2024, as prepared by Hudson Land Design.

The proposed project is the reuse of the existing building located at the project site for a mixed-use development which will include a Dunkin' coffee house with a drive through, commercial space, and 3 residential units. The project site consists of 3 different tax parcels which will be merged as a single parcel as part of the project. The proposed project is located in the GB (General Business) Zone, with the 3 parcels combined having a total area of ±1.095 acres. It should be noted that a coffee house, retail space, and multifamily dwellings are permitted uses within the GB Zone.

Based on our review of the above documents and plans, we would like to offer the following comments:

Lot Line Removal Plat:

1. As previously requested, the existing City easement for stormwater and sewer has been shifted to center the easement over the existing storm water pipe. The applicant shall submit a description for the revised easement for review. ***Applicant's consultant notes that this will be provided in the future.***

2. The proposed plat shall be updated in the future to reflect the potential easement for the future path between Fishkill Avenue and the trail to the rear of the project.

General Comments:

1. The project engineer shall prepare a construction cost estimate for the proposed work within the right-of-way and submit it to the City Engineer for review. The cost estimate will be the basis for the performance bond that will need to be provided for the proposed work within the City's road right-of-way. ***Applicant's engineer notes that this will be submitted with a future submittal once the layout has generally been accepted.***

2. Consideration should be given to providing the City of Beacon with a 10-foot ingress/egress easement for a trail along the north-east side of the site for access to the future rail trail to be located behind the project site. ***Applicant's engineer notes that a potential for a future path for trail access is shown and that an easement will be provided once the general layout has been accepted.***

3. A landscape plan shall be prepared for the project and shall include a planting schedule table. ***Applicant's engineer notes that a formal landscaping plan is being developed by Debra Adamsons and will be provided in the future.***

4. The detail sheets shall be revised to include additional details for ADA compliant curb ramps.

Existing Conditions & Removals Plan (Sheet 2 of 8):

1. The plan depicts all areas on the site that are to be removed as currently proposed, but what is to happen to the areas of pavement not shown to be removed? Are these areas to remain and be overlaid with new asphalt near the project's completion, or is all asphalt to be removed and replaced with the new pavement section shown on Sheet 7 of 8? The plan and notes on this sheet should clearly reflect what is to occur to the pavement in the areas where the pavement is not designated to be removed.

Site Plan (Sheet 3 of 8):

1. A "One-Way" sign shall be installed on the opposite curb line (south-east side of site) from the exit lane serving the parking stalls nearest the building.

2. A "Stop" sign should be installed at the exit lane from the parking stalls nearest the building to prevent drivers from pulling out directly into those vehicles leaving the drive-thru.

Grading & Utility Plan (Sheet 4 of 8):

1. The plan notes the existing sewer lateral to be 4" in size. Is this sufficient to service the project, or will this need to be increased in size? The City of Beacon is currently working on a design for the replacement of the water and sewer mains in Fishkill Avenue. In knowing the required size for this service would allow for the City to ensure the appropriate size service connection is provided on the new sewer main.

2. Will a grease trap be required for the project? If so, what size grease trap will be required, and where will this grease trap be located? The applicant should discuss this further with the City's Building Department at this time.

3. The plan shall be updated to show proposed grading across the site, as well as providing spot elevations along the curb lines. ***Applicant's engineer notes that this will be provided with a future submission.***

4. Although the location of the proposed water service to service the site is shown, it is recommended that the sizing of this new service line be determined at this time, as the City of Beacon is currently working on a design for the replacement of the water and sewer mains in Fishkill Avenue. This would allow for the City to ensure the appropriate size service connection is provided on the new water main.

5. A 6" PVC downspout discharge is shown to extend onto Metro-North's property. An agreement with Metro-North will be required for this piping and discharge onto the neighbors parcel, otherwise the discharge pipe shall be relocated.

6. The plan shall reflect a new ADA ramp at the intersection of Townsend where the crosswalk is proposed to connect to the sidewalk.

7. The plan shall reflect a new ADA ramp at the access to and from the trail on the north-east side of the site.

This completes our review at this time. Further comments may be provided based on future submissions. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,
LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

KARC
PLANNING CONSULTANTS, INC.

**TO:** John Gunn, Chair, and the City of Beacon Planning Board

**FR:** KARC Planning Consultants, Inc.

**DATE:** January 14, 2025

**RE:** 420-430 Fishkill Avenue Application for Subdivision & Site Plan, DKH Realty, LLC

---

I have reviewed the following materials regarding the proposed lot merger and re-use of the building located at 420-430 Fishkill Avenue:

- Cover letter by Taylor Palmer of Cuddy + Feder, dated January 2, 2025
- Drainage Report by Hudson Land Design, dated December 24, 2024
- Lighting Fixture Specification Sheets (28 pages)
- Floor Plans and Renderings by Studio Architecture SPC, dated January 2, 2025
- Site Development Plan by Hudson Land Design, dated October 29, 2024, last revised December 31, 2024
- Exhibit A: Responses to Comments Memo by Colliers Engineering, dated December 30, 2024
- Exhibit B: Responses to Comment Memo by Hudson Land Design, dated January 2, 2025
- Correspondence from Debra Adamsons of Landscape Restorations, dated January 2, 2025

**Project Description:**

The applicant is proposing to merge three (3) lots that compromise 420-430 Fishkill Ave and adaptively reuse the existing building on the premises, which was formerly used as a Healy Ford car dealership. The proposed mixed-use development will include a Dunkin' Donuts coffee house with accessory drive through, additional first floor commercial space, and three (3) residential units on the second floor. The property is in the GB Zoning District where restaurant or coffee house, multifamily, office, and retail are permitted uses.

**Comments & Recommendations:**

1. **Parking for Residential Units:** The new location of the tenant-only parking requires residents to cross over the escape lane and drive-thru lane to access the building, with limited visibility as vehicles follow the drive-thru lane around the corner of the building. This location will likely be less safe than the previously identified location for tenant-only parking, relocation is therefore recommended. To address the larger theme of comments, the applicant should discuss the intended experience of future residential tenants on this site, due to the fact that accommodations for the residential use continue to face incompatibilities with the proposed commercial use and accessory drive-thru.

2. **Loading Area:** The previously proposed loading area was removed from the southern portion of the site and replaced with the four designated tenant-only parking spaces discussed above. Per Section 223-26(F)(2), it is within the Planning Board's discretion to determine the location and appropriate number of loading spaces based on the context of the property. The applicant has indicated deliveries will be restricted to overnight hours when the commercial spaces will not be in operation. Overnight deliveries raise concerns regarding noise impacts to tenant onsite and adjacent properties. It is recommend that a designated loading area be identified onsite to accommodate both commercial deliveries as well as residents moving in and out of the proposed units.

3. **Entrance-only Driveway**: The Board's traffic consultant previously voiced a concern of visitors using the southern driveway to "cut" the drive-thru line. The proposed modification to the site plan to eliminate the "deliveries only" driveway and remove bollards separating the escape lane and drive-thru lane make this scenario all the more likely.

4. **EV Charging Stations:** Has the applicant considered the addition of EV charging stations on site to serve residents as well as visitors and employees of the proposed retail/office space?

5. **Laundromat:** The applicant previously indicated that the three parking spaces on the northern portion of the site may be used by patrons of the adjacent Laundromat. We strongly support this shared use of parking along the Fishkill Avenue Corridor. One additional amenity that could serve intent would be the addition of a fourth bench near these parking spaces and the Laundromat so that patrons have the option to site outside but still keep and eye on their machines.

6. **Lighting Plan:** A Lighting Plan is proposed on sheet LT-1. We offer the following comments and questions to ensure compliance with all requirements of Section 223-14B.

    a. What are the proposed hours of lighting onsite? Are dimmers and timers proposed?

    b. Based on google maps and the proposed site plan, it appears that the existing light poles within the parking area will be retained, but that the current two tired luminaire system will be reduced to one tier of lights at 20 feet height. The applicant should confirm and note removal of the upper tier of lights on the demolition and removal plan.

    c. Please note the proposed color temperature for each fixture in the Luminaire schedule. Section 223-14(B)(3)(c) permits between 2,400 and 4,000k. Based on the spec sheets provided, many of the proposed fixtures can accommodate a range of temperature options. For example, the Tessie wall sconce comes in a 3,000k, 3,500k, or 4,000k option.

d. Please note the proposed color rendering index for each fixture in the Luminaire schedule. Section 223-14(B)(3)(d) permits between 80 to 100.

e. With regards to Lighting note 1, please clarify that "full cutoff" is proposed, not just "cutoff"




7. **Landscaping Plan:** A proposed landscaping plan with planting details should be provided for review. The applicant has indicated that such plan is forthcoming and provided a general concept letter by Debra Adamsons.

8. **Crosswalk:** The proposed crosswalk at the "T" intersection of Townsend Street and Fishkill Avenue is a welcome addition that will facilitate pedestrian access to the site and to the proposed connection to the future rail trail / greenway trail. Since this is an unsignalized intersection, inclusion of a rapid repeat flashing beacon (RRFB) or other improvements should be considered to provide pedestrians with increased visibility. The applicant has proposed a painted crossing and signage. Additional measures may be required to ensure safe pedestrian crossings.

If you have any questions or need additional information, please feel free to contact me.

Natalie Quinn
Beacon Planning Consultant

Cc: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer
Taylor M. Palmer, Cuddy + Fedder LLP
Daniel G. Koehler, P.E., Hudson Land Design

**City of Beacon Planning Board Agenda**
**01/14/2025**

**Title:**

Continue review of application for Site Plan Approval, Mixed-Use Commercial and Residential, 291 Main Street, submitted by Telephone Building Beacon, LLC.

**ATTACHMENTS**

291 Main PB 1.14.25 Architect Response Letter_t_241231.pdf

291 Main PB 1.14.25 HLD Response_2024-1231.pdf

291 Main PB 1.14.25 Project Narrative_241231a.pdf

291 Main PB 1.14.25 I&I Report_2024-1231.pdf

291 Main PB 1.14.25 EAF_2024-1231.pdf

291 Main PB 1.14.25 grading and utility HLD_2024-1231.pdf

291 Main PB 1.14.25 Sheet 1_Site Plan_ Submission 1_241231.pdf

291 Main PB 1.14.25 Submission 1_Sheet 2_Existing Conditions Demolition Plan_241231.pdf

291 Main PB 1.14.25 Sheet 3_Floor Plan_Submission 1_241231.pdf

291 Main PB 1.14.25 Sheet 4_Building Elevations & Views_ Submission 1_241231.pdf

2025.01.09_KARC Review PB_291 Main Street.pdf

Lanc & Tully 291 Main Street 01-12-25 review.pdf

John Gunn - Planning Board Chairman
City of Beacon
One Municipal Plaza
Beacon, NY 12508

**Re: 291 Main Street, Beacon, New York**
*Site Plan Application – Responses to Comments*

December 31, 2024

Dear Chairman Gunn and Members of the Planning Board,

Below please find our responses to the comments included in KARC Planning Consultant's Memorandum, dated November 8, 2024.

**KARC Planning Consultant's Comment Responses:**

1. **Clerical Corrections:**
   a. Site Plan Application Form: Under "Zoning District(s)" the applicant should indicate that the project also falls within the Historic District and Landmark Overlay Zone pursuant to the city zoning map dated November 2, 2023.

      *Response: It will be noted that the project falls within the HDLO Zone.*

   b. Environmental Assessment Form: The description of the proposed action states that the existing building is 3 stories. This should be corrected to 2 stories.

      *Response: The EAF has been corrected to indicate 2 stories.*

   c. I&I Study: The first paragraph of the letter references the project site as 291 Henry Street. This should be corrected to 291 Main Street.

      *Response: The I & I letter is corrected to show 291 Main Street.*

   d. Floor Plans (sheet 3 of 8): the label for each of the three floors says, "1st floor plan." The label for detail 2 and 3 should be corrected to indicate the 2nd floor plan and 3rd floor plan, respectively.

      *Response: Floor plan labels have been corrected.*

   e. Site Plan: The Bulk Zoning Regulations Table on the Site Plan (sheet 1 of 8) provides two columns for "Main Street Frontage Required" but does not provide a column or calculation for "Main Street Frontage Proposed." The proposed street frontage calculation should be provided and should include both the existing and proposed building frontage.

      *Response: Bulk Zoning Table has been corrected.*

84 Mason Circle | ajs@ajsarch.com | *Tel* 845 838 2490
Beacon, New York 12508 | www.ajsarch.com | *Fax* 845 838 2657

2. **Refuse:** The proposed location of refuse storage should be identified on the site plan

*Response: The refuse storage is enclosed in the building on the 1st floor. Trash containers will be brought to the street on collection days.*

3. **Snow Storage:** The proposed location of snow storge should be identified on the site plan.

*Response: The refuse storage is enclosed in the building on the 1st floor. Trash containers will be brought to the street on collection days.*

4. **Landscaping Plan:** Plantings details should be provided for the proposed landscaped areas. Per Section 223-41.18(E)(12), the Planning Board will review the details to ensure that the proposed landscaped areas enhance the streetscape, provide a landscaped rear yard or courtyard, and are found to be consistent with the intent of the district.

*Response: The Landscaping Plan is being developed, and will be provided in the following submittal.*

5. **Parking Standards:** No minimum number of off-street parking spaces are required within the CMS district due to the proximity of this district to municipal parking areas, public transportation, and pedestrian-oriented streetscapes. A parking maximum of 17 spaces is applied to the proposed project based on the calculation of 1 space per dwelling unit and 3 spaces per every 1,000 GFA of commercial space [550 SF of proposed retail + 3,614 SF of existing office]. A total of 4 parking spaces are currently proposed on site.

To assist with the Planning Board's determination of the appropriate number of off-street parking spaces within the range or 0 to 17 spaces, the Board may request that the applicant provide a narrative addressing the following considerations outline in Sections 223-26(D)(2) and (3).

a. Historic utilization of parking by the existing office space tenants on site
b. Availability of public and on-street parking
c. Comparable analysis of similar uses and properties in the area
d. Proposed demand reduction strategies, including and proposed bike parking per Section223-26(H)(3)

*Response: A narrative will be provided describing Parking.*

6. **Parking Layout:** Dimensions for the column bound parking spaces should be provided. Section223-26(B)(3)(b) states that parking spaces bordered by columns or walls shall not be less than 10 ft wide.

*Response: The parking spaces have been revised and comply with the width requirements.*

7. **Elevations and Design Standards:** Elevations with dimensions and material callouts will be required to complete review of the project and compliance with the design standards outlined in CMS district code. Elevations should be provided for all sides of the proposed building.

*Response: The building has been completely re-designed in response to the comments we received. The new design has a 2-story building at Main Street. The building is 3 stories behind the 2-story section and beyond the*

*step back in the existing Telephone Building. The new design does not interfere with the existing cornice on the Telephone Building.*

8. **Lot for Every Building:** As there are not internal connections proposed between the existing building and the new construction, it is unclear whether the proposed development would be considered an addition or second building with shared party wall. Per Section 223-12(A) regarding "Lot for every building," the Building Inspector should review whether the proposed development is considered one building or two, and whether two buildings are permitted on a single lot in the CMS district. If not, a subdivision application may be required.

> *Response: The Building Inspector made the determination that there can be 2 separate buildings in this case in the CMS District for the proposed uses.f.*

Please refer to Hudson Land Design's letter for responses to Lanc & Tully comments. Thank you. Please let me know if you have any questions.

Sincerely,



Aryeh Siegel
*Aryeh Siegel, Architect*

HUDSON LAND DESIGN

*Civil & Environmental Engineering Consultants*
*174 Main Street, Beacon, New York 12508 (Main Office and Mailing Address)*
*13 Chambers Street, Newburgh, NY 12550 (Satellite Office)*
*Phone: 845-440-6926 Fax: 845-440-6637*
*www.HudsonLandDesign.com*

December 31, 2024

Hon. John Gunn, Chairman
City of Beacon Planning Board
1 Municipal Plaza
Beacon, New York 12508

Re: 291 Main Street Residential Site Plan
Telephone Building Beacon, LLC (Applicant)
291 Main Street
Tax Parcel: 5954-36-893875 (±0.143 acre)
City of Beacon, New York

Dear Chairman Gunn and Members of the Planning Board:

On behalf of the Applicant for the above referenced project, Hudson Land Design (HLD) has revised the Site Plan Set in response to Lanc & Tully's November 7, 2024 comment letter, and KARC's November 8, 2024 comment memorandum. Below is a point-by-point response to the comments received.

**Lanc & Tully November 7, 2024 Comment Letter**

General Comments:

1. Comment noted. The plans show a proposed roof drainpipe being connected to the City drainage system.
2. A project narrative is being provided by Aryeh Seigel under separate cover.
3. Aryeh Seigel has responded to this comment under separate cover.
4. Aryeh Seigel has responded to this comment under separate cover.
5. Aryeh Seigel has responded to this comment under separate cover.
6. The plans on sheet 6 and 7 have been increased to 1"=10' scale.
7. The existing water mains in S. Brett and Main Street along the building have been confirmed with the water superintendent to be 8" and 16" DIP pipe respectively and have

been identified on the plans. The 8" main in S. Brett Street transitions to cast iron pipe south of the project area. The water superintendent has requested that a new connection to the 16" main be avoided if possible as it is very deep. Therefore, the water service connection is being made to the 8" DIP main in S. Brett St.. The new building addition will connect to the new 4" water service within the existing building.

8. The curb-o-let has been replaced with a pipe connection to a new catch basin located at the west curb of S. Brett St.. It is noted that the catch basin will be located slightly on top of an existing sewer line. Furthermore, the existing sewer manhole located just south of the proposed catch basin location may be in conflict with the existing storm pipe. This requires further investigation into the configuration of the existing sewer manhole, and if the City is comfortable with the storm line being in such close proximity to the existing sewer line. If it is found that the existing sewer manhole is in conflict with the proposed storm pipe, the curb-o-let will be the only available option to disconnect the roof drainage from the sanitary sewer. The proposed solution will be updated accordingly after additional investigation is conducted.

9. The restoration detail has been updated. A proposed cut within Main Street is no longer proposed; however, in the event that a cut in Main Street is required, the restoration detail includes a note stating that the required pavement thickness for each layer is minimum and shall match the existing pavement thickness if greater than the required thickness.

10. The monolithic curb and sidewalk detail has been updated to require 4,000 PSI concrete.

**KARC November 8, 2024 Comment Memorandum**

1. Clerical Corrections:
    a. Aryeh Seigel has responded to this comment under separate cover.
    b. The description within the EAF has been corrected to state a 2-story building.
    c. The address has been updated within the I&I report.
    d. Aryeh Seigel has responded to this comment under separate cover.
    e. Aryeh Seigel has responded to this comment under separate cover.
2. Aryeh Seigel has responded to this comment under separate cover.
3. Snow storage is identified on sheet 6 of the site plan set.
4. Aryeh Seigel has responded to this comment under separate cover.
5. Aryeh Seigel has responded to this comment under separate cover.
6. Aryeh Seigel has responded to this comment under separate cover. Parking stalls are 10' wide on the revised plan.
7. Aryeh Seigel has responded to this comment under separate cover.
8. Aryeh Seigel has responded to this comment under separate cover.

The following materials are submitted in support of the project:

- Updated Site Plan Set
- Updated I&I Report
- Updated EAF

Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 845-440-6926.

Sincerely,

Michael A. Bodendorf, P.E.
Principal

cc: Telephone Building Beacon, LLC (via email)
Aryeh Seigel, AIA
Daniel G. Koehler, P.E. (HLD file)

ARYEH SIEGEL
ARCHITECT

# Proposed Addition to 291 Main Street

Project Narrative

December 31, 2024

**Summary:**
Construct a new 2 and 3 story addition to the existing Telephone Building at 291 Main Street.

The addition will have commercial space at the ground floor, and 3 residential apartments on the 2nd and 3rd floors.

There is no proposed interior connection between the existing building and the addition.

The building is designed with a 2 story section along Main Street to reduce the impact of the proposed addition on the existing building. This keeps the existing cornice completely intact. The building connects to the existing building with a stepped back glass connection to reduce the apparent visual connection. The façade of the addition reflects elements and proportions of the existing building while offering a modern interpretation.

There are 4 parking spaces, including one ADA parking space, at the rear of the building. Some of the parking spaces are covered below the proposed addition. There are 3 parking spaces maximum permitted by Zoning Code for the residential use in the CMS District, and no minimum number of parking spaces are required.

The commercial uses require a maximum of 13 spaces, and a minimum of 3 spaces.

The existing Telephone Building provides parking spaces for two of the existing commercial tenants, and the Applicant states that parking has not been an issue since he has owned the building. The two tenants use those parking spaces Monday to Friday between 9am and 5pm. There is street parking generally available.

Nearby public parking lots include:

- DMV Building – approximately 650 feet away
- Henry Street - approximately 750 feet away
- Rite Aid - approximately 750 feet away

We did not find specific comparable projects in the area to review.

The Applicant will review the feasibility of adding bicycle parking on site to further reduce the need for parking.

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HUDSON
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*www.HudsonLandDesign.com*

December 31, 2024

Mr. Bruce Flower
City of Beacon Building Inspector
1 Municipal Center
Beacon, NY 12508

Re: Infiltration and Inflow Investigation
291 Main Street Site Plan
Tax ID: 5954-36-893875 (±0.14 Acres)
City of Beacon, New York

Dear Mr. Flower,

Hudson Land Design (HLD) has completed an infiltration and inflow investigation at the above referenced parcel as required by the City of Beacon. The investigation was conducted on February 15, 2024 at the existing building located at 291 Main Street, which consists of a two-story mixed use building, commonly known as "The Telephone Building".

The first phase of the study consisted of an exterior inspection of the building to determine the location of roof leader discharge points. The existing building has a flat roof with roof drains that drain through internal plumbing within the building. No external roof leaders were present as seen in the following photos.



View looking north and west elevation of the building



View looking at west elevation of the building



View looking at south elevation of the building

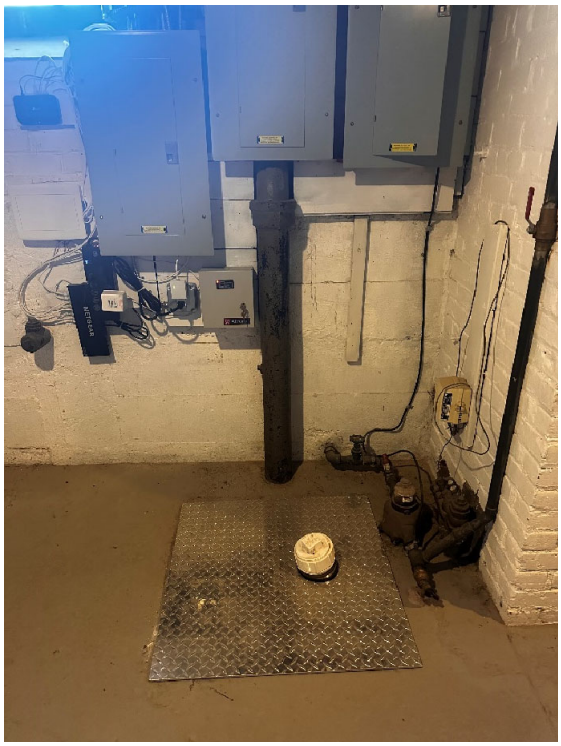


View looking south and east elevation of the building

The second phase of the study consisted of an interior inspection of the building to determine if there are any illicit connections to the building sewer line from sump pumps, floor drains and/or interior roof drains. HLD personnel were able to observe the attic section of the building where two roof drains were observed. The roof drains are collected by internal plumbing that travels downward through the building within an internal pipe chase. It was determined that this downward pipe has sanitary sewer connections to it within the building. The combined pipe is connected to the main sewer that exits the building toward South Brett St.; therefore, it is confirmed that the roof drains are connected to the City sanitary sewer system.



A view of the main sewer pipe in the basement. The roof drain plumbing is connected to this pipe in the attic.



A view of the sewer cleanout within the basement floor. The sewer pipe leads toward Main St.

No sump pumps or floor drains were observed within the building basement. Stormwater runoff calculations were performed to determine the amount of stormwater runoff entering the City of Beacon's sanitary sewer system during rainfall. The table below shows runoff volumes discharged to the sanitary sewer system that will be eliminated by disconnecting the roof drains from the sewer plumbing and redirecting to the City stormwater system.

| Roof Area | 1-year Peak Rate (cfs) | 1-year Peak Volume (acre-ft) | 2-year Peak Rate (cfs) | 2-year Peak Volume (acre-ft) | 5-year Peak Rate (cfs) | 5-year Peak Volume (acre-ft) | 10-year Peak Rate (cfs) | 10-year Peak Volume (acre-feet) |
|---|---|---|---|---|---|---|---|---|
| 1,800 sqft | 0.15 | 0.008 | 0.18 | 0.009 | 0.23 | 0.012 | 0.34 | 0.018 |

Notes have been added to the site plan set requiring the roof drains to be disconnected from the building's sanitary system and redirected to the City's stormwater collection system. A new roof pipe is proposed to discharge roof runoff to a proposed catch basin on the west side of South Brett St., as there are no drainage structures within the vicinity of the building. A 15" HDPE pipe is proposed to be connect the new catch basin to an existing City catch basin located in South Brett St. approximately 45 feet south of the parcel.

Other than the roof drains, HLD did not find any other illicit connections from the building located at 291 Main Street to the City of Beacon's sanitary sewer collection system. Should you have any questions, please feel free to call my direct line at 845-765-8956.

Sincerely,

Michael A. Bodendorf, P.E.
Principal

cc: Telephone Building Beacon, LLC (via email)
Beacon Planning Board
Daniel G. Koehler, P.E. (HLD file)

# *Short Environmental Assessment Form*
## *Part 1 - Project Information*

**Instructions for Completing**

**Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

**Part 1 – Project and Sponsor Information**

Name of Action or Project:
291 Main Street Addition

Project Location (describe, and attach a location map):
291 Main Street Beacon, NY 12508

Brief Description of Proposed Action:
A proposed 2 and 3-story addition to the existing 2-story building located on the subject parcel. The building addition will consist of +/- 600 sqft of retail on the first floor and 4 residential apartments on the second and third floors. The rear parking lot will be re-striped to accommodate the building addition.

| Name of Applicant or Sponsor: | Telephone: 646-836-8470 |
|---|---|
| Telephone Building Beacon LLC (Shady Twal) | E-Mail: shady.twal@gmail.com |

Address:
291 Main Street

| City/PO: | State: | Zip Code: |
|---|---|---|
| Beacon | NY | 12508 |

| | NO | YES |
|---|---|---|
| 1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2. | ☑ | ☐ |
| 2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: City of Beacon - Site Plan Approval | ☐ | ☑ |

3. a. Total acreage of the site of the proposed action? 0.14 acres
   b. Total acreage to be physically disturbed? 0.09 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.14 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☑ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

| | NO | YES | N/A |
|---|---|---|---|
| 5. Is the proposed action, | | | |
| a. A permitted use under the zoning regulations? | ☐ | ☑ | ☐ |
| b. Consistent with the adopted comprehensive plan? | ☐ | ☑ | ☐ |

| | NO | YES |
|---|---|---|
| 6. Is the proposed action consistent with the predominant character of the existing built or natural landscape? | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? | | |
| If Yes, identify: _____ | ☑ | ☐ |

| | NO | YES |
|---|---|---|
| 8. a. Will the proposed action result in a substantial increase in traffic above present levels? | ☑ | ☐ |
| b. Are public transportation services available at or near the site of the proposed action? | ☐ | ☑ |
| c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action? | ☐ | ☑ |

| | NO | YES |
|---|---|---|
| 9. Does the proposed action meet or exceed the state energy code requirements? | | |
| If the proposed action will exceed requirements, describe design features and technologies: | | |
| The proposed action will meet energy code requirements. _____ | ☐ | ☑ |
| _____ | | |

| | NO | YES |
|---|---|---|
| 10. Will the proposed action connect to an existing public/private water supply? | | |
| If No, describe method for providing potable water: _____ | ☐ | ☑ |
| _____ | | |

| | NO | YES |
|---|---|---|
| 11. Will the proposed action connect to existing wastewater utilities? | | |
| If No, describe method for providing wastewater treatment: _____ | ☐ | ☑ |
| _____ | | |

| | NO | YES |
|---|---|---|
| 12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? | ☑ | ☐ |
| According to the CRIS website, the subject parcel and adjacent parcels are within the buffer zone of archaeologically sensitive areas. A token has been set up with CRIS. | ☐ | ☑ |
| b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? | | |

| | NO | YES |
|---|---|---|
| 13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? | ☑ | ☐ |
| b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? | ☑ | ☐ |
| If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ | | |
| _____ | | |
| _____ | | |

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☑ Urban ☐ Suburban

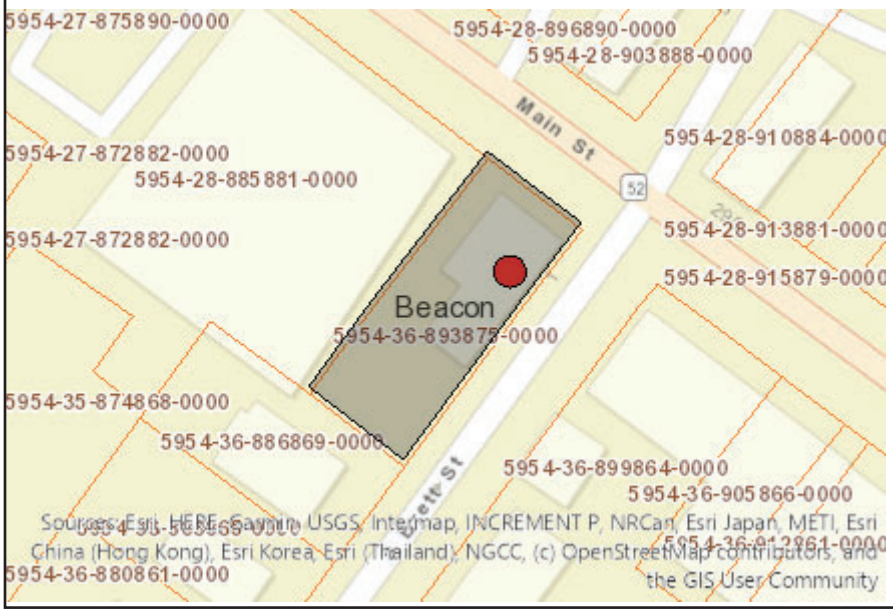
| | NO | YES |
|---|---|---|
| 15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?<br>Indiana Bat Note: No trees will be removed as part of the project. | ☐ | ☑ |
| 16. Is the project site located in the 100-year flood plan? | ☑ | ☐ |
| 17. Will the proposed action create storm water discharge, either from point or non-point sources?<br>If Yes, | ☐ | ☑ |
| a. Will storm water discharges flow to adjacent properties? | ☑ | ☐ |
| b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? | ☐ | ☑ |
| If Yes, briefly describe: | | |
| 18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?<br>If Yes, explain the purpose and size of the impoundment: | ☑ | ☐ |
| 19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?<br>If Yes, describe: | ☑ | ☐ |
| 20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?<br>If Yes, describe:<br>A search of the DEC remedial database revealed no records on the subject parcel or adjacent parcel. | ☐ | ☑ |

**I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**

Applicant/sponsor/name: Michael A. Bodendorf, PE Date: 12/31/2024

Signature: _____ Title: Engineer for Applicant

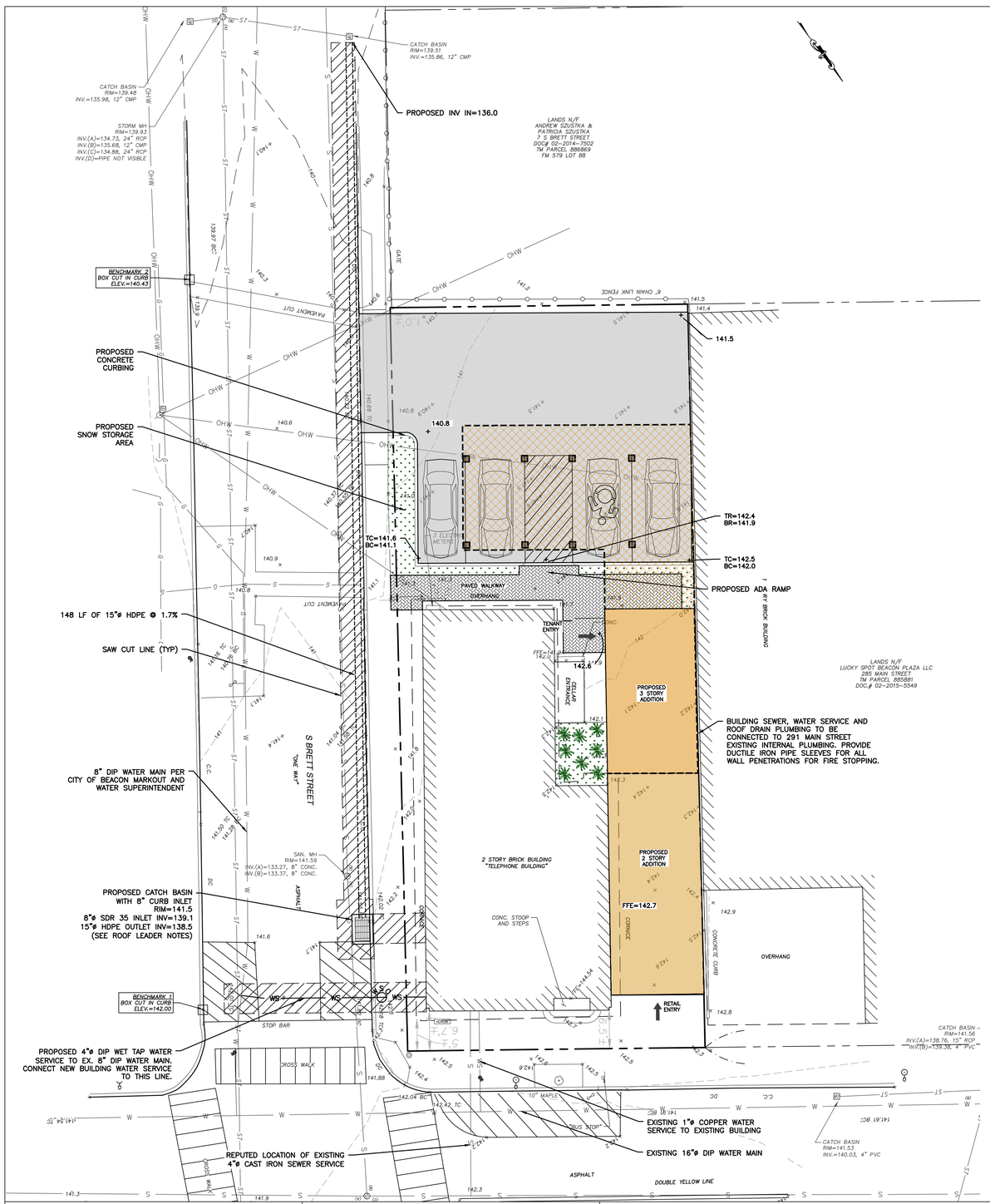
PRINT FORM




**Disclaimer:** The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.




| | |
|---|---|
| Part 1 / Question 7 [Critical Environmental Area] | No |
| Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites] | No |
| Part 1 / Question 12b [Archeological Sites] | Yes |
| Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies] | No |
| Part 1 / Question 15 [Threatened or Endangered Animal] | Yes |
| Part 1 / Question 15 [Threatened or Endangered Animal - Name] | Indiana Bat |
| Part 1 / Question 16 [100 Year Flood Plain] | No |
| Part 1 / Question 20 [Remediation Site] | Yes |




## LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING HYDRANT
- EXISTING WATER VALVE
- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING STORM WATER MANHOLE
- EXISTING GAS VALVE

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE

## SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962. SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS (IF APPLICABLE), WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
3. THE SITE CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF UTILITY LINES WITHIN SOUTH BRETT STREET VIA INVESTIGATIVE TEST PIT EXCAVATIONS. ANY UTILITY CONFLICTS SHALL BE BROUGHT TO THE DESIGN ENGINEER'S ATTENTION IMMEDIATELY.
4. THE PROPOSED BUILDING SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES.
5. THE WATER SERVICE LINE AND METER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
6. THE WATER SERVICE LINE TO THE BUILDING SHALL BE PER MEP ENGINEER TO MEET SPRINKLER REQUIREMENTS.
7. THE EXISTING 3/4" WATER SERVICE STUB TO THE FRONT BUILDING MAY BE USED OR ABANDONED IN PLACE.
8. A ROAD OPENING PERMIT SHALL BE REQUIRED FOR THE INSTALLATION OF THE UNDERGROUND UTILITIES. STREET CLOSURE FOR SERVICE CONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS.
9. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE PROPOSED DRIVEWAY SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE.
10. SUMP PUMP TO BE PROVIDED FOR FOOTING DRAIN, IF NECESSARY. THE TYPE OF PUMP AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT.
11. THE CITY OF BEACON BUILDING DEPARTMENT SHALL BE PROVIDED ACCESS TO VERIFY THE LOCATION OF THE EXISTING ROOF LEADERS AND SUMP PUMPS AND THE AREA THEY DRAIN TO.

## EXISTING SIDEWALK, CURBING AND ASPHALT PAVEMENT REPAIR NOTES:

1. THE CONTRACTOR SHALL REPAIR AND REPLACE IN-KIND EXISTING CONCRETE SIDEWALKS AND CURBING, AND ASPHALT PAVEMENT WITHIN THE CITY R.O.W. AS A RESULT OF UTILITY WORK.
2. THE SIDEWALKS SHALL BE SAW CUT AT AN EXISTING CONSTRUCTION JOINT OR CONTROL JOINT SO THAT THE FINISHED CONSTRUCTION AND CONTROL JOINT SPACING MATCHES EXISTING.
3. CUTS THROUGH EXISTING PAVEMENT SHALL BE MADE VIA SAW CUT AND REPAIRED IN ACCORDANCE WITH THE DETAILS ON CD-1.

## GENERAL CONSTRUCTION NOTES:

1. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED PRIOR TO CONSTRUCTION. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES.

2. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.

3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS, SANITARY MANHOLES AND WATERLINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.

4. PIPE CONNECTIONS TO ALL CATCH BASINS SHALL BE MADE WATERTIGHT, WITH PARTICULAR ATTENTION BEING PAID TO CONNECTIONS LOCATED WITHIN 10 FEET OF WATER AND SEWER MAINS (AND SERVICE LATERALS).

## ROOF LEADER NOTES:

1. AN INFLOW AND INFILTRATION INVESTIGATION REVEALED THAT THE ROOF DRAINS IN THE EXISTING BUILDING ARE CONNECTED TO THE SANITARY SEWER SYSTEM. THE ROOF DRAIN PIPES SHALL BE DISCONNECTED FROM THE SANITARY SEWER WITHIN THE BUILDING AND DISCHARGED TO THE CITY DRAINAGE SYSTEM SEPARATELY.

2. A SEPARATE 6" SCH 40 PVC PIPE SHALL BE CONNECTED TO THE ROOF DRAINS IN THE ATTIC SPACE AND DIRECTED DOWN THROUGH THE EXISTING PIPE CHASE WITHIN THE BUILDING TO THE BASEMENT. THE PIPE WILL THEN BE DIRECTED THROUGH THE EAST WALL OF THE BUILDING AND CONNECTED TO THE CURB-O-LET OUTSIDE THE BUILDING.

3. THE ROOF DRAINS FROM THE NEW BUILDING ADDITION SHALL BE CONNECTED TO THE NEW ROOF LEADER PIPE WITHIN THE EXISTING BUILDING.

4. THERE ARE NO CATCH BASINS IN THE VICINITY OF THE BUILDING. THEREFORE, A CURB-O-LET IS PROPOSED TO DISCHARGE ROOF RUNOFF TO THE GUTTER LINE OF SOUTH BRETT ST., THE ROAD GRADE SLOPES TOWARD THE SOUTH. THERE IS A CATCH BASIN LOCATED APPROXIMATELY 45 FEET SOUTH OF THE PARCEL ON THE WEST SIDE OF SOUTH BRETT ST.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: MAB | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 12/31/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 10 ft.

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STATE OF NEW YORK MICHAEL A. BOBINSKI 084466 LICENSED PROFESSIONAL ENGINEER

SEAL

HUDSON LAND DESIGN

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

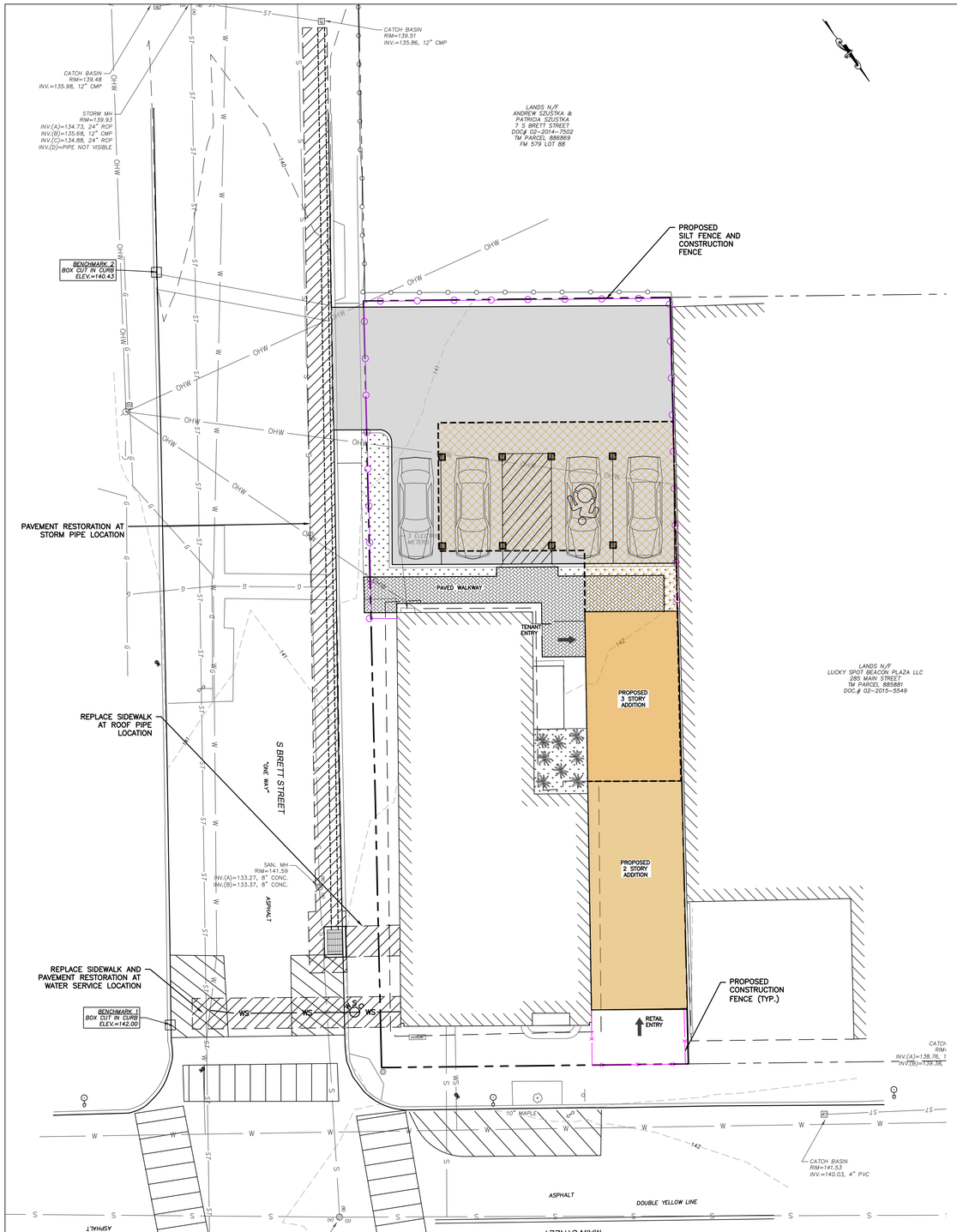
GRADING & UTILITY PLAN

# 291 MAIN STREET-TELPHONE BUILDING

291 MAIN STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-36-893875

| | |
|---|---|
| JOB #: | 2024:034 |
| DATE: | 10/29/24 |
| SCALE: | 1" = 10' |
| TITLE: | GU-1 |
| SHEET: | 6 OF 8 |

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW




## LEGEND:

- EXISTING PROPERTY LINE
- ADJOINING PROPERTY LINE
- 250 EXISTING MAJOR CONTOUR
- 252 EXISTING MINOR CONTOUR
- OHW EXISTING OVER HEAD WIRE
- EXISTING UTILITY POLE
- SS EXISTING SEWER SERVICE LINE
- S EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEAN OUT
- W EXISTING WATER LINE
- WS EXISTING WATER SERVICE LINE
- EXISTING HYDRANT
- EXISTING WATER VALVE
- ST EXISTING STORM WATER LINE
- EXISTING CATCH BASIN
- EXISTING STORM WATER MANHOLE
- EXISTING GAS VALVE

- PROPOSED PROPERTY LINE
- PROPOSED SET BACK LINE
- 250 PROPOSED MAJOR CONTOUR
- 252 PROPOSED MINOR CONTOUR
- PROPOSED EASEMENT
- PROPOSED TREE LINE
- SS PROPOSED SEWER SERVICE LINE
- PROPOSED SEWER MANHOLE
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- ST PROPOSED STORM WATER LINE
- RL PROPOSED ROOF LEADER LINE
- PROPOSED ROOF LEADER
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WELL
- PROPOSED HYDRANT
- PROPOSED WATER SHUT OFF VALVE
- PROPOSED WATER VALVE
- PROPOSED SILT FENCE
- PROPOSED CONSTRUCTION FENCE

## EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE PROVIDED ON THIS SHEET. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.

2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G., SWALES, CULVERTS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. SEDIMENT AND TRASH SHALL BE REMOVED, AS NECESSARY.

3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

4. ANY PILE OF POTENTIALLY EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.

5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THE APPROVED SITE PLAN DETAIL SHEET.

6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.

7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.

8. THE PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.

9. THE CITY MAY INSPECT EROSION AND SEDIMENT CONTROL PRACTICES ON THE SITE DURING CONSTRUCTION AND RECOMMEND THAT THE CONTRACTOR INSTALL ADDITIONAL EROSION CONTROL MEASURES IF DEEMED NECESSARY TO PROTECT ANY UNDISTURBED AREAS OF THE SITE. ANY SUCH REQUESTS SHALL BE MADE DIRECTLY TO THE CONTRACTOR AND QUALIFIED PROFESSIONAL AND FOLLOWED UP WITH A WRITTEN NOTIFICATION TO THE DEVELOPER. IN ADDITION, THE CITY SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS.

10. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (AKA SUMP PIT) TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.

11. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED PER THE APPROVAL OF THE ENGINEER SUPERVISING CONSTRUCTION.

## INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

PERMANENT AND TEMPORARY VEGETATION:

INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

SILT FENCE:

INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

DUST CONTROL:

SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORK. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

CATCH BASINS:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION AND DEBRIS, AND REMOVED AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: MAB | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 12/31/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |

GRAPHIC SCALE
10 0 5 10 20 40
( IN FEET )
1 inch = 10 ft.

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SEAL

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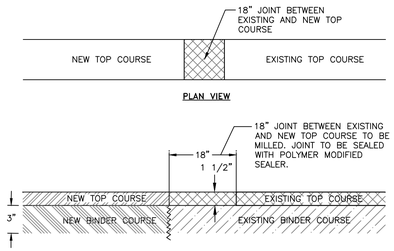
EROSION & SEDIMENT CONTROL PLAN

# 291 MAIN STREET-TELPHONE BUILDING

291 MAIN STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954-36-893875

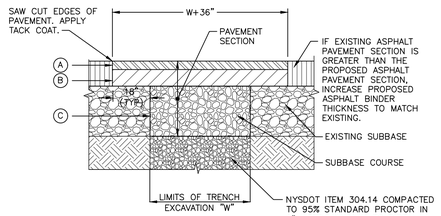
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| JOB #: | 2024:034 |
| DATE: | 10/29/24 |
| SCALE: | 1" = 10' |
| TITLE: | ESC-1 |
| SHEET: | 7 OF 8 |

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NOTES:
1. 3" BINDER COURSE AND 1½" TOP COURSE TO BE USED FOR RESTORATION OF PAVEMENT WITHIN CITY ROADS.
2. EXCAVATIONS ARE TO BE SAW CUT SMOOTH, ALL EDGES TACK COATED, AND ALL SEAMS SEALED WITH A HOT POLYMER MODIFIED CRACK SEALANT.
3. IF EXISTING ASPHALT PAVEMENT DEPTH IS GREATER THAN THE PROPOSED ASPHALT PAVEMENT SECTION, INCREASE PROPOSED ASPHALT BINDER THICKNESS TO MATCH EXISTING.

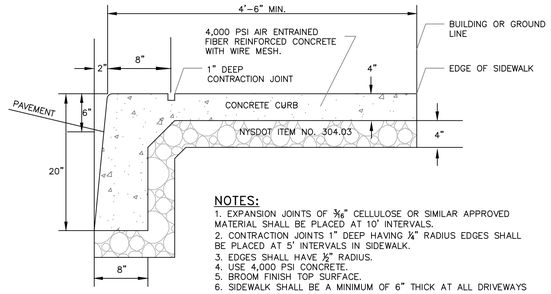
## MILLED KEYWAY DETAIL
NOT TO SCALE




LEGEND
- (A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
- (B) 3–1/2" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
- (C) 10" GRANULAR SUBBASE COURSE– NYSDOT ITEM 304.14

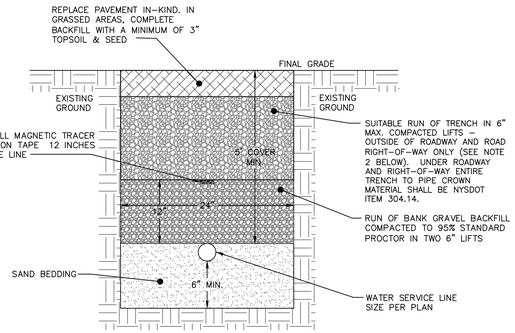
NOTES:
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

## STREET PAVEMENT RESTORATION DETAIL
NOT TO SCALE



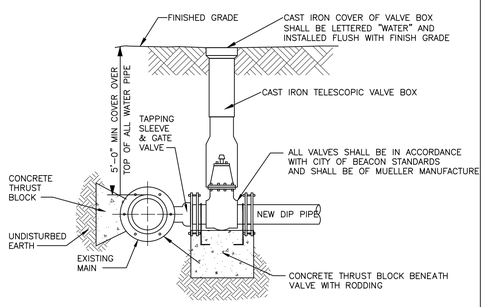

NOTES:
1. EXPANSION JOINTS OF 3/8" CELLULOSE OR SIMILAR APPROVED MATERIAL SHALL BE PLACED AT 10' INTERVALS.
2. CONTRACTION JOINTS 1" DEEP HAVING ¼" RADIUS EDGES SHALL BE PLACED AT 5' INTERVALS IN SIDEWALK.
3. EDGES SHALL HAVE ½" RADIUS.
4. USE 4,000 PSI CONCRETE.
5. BROOM FINISH TOP SURFACE.
6. SIDEWALK SHALL BE A MINIMUM OF 6" THICK AT ALL DRIVEWAYS AND HANDICAP RAMPS.
7. MAXIMUM SLOPE OF 1 ON 12 TO BE USED WHERE SIDEWALK TERMINATES AT HANDICAP RAMPS.

## MONOLITHIC CURB AND SIDEWALK DETAIL
NOT TO SCALE



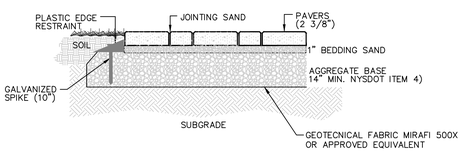

NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOCATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.

## WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



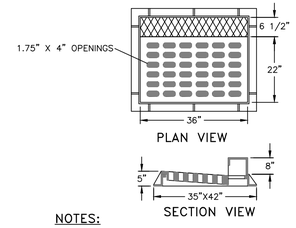

NOTES:
1. TAPPING SLEEVE SHALL BE USED IT THE SECTION OF WATER MAIN IN THE VICINITY OF THE CONNECTION CANNOT BE SHUT DOWN AND ISOLATED.
2. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2–INCH SQUARE–OPERATING NUT PAINTED RED.
3. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
4. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H–615, AND T–2630 RESPECTIVELY.

## TAPPING SLEEVE DETAIL
NOT TO SCALE



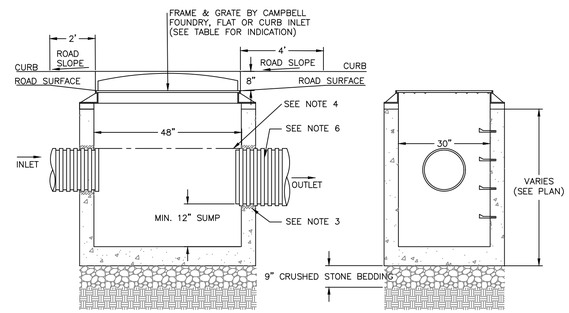

NOTE:
THE CONCRETE PAVER DRIVE SHALL SUPPORT A MINIMUM OF 75,000 POUNDS PER APPENDIX "D" OF THE 2020 INTERNATIONAL BUILDING CODE

## CONCRETE PAVER DETAIL
NOT TO SCALE



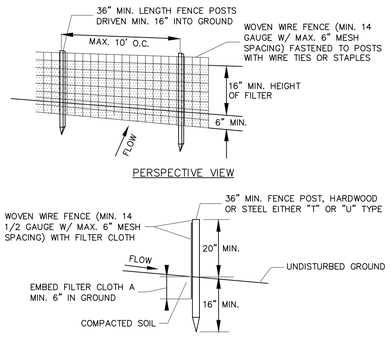

NOTES:
1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
2. ALL CATCH BASINS TO RECEIVE CURB INLETS UNLESS OTHERWISE NOTED.

## CAST IRON STORMWATER CURB INLET GRATE DETAIL
NOT TO SCALE



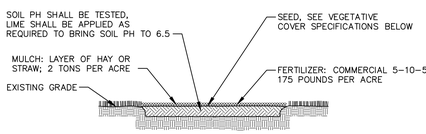

NOTES:
1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
6. HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.

## CATCH BASIN DETAIL
NOT TO SCALE




NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

## SILT FENCE DETAIL
NOT TO SCALE




NOTES:
1. TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
2. SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:

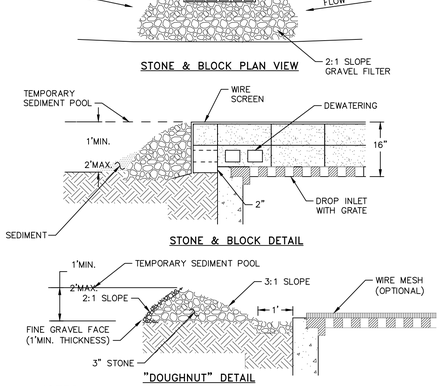
| | |
|---|---|
| 65% KENTUCKY BLUE GRASS BLEND | 114 POUNDS PER ACRE |
| 20% PERENNIAL RYEGRASS | 35 POUNDS PER ACRE |
| 15% FINE FESCUE | 26 POUNDS PER ACRE |
| | 175 POUNDS PER ACRE |

3. SEED MIXTURE FOR USE IN SHADY AREAS:

| | |
|---|---|
| 80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS | 138 POUNDS PER ACRE |
| 20% FINE FESCUE | 37 POUNDS PER ACRE |
| | 175 POUNDS PER ACRE |

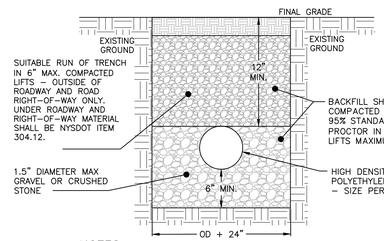
4. SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
5. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20%. TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

## TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE




NOTES:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2–3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

## CATCH BASIN INLET PROTECTION DETAIL
NOT TO SCALE




NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

## STORM LINE TRENCH DETAIL
NOT TO SCALE

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

| DRAWN BY: CMB | | | | CHECKED BY: MAB | | | |
|---|---|---|---|---|---|---|---|
| REVISIONS: | | | | REVISIONS: | | | |
| NO. | DATE | DESCRIPTION | BY | NO. | DATE | DESCRIPTION | BY |
| 1 | 12/31/24 | PER PLANNING BOARD COMMENTS | CMB | | | | |

Dig Safely. New York Call 811 before you dig

STATE OF NEW YORK MICHAEL A. BODENDORF 082446 LICENSED PROFESSIONAL ENGINEER

SEAL

HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845–440–6926

CONSTRUCTION DETAILS

291 MAIN STREET–TELPHONE BUILDING

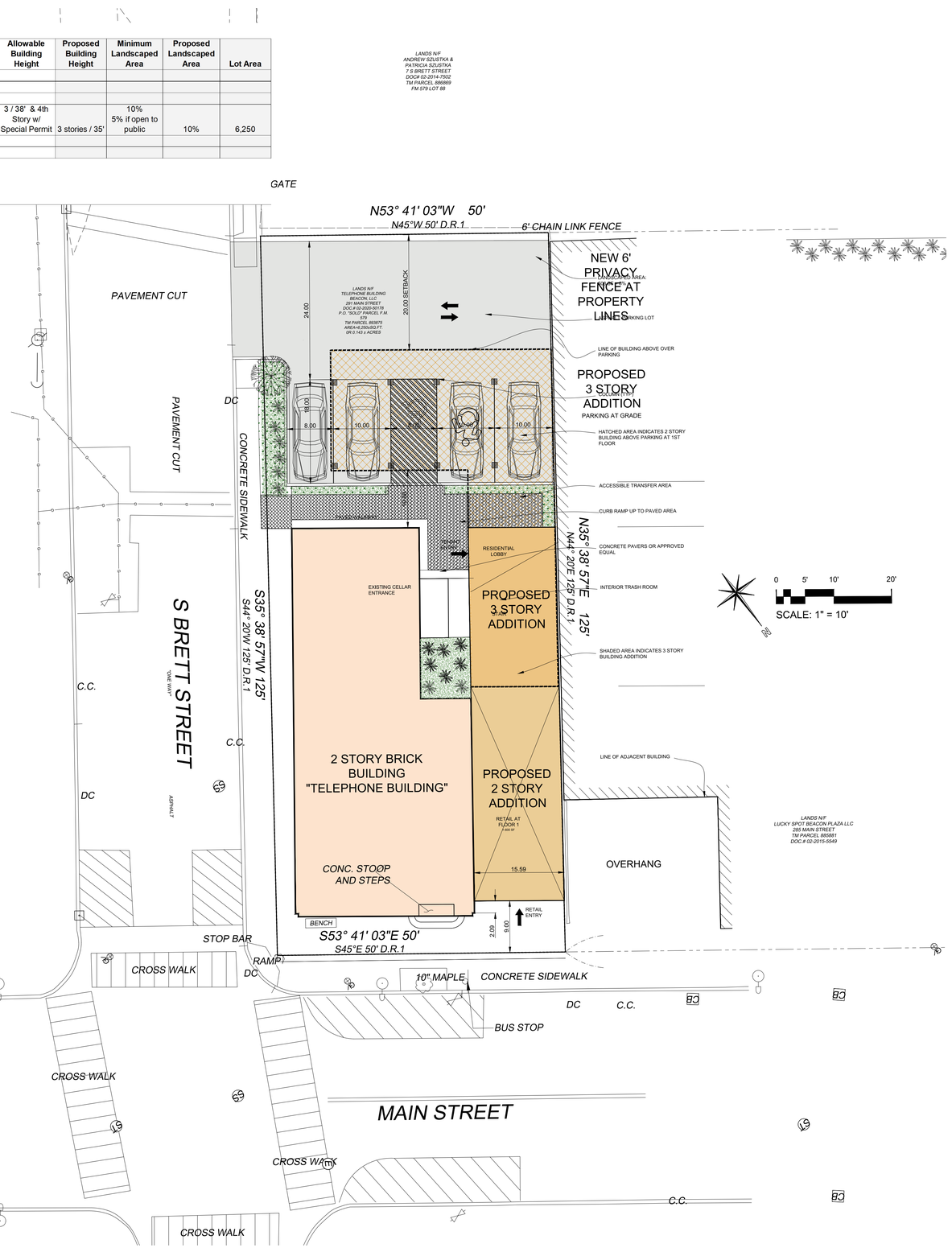
291 MAIN STREET
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 5954–36–893875

| | |
|---|---|
| JOB #: | 2024:034 |
| DATE: | 10/29/24 |
| SCALE: | AS SHOWN |
| TITLE: | CD–1 |
| SHEET: | 8 OF 8 |

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

## Bulk Zoning Regulations Table

| | Required Setbacks | | | Proposed Setbacks | | | Main Street Frontage Required | Main Street Frontage Proposed | Minimum Lot Depth | Proposed Lot Depth | Allowable Building Height | Proposed Building Height | Minimum Landscaped Area | Proposed Landscaped Area | Lot Area |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Front | Side | Rear | Front | Side | Rear | | | | | | | | | |
| **Zoning District** | | | | | | | | | | | | | | | |
| **CMS** | 0'-10' | 0' | 20' | 10' | 0' | 20' | 100% | 100% | 75' | 125' existing | 3 / 38' & 4th Story w/ Special Permit | 3 stories / 35' | 10% 5% if open to public | 10% | 6,250 |




## Site Plan

Scale: 1" = 10'



## Location Map

Scale: 1" = 400'

## Zoning Summary

| | |
|---|---|
| Zoning District: | CMS (Central Main Street) |
| Tax Map No.: | 5954-36-893875 |
| Lot Area: | 0.143 Acres (6,250 sf) |
| Building Footprint: | 1,926 sf |
| Historical Overlay District: | Yes |
| Parking Overlay District: | Yes |
| Existing Use: | Commercial |
| Proposed Use: | Mixed-Use: Retail / Office / Residential |

## Parking & Loading

| Use & Parking Requirements | Proposed Area / Count | Parking Requirement |
|---|---|---|
| | | |
| **Residential** | | |
| 1 space per dwelling unit (minimum) | 3 dwelling units | 3 parking spaces maximum |
| | | |
| **Commercial** | | |
| 3 spaces per 1,000 sf GFA (minimum) | 3,650 sf existing + 588 sf proposed = 4,238 sf total commercial | 13 parking spaces maximum |
| | | |
| **Total Required** | | **17 parking spaces maximum** |
| | | |
| **Total Provided** | | **4 parking spaces** See Notes Below |
| | | |

**Notes:**

1. Parking for the residential use is provided on site. See Note 2 below for shared parking since there are both commercial and residential uses on the property. There is no other space for parking on the site.
2. There are municipal parking lots and ample street parking within walking distance from the property
3. Two or more uses on same lot. Where two or more different uses occur on a single lot, the Planning Board may approve the joint use of parking spaces by two or more establishments on the same lot or on contiguous lots, the total capacity of which is less than the sum of the spaces needed for each use individually, provided that said Board finds that the capacity to be provided will substantially meet the intent of this article by reason of variation in the probable time of maximum use by patrons or employees at such establishments and provided that such approval of such joint use shall be automatically terminated upon a change of use at any such establishment.
4. No signage is proposed as part of this application. Retail tenant will apply separately to the Planning Board for their own signage
5. Retail hours of operation: Monday through Sunday 7am – 11pm

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

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| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 12/31/24 | REVISE PER PLANNING BOARD COMMENTS | AJS |

## Index of Drawings


| | |
|---|---|
| Sheet 1 of 8 | Site Plan |
| Sheet 2 of 8 | Existing Conditions & Demolition Plan |
| Sheet 3 of 8 | Building Plans |
| Sheet 4 of 8 | Building Elevations & Renderings |
| Sheet 5 of 8 | Landscape & Lighting Plan (Future) |
| Sheet 6 of 8 | Grading & Utility Plan |
| Sheet 7 of 8 | Erosion and Sediment Control Plan |
| Sheet 8 of 8 | Construction Details |


# Site Plan Application

**Sheet 1 of 8 - Site Plan**


*Owner:*
**Telephone Building Beacon LLC**
221 Beechwood Ave
Poughkeepsie, NY 12601

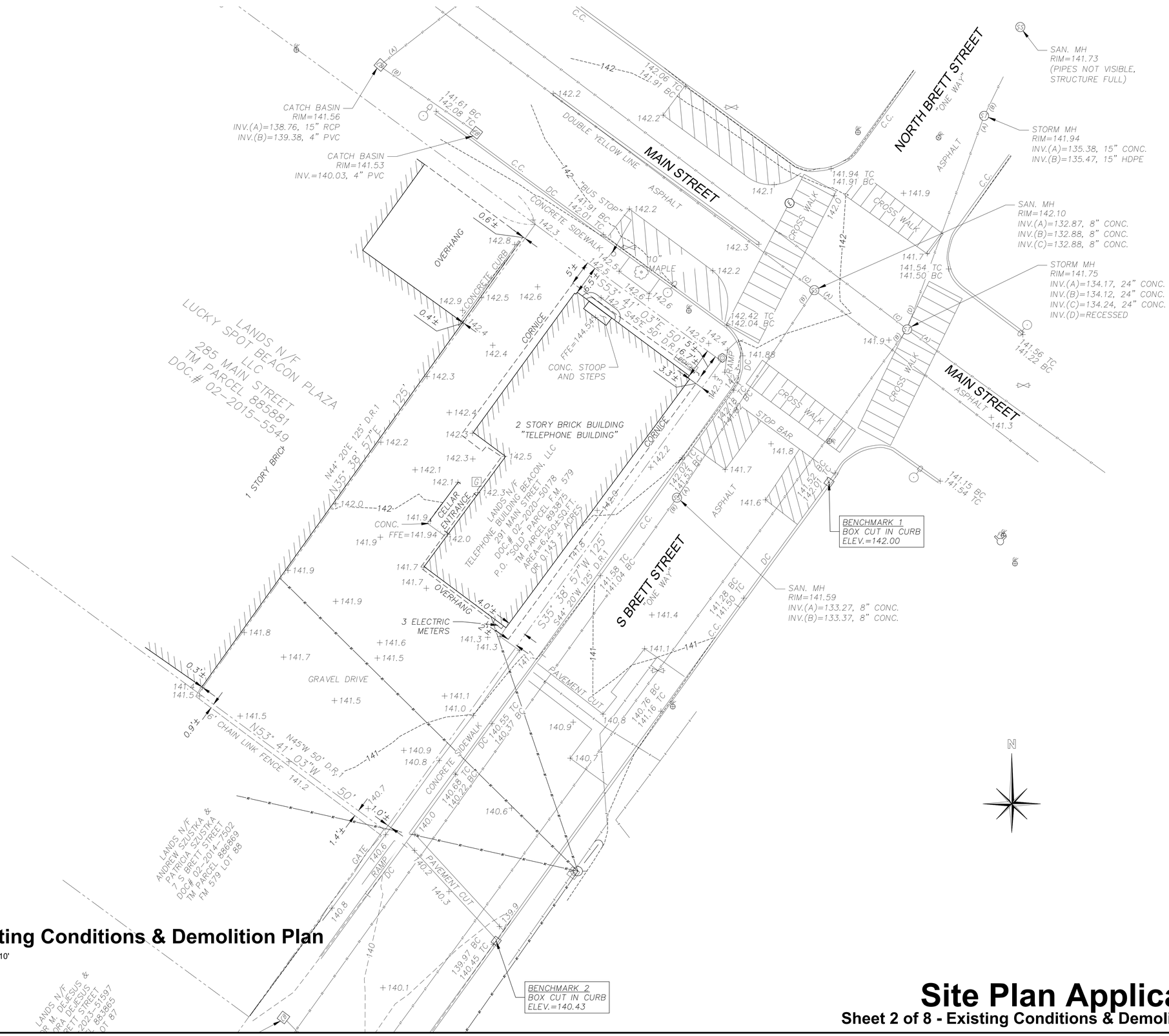
*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Site / Civil Engineer:*
**Hudson Land Design**
174 Main Street
Beacon, New York 12508

*Surveyor:*
**MJ Engineering**
21 Corporate Drive
Clifton Park, New York 12065


## 291 Main Street - Telephone Building

Beacon, New York
Scale: 1" = 10'
October 1, 2024




APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____, SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

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|---|---|---|---|
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| 1 | 12/31/24 | REVISE PER PLANNING BOARD COMMENTS | AJS |

## Existing Conditions & Demolition Plan

Scale: 1" = 10'

# Site Plan Application

**Sheet 2 of 8 - Existing Conditions & Demolition Plan**

## 291 Main Street - Telephone Building

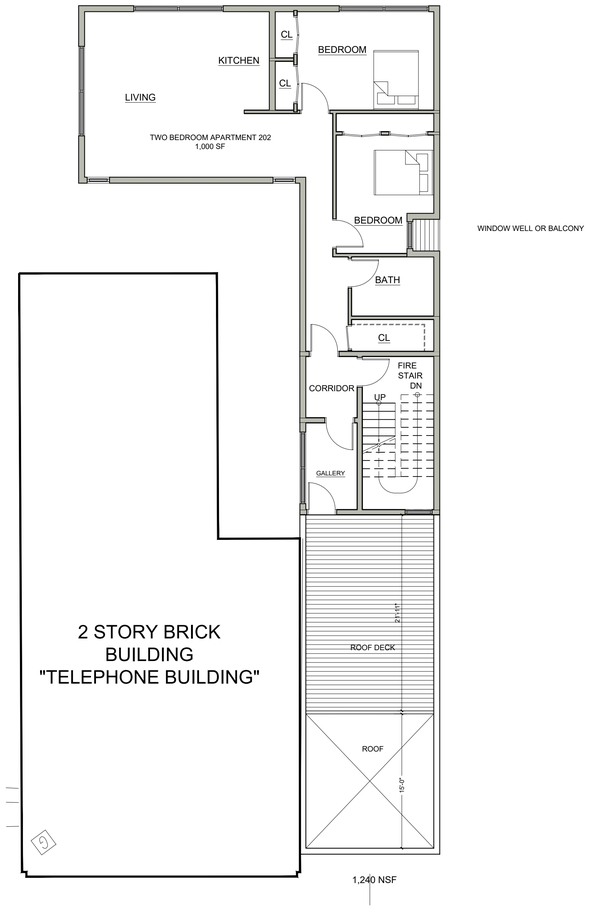
Beacon, New York
Scale: 1" = 10'
October 1, 2024

*Owner:*
**Telephone Building Beacon LLC**
221 Beechwood Ave
Poughkeepsie, NY 12601

*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

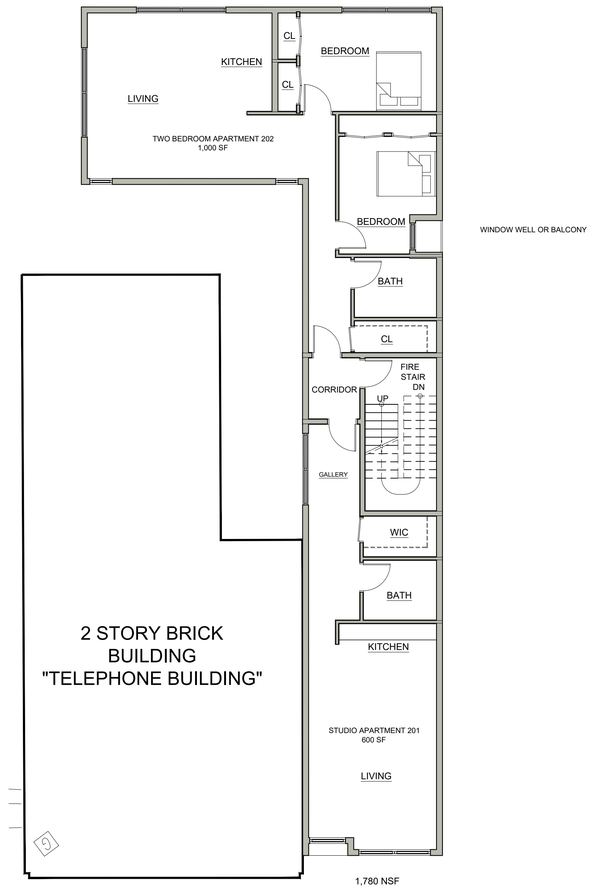
*Site / Civil Engineer:*
**Hudson Land Design**
174 Main Street
Beacon, New York 12508

*Surveyor:*
**MJ Engineering**
21 Corporate Drive
Clifton Park, New York 12065



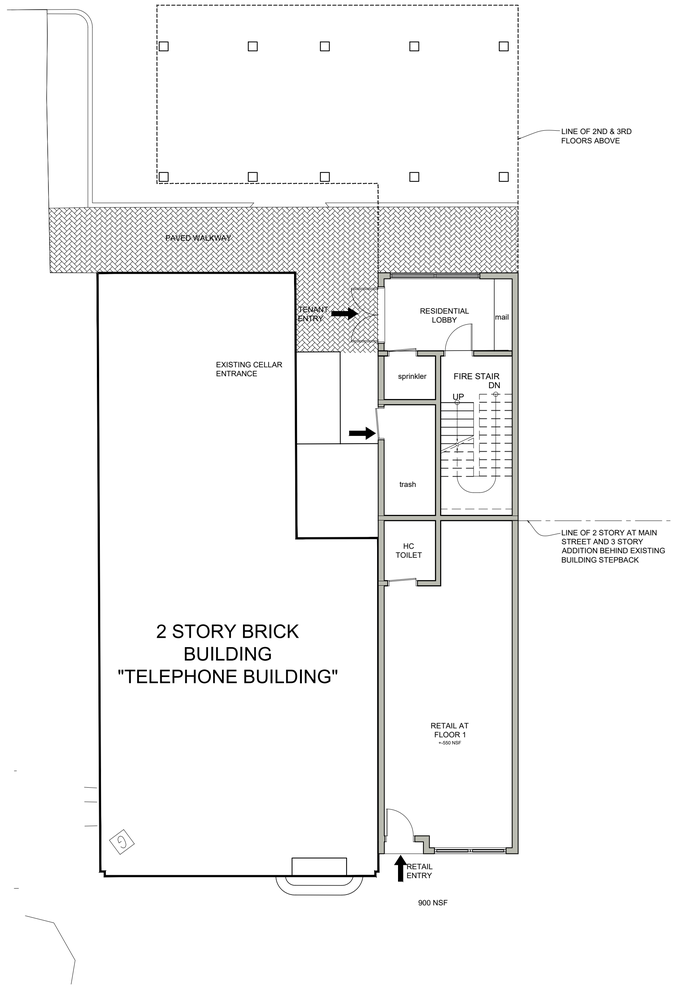

1,240 NSF

3 1st Floor Plan
1/8" = 1'-0"




1,780 NSF

2 1st Floor Plan
1/8" = 1'-0"




900 NSF

1 1st Floor Plan
1/8" = 1'-0"

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

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_____ SECRETARY

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| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 12/31/24 | REVISE PER PLANNING BOARD COMMENTS | AJS |

# Site Plan Application

**Sheet 3 of 8 - Floor Plans**

*Owner:*
**Telephone Building Beacon LLC**
221 Beechwood Ave
Poughkeepsie, NY 12601

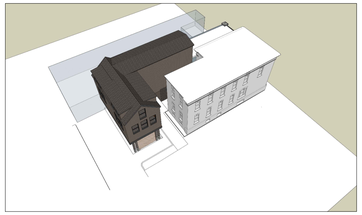
*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Site / Civil Engineer:*
**Hudson Land Design**
174 Main Street
Beacon, New York 12508

*Surveyor:*
**MJ Engineering**
21 Corporate Drive
Clifton Park, New York 12065

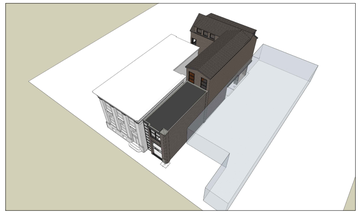
## 291 Main Street - Telephone Building

Beacon, New York
Scale: 1" = 10'
October 1, 2024



## View 6: Aerial

Scale: NTS



## View 7: Aerial

Scale: NTS




## View 1: Main Street

Scale: NTS



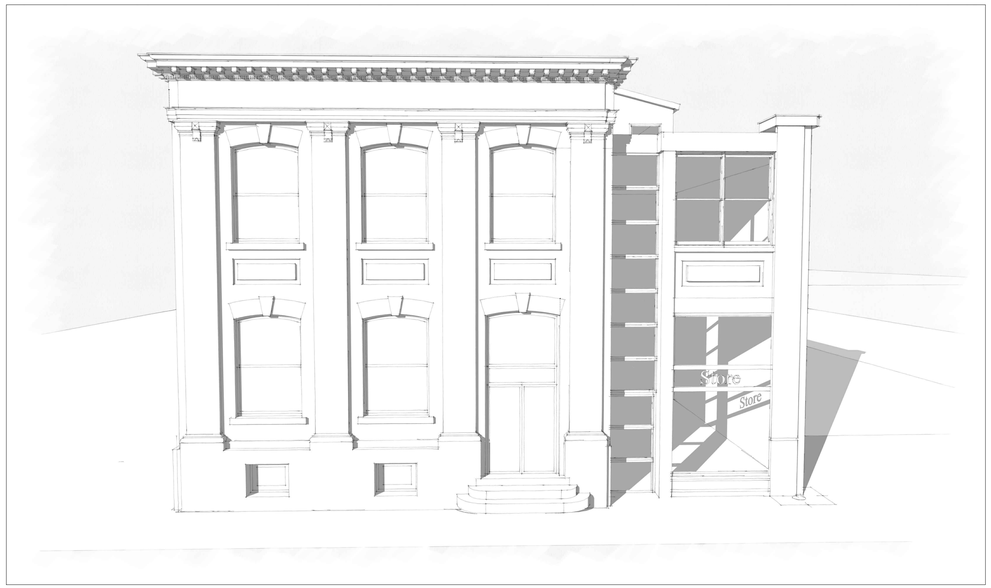
## View 5: Main Street

Scale: NTS



## View 2: Main Street & South Brett

Scale: NTS




## View 4: Main Street

Scale: NTS



## View 3: South Brett Street

Scale: NTS

| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 12/31/24 | REVISE PER PLANNING BOARD COMMENTS | AJS |

# Site Plan Application

**Sheet 4 of 8 - Building Elevations & Views**

*Owner:*
**Telephone Building Beacon LLC**
221 Beechwood Ave
Poughkeepsie, NY 12601

*Architect:*
**Aryeh Siegel, Architect**
84 Mason Circle
Beacon, New York 12508

*Site / Civil Engineer:*
**Hudson Land Design**
174 Main Street
Beacon, New York 12508

*Surveyor:*
**MJ Engineering**
21 Corporate Drive
Clifton Park, New York 12065

**291 Main Street - Telephone Building**
Beacon, New York
Scale: As Noted
October 1, 2024

KARC
PLANNING CONSULTANTS, INC.

**TO:** John Gunn, Chair, and the City of Beacon Planning Board

**FR:** KARC Planning Consultants, Inc.

**DATE:** January 9, 2025

**RE:** 291 Main Street Application for Site Plan Approval, Telephone Building Beacon LLC c/o Aryeh Siegel Architect

---

I have reviewed the following materials regarding the proposed development at 291 Main Street:

- Project Narrative by Aryeh Siegel, dated December 31, 2024
- Updated SEAF completed by Michael A Bodendorf, PE, dated December 31, 2024
- Comment response letter by Hudson Land Design, dated December 31, 2024
- Comment response letter by Aryeh Siegel, dated December 31, 2024
- Engineering Plan Set (3 sheets: sheet 6 of 8 – sheet 8 of 8) prepared by Michael A Bodendorf, PE, dated October 29, 2024, last revised December 31, 2024
- Updated I & I Report by Hudson Land Design, dated December 31, 2024
- Site Plan (Sheet 1 of 8), preparer / stamp not provided, dated October 1, 2024, last revised December 31, 2024
- Existing Conditions & Demolition Plan (Sheet 2 of 8), preparer / stamp not provided, dated October 1, 2024, last revised December 31, 2024
- Ploor Plans (Sheet 3 of 8), preparer / stamp not provided, dated October 1, 2024, last revised December 31, 2024
- Building Elevations & Views (Sheet 4 of 8), preparer / stamp not provided, dated October 1, 2024, last revised December 31, 2024

**Project Description:**

The applicant is proposing a 3-story addition adjacent to the existing 2-story building located at 291 Main Street. The addition will consist of 550 square feet of retail on the ground floor with 3 residential apartments on the second and third floors. The project is located within the CMS district and Historic District and Landmark Overlay Zone (HDLO).

**Comments & Recommendations:**

1. **Clerical Corrections:**
    a. EAF project description states that 4 residential apartments are proposed rather than the revised proposal for 3 units.

b. Floor Plans (sheet 3 of 8): the label for each of the three floors says, "1st floor plan." The label for detail 2 and 3 should be corrected to indicate the 2nd floor plan and 3rd floor plan, respectively.
c. Bulk Zoning Regulations Table on Site Plan (sheet 1 of 8) says proposed front yard setback is 10', yet dimensions show 9'. Clarify and correct.

2. **Mechanical equipment** shall be concealed from public view by approved architectural or landscaping elements. Where is the mechanical equipment for the new addition proposed to be located?

3. **Snow Storage:** The proposed location for snow storge is shown on sheet 6 of 8 and appears to encompass a landscaped area of approximately 20ft by 4ft. Will this space be sufficient for snow from all paved areas on site or is it planned for snow to be removed from the site? As one of the few landscaped areas on the site, the forthcoming landscaping plan should indicate plantings that can withstand snow and salt.

4. **Landscaping Plan:** Plantings details should be provided for the proposed landscaped areas. Per Section 223-41.18(E)(12), the Planning Board will review the details to ensure that the proposed landscaped areas enhance the streetscape, provide a landscaped rear yard or courtyard, and are found to be consistent with the intent of the CMS district. The applicant should also provide dimensions of landscaped areas and calculations demonstrating that the minimum requirement of 10% is met.

5. **Parking Standards:** No minimum number of off-street parking spaces are required within the CMS district due to the proximity of this district to municipal parking areas, public transportation, and pedestrian-oriented streetscapes. A parking maximum of 17 spaces is applied to the proposed project based on the calculation of 1 space per dwelling unit and 3 spaces per every 1,000 GFA of commercial space [588 SF of proposed retail + 3,650 SF of existing office]. A total of 4 parking spaces are currently proposed on site, one of which will be a dedicated ADA space.
    a. The project narrative states that "the existing Telephone Building provides parking spaces for two of the existing commercial tenants, and the Applicant states that parking has not been an issue since he has owned the building. The two tenants use those parking spaces Monday to Friday between 9am and 5pm." More information should be provided regarding the number of spaces currently provided onsite and the typical number of vehicles parking onsite from the existing two tenants.
    b. The project narrative clarifies that public parking is available at the DMV Building, Henry Street, and the Rite Aid. Additional information regarding utilization and availability of parking at these lots should be described by the applicant and added to the record.
    c. Are any demand reduction strategies proposed outside of the potential addition of bike parking?

d. The Board may request that a comparable analysis of similar uses and properties in the area be provided.

6. **Elevations and Design Standards:** Elevations with dimensions and material callouts will be required to complete review of the project. The applicant will need to justify the revised building design in relation to the criteria in 134-7 and the CMS design standards in 223-41.18.J. When appropriate, the building design should be referred to the Architectural Review Subcommittee. Points of consideration should include:

    a. The code requires that new construction shall build in the historic context and demonstrate aspects of inspiration from or similarities to adjacent HDLO structures. The code is clear that "Compatibility does not imply historic reproduction, but new architecture shall also not arbitrarily impose contrasting materials, scales, colors, or design features." The applicant has stated that the revised façade offers a modern interpretation of elements and proportions of the existing building. Specific examples and references to context, scale, materials, roof and cornice forms, windows, fixtures, etc. should be provided to support this statement.

If you have any questions or need additional information, please feel free to contact me.

Natalie Quinn
Beacon Planning Consultant

Cc: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer

LANC & TULLY
Engineering and Surveying, P.C.

January 12, 2025

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: 291 Main Street
Tax No. 5954-36-893875
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding the proposed mixed-use commercial and residential space at 291 Main Street:

- Response correspondence from Aryeh Siegel, Architect, dated December 31, 2024.
- Project Narrative dated December 31, 2024, as prepared by Aryeh Siegel, Architect.
- Response correspondence from Hudson Land Design, dated December 31, 2024.
- Revised Inflow and Infiltration (I&I) Investigation Report dated December 31, 2024, as prepared by Hudson Land Design.
- Short Environmental Assessment Form dated December 31, 2024.
- Plan set titled "291 Main Street – Telephone Building", as prepared by Aryeh Siegel, Architect, and Hudson Land Design and consisting of the following drawings:
  - Sheet 1 of 8 – Site Plan, with the latest revision date of December 31, 2024.
  - Sheet 2 of 8 – Existing Conditions & Demolition Plan, with the latest revision date of December 31, 2024.
  - Sheet 3 of 8 – Floor Plans, with the latest revision date of December 31, 2024.
  - Sheet 4 of 8 – Building Elevations & Views, with the latest revision date of December 31, 2024.
  - Sheet 6 of 8 – Grading & Utility Plan, with the latest revision date of December 31, 2024.
  - Sheet 7 of 8 – Erosion & Sediment Control Plan, with the latest revision date of December 31, 2024.
  - Sheet 8 of 8 – Construction Details, with the latest revision date of December 31, 2024.

The proposed project entails the construction of a 2 and 3-story addition to the existing building located at 291 Main Street, on a 0.143-acre parcel in the Central Main Street (CMS) Zone and the Historic District and Landmark Overlay Zone. The first floor consists of 600± square feet of commercial space, whereas the second and third floors will consist of 4 residential apartments.

Based on our review of the above documents and plans, we would like to offer the following comments:

General Comments:

1. A landscape plan and lighting plan shall be prepared for the project and made part of the overall site.

Site Plan (Sheet 1 of 8):

1. The bulk zoning table, parking requirements and notes for the project shall be provided on the plan.

2. The dark hatching on the plan is making it hard to read to discern the text located within the hatching. The text should be moved to the front and/or masked, and the hatching lightened. It should be further noted that there are several areas where various text notes are located over top of one another. This shall be revised so that all text is legible and not overlapping.

3. Given the tight constraints of the site, there does not appear to be any areas on the site for snow storage. Notes shall be added to the plans with regards to snow removal and a time frame as to the removal of snow from the site.

Existing Conditions & Demolition Plan (Sheet 2 of 8):

1. Although the plan is titled as "Existing Conditions & Demolition Plan", the plan does not appear to be showing any demolition work to occur. The plan should be revised to reflect all demolition work proposed on and adjacent to the site, or the title of the plan should be revised to "Existing Conditions Plan" only.

Grading & Utility Plan (Sheet 6 of 8):

1. The storm water line proposed to run from the building to the proposed catch basin on South Brett Street shall be shown on the plan.

2. It is recommended that the water service connection on South Brett be shifted to the south slightly where there appears to be more separation between the existing water and storm lines.

3. Consideration should be given to providing for a exterior sewer clean-out on the existing sewer lateral if one is not present within the building.

4. Although the plan notes the area to the east of the parking stalls to be for snow storage, this area is very minimal in size and is shown to contain bushes and a tree on Sheet 1 of 8. As noted under the comments for Sheet 1, notes shall be provided on the plans as to snow removal from the site.

5. Engineer shall verify that the existing 4" sewer lateral servicing the building is sufficient to handle all flows proposed from the building, or if the sewer lateral size will need to be increased to a 6" pipe.

6. Where will roof leaders for the proposed building additions drain to? Consideration should be given to providing an additional catch basin along the storm water drainage line in the vicinity of the driveway entrance to intercept any additional roof leaders from the buildings in the rear, as well as run-off from the paved parking area.

This completes our review at this time. Further comments may be provided based on future submissions when more detailed plans are prepared for the project. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

**City of Beacon Planning Board Agenda**
**01/14/2025**

**Title:**

Continue review of application for Site Plan Approval, 14 N Cedar Street, 4-unit multi-family dwelling, submitted by Cervone-Perrucci Realty.

**ATTACHMENTS**

14 N Cedar PB 1.14.25 Response Letter.pdf

14 N Cedar PB 1.14.25 EAF Form.pdf

14 N Cedar PB 1.14.25 Modular Plans.pdf

14 N Cedar PB 1.14.25 1-Title Sheet.pdf

14 N Cedar PB 1.14.25 2 Sheet C-1 Existing Condition.pdf

14 N Cedar PB 1.14.25 3 Sheet C-2 Demo Plan.pdf

14 N Cedar PB 1.14.25 4 SheetC-3 Site Plan.pdf

14 N Cedar PB 1.14.25 5 Sheet GRADING Plan.pdf

14 N Cedar PB 1.14.25 6 Sheet Light Plan.pdf

14 N Cedar PB 1.14.25 7 Sheet S-1 Soil Erosion.pdf

14 N Cedar PB 1.14.25 8 Sheet Detail Sheet-D-1.pdf

14 N Cedar PB 1.14.25 9 Sheet Detail Sheet-D-2.pdf

14 N Cedar PB 1.14.25 10 Sheet Detail Sheet-D-3.pdf

KARC Review PB_14 N Cedar 2025.01.09.pdf

Lanc & Tully 14 N Cedar 01-12-25 review.pdf

December 22,2024

John Gunn, Chairman
City of Beacon Planning Board
1 Municipal Plaza
Beacon, NY 12508

RE: Site Plan
14 North Cedar Street
Tax No. 5954-28-943881
City of Beacon

Dear Mr. Russo and Mr. Gunn,

I have received your letter dated July 27th 2024 and below in bold are my responses to your comments.

SEQRA Comments:

1. The “Brief Description” on Page should be revised, as the lot is not “empty”, but rather has garage/storage structure located on it presently.

**In the brief description it will say a garage is presently located on the property.**

2. Question D.2.C should reflect water usage of 880 gallons per day.

**Question D.2.c. will be updated to 880 gallons per day.**

3. Question D.2.D should reflect water usage of 880 gallons per day.

**Question D.2.d. will be updated to 880 gallons per day.**

General Comments:

1. As the occupancy Classification for the proposed 4 unit apartment building would be Residential Group R-2 per the 2020 NYS Building Code, the proposed structure may require the installation of a sprinkler system.

**The proposed building requires a sprinkler system. The type of sprinkler system required is a NFPA 13-R system. One water service line will be for the sprinklers and potable water.**

2. A pre & post storm drainage analysis shall be prepared for the project to show the increase of stormwater runoff expected from the proposal project site.

**A pre & post storm drainage calculation can be seen on the plans.**

3. The plans shall show how drainage from the site will be handled.

**A dry well will be installed to handle increased stormwater runoff. The roof drain on the existing and proposed building will be connected to the dry well.**

4. As the lower units of the proposal building appear to be accessible units, the plans should include accessible parking stalls.

**An ADA parking stall will be included.**

5. Are any other uses proposed for the storage building other than storage?
   **The existing building on the property will be an existing accessory storage structure and will be noted on the plans.**

Demolition Plan:

1. The Plan notes the removal of a small portion of the existing asphalt on the parcel adjacent to church street. As the remaining asphalt on the site around the storage structures appears to be in poor condition, why would this not be removed also?

**The asphalt around the building will be removed and turned to grass.**

Site Plan:

1. The site plan shows the new paving to wrap around the existing structure. It would be preferable to have south-east and southwest sides along the structure as grassed area to reduce the amount of paving on the site , in turn reducing stormwater runoff.

**The asphalt around the building will be removed and turned to grass to help reduce stormwater.**

2. An ADA compliant ramp will need to be installed at the intersection of North Cedar and Church Street. A construction detail shall be added to the plans for the ramp.

**An ADA compliant ramp will be installed at the the intersection of North Cedar and Church Street as seen on the Site Plan. A construction detail can be found on D-2.**

3. New sidewalks installed along roads shall be monolithic curb and sidewalk. A construction detail shall be added to the plans for this.

**A construction detail for monolithic curb and sidewalk will be found on D-1.**

4. The site plan will show where the roof leaders for the proposed building will drain to.

**The site plan will show the roof leaders for the proposed building draining to the dry well.**

5. The plan shall note that the portion of North Cedar Street in front of the project is “One-Way” and indicate the direction of travel.

**The site plan will show the direction of the one way street on North Cedar.**

6. The plan shall show driveway aprons at the proposed entrance and exit to the site. A construction detail for these driveway aprons shall be provided on the plans. Driveway aprons shall be at least a minimum of 6 inches thick.

**The Construction detail sheet D-1 will have the driveway construction detail which includes the depth 6” and length of driveway.**

7. Trench detail shall be enlarged for legibility.

**The Construction detail sheet D-1 will have the trench details for the water service line and sewer line.**

8. All work within the road right-of-way shall note that the backfill is to be NYSDOT item No. 304.12. Construction details shall be revised to reflect this.

**All work within the road right-of way- will include NYSDOT Item No. 304.12 this detail can be found on D-1.**

9. Signpost detail shall note the use of break-away hardware for the base of signposts.

**Signage post detail with breakaway hardware for the base of signposts can be found on D-3.**

10. A water service detail shall be provided for the proposed water service connection. This would include connection to the main with a tapping saddle, k-copper piping, depth to line backfill material, etc.

**A water service detail can be found on D-1**

11. The plan shall provide the pipe invert elevations of the upstream and downstream manholes between the proposed sewer connection, as well as providing the elevation of connection at the sewer main and the lowest sewerable elevation (LSE) within the building.

**Pipe Inverts on the upstream and downstream will be on the existing condition plan. The lowest sewerable elevation within the elevation will be on the Site Plan**

12. A construction detail shall be added for pavement restoration of all disturbed areas within the roads. This detail shall also note that all seams are to be sealed.

**A construction detail for pavement restoration will be on D-1**

13. A construction detail shall be added for the sewer lateral connection to the existing sewer main.

**A construction detail for the sewer lateral connection will be on D-1**

14. The water and sewer construction details shall note the manufacturer and model of all materials to be used.

**The construction details on D-1 will also have the manufacturer and models of material.**

15. The plan shall include areas for snow storage.

**The site plan will include areas for snow storage.**

16. The proposed traffic signs at the exit of the site shall be shifted back so that they are not located on the sidewalk along North Cedar Street.

**No stop signs will be located on the sidewalk.**

<u>Grading Plan:</u>

1. The plan shall include the first floor elevations of the proposed building. If the building is to have a basement, the elevation of the basement floor shall also be noted on the plans. If the building is not to have a basement, then note shall be added to the plans as such.

**The building elevations will be shown on the plans and the building will have no basement.**

2. The existing topography as shown on C-1 should be included on the plan, outside of the building structure itself, to show how the proposed grading will tie into the existing topography, especially along the property line.

**The existing topography shown on C-1 will be shown on the plan**

3. Additional proposed spot grade elevations shall be provided throughout the parking area to clarify slopes across the site as well as drainage patterns across the site.

**Additional spot grade elevations will be provided on the plan to show the drainage on the site.**

4. Door/floor elevations of existing storage building will be provided on the Plan.

**Door and floor elevations of existing building will be on the Grading Plan.**

5. The cross slope on the sidewalks around the building shall not exceed 1.5% maximum.

**The cross slope on the sidewalks will not exceed 1.5%**

**6.** Additional existing spot elevations shall be provided on the plan so as to relate the proposed grading to the existing grading, as well as how proposed grading will tie to the existing grading. Spot elevations shall also be provided around the existing storage structure located on the site.

**Additional spot elevations will be located throughout plans**

Lighting Plan:

1. Section 223-14, ParagraphB(3)(b) states “Pedestrian and parking lot areas should average approximately one footcandle. Only high security areas may require lighting in the two to five foot candle range, while over five foot candles is usually a waste of energy and a source of glare”. As there are areas that appear to have hot spots approaching 2.0 to 2.5 footcandles at the existing storage facility, we would recommend that the applicant look at altering/revising the proposed lighting fixtures on this structure. This would help to reduce spill over onto adjacent properties parcel to the south-east.

**The lighting plan has been updated to average 1 footcandle in pedestrian and parking lot areas.**

2. The lighting plan shall include the manufacturer for the proposed lighting.

**The manufacturer for the proposed lighting can be found on the Lighting plan, Cree Lighting.**

Erosion Control Plan:

1. Location of the silt fence shall be adjusted to prevent the discharge of turbid waters from all areas to be disturbed. This would include the landscape island and parking area along Church Street and in front of the storage building.

**Soil Erosion plan has been updated to have a silt fence surrounding the entire property.**

If you have any questions please feel free to contact me.

Thank you,

Angelo Perrucci III, P.E.

## Instructions for Completing Part 1

**Part 1 is to be completed by the applicant or project sponsor.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

### A. Project and Applicant/Sponsor Information.

| | | |
|---|---|---|
| Name of Action or Project:<br>Site Plan 14 North Cedar Street | | |
| Project Location (describe, and attach a general location map):<br>14 North Cedar St, Beacon NY,12508 | | |
| Brief Description of Proposed Action (include purpose or need):<br>Proposing a 2 Story 4 unit apartment building on a lot with an existing garage. | | |
| Name of Applicant/Sponsor:<br>Cervone- Perrucci Realty | Telephone: 908-763-9602<br>E-Mail: angelomp318@gmail.com | |
| Address: 111 N. Walnut Street | | |
| City/PO: Beacon | State: NY | Zip Code: 12508 |
| Project Contact (if not same as sponsor; give name and title/role):<br>Same as Sponsor (Angelo Perrucci III) | Telephone:<br>E-Mail: | |
| Address: | | |
| City/PO: | State: | Zip Code: |
| Property Owner (if not same as sponsor):<br>Same as Sponsor | Telephone:<br>E-Mail: | |
| Address: | | |
| City/PO: | State: | Zip Code: |

**B. Government Approvals**

| **B. Government Approvals, Funding, or Sponsorship.** ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.) | | |
|---|---|---|
| **Government Entity** | **If Yes: Identify Agency and Approval(s) Required** | **Application Date (Actual or projected)** |
| a. City Counsel, Town Board, or Village Board of Trustees ☐Yes☐No | | |
| b. City, Town or Village Planning Board or Commission ☑Yes☐No | Beacon Planning Board | 6-9-2023 |
| c. City, Town or Village Zoning Board of Appeals ☐Yes☐No | | |
| d. Other local agencies ☐Yes☐No | | |
| e. County agencies ☐Yes☐No | | |
| f. Regional agencies ☐Yes☐No | | |
| g. State agencies ☐Yes☐No | | |
| h. Federal agencies ☐Yes☐No | | |

i. Coastal Resources.

*i.* Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes☑No

*ii.* Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑Yes☐No

*iii.* Is the project site within a Coastal Erosion Hazard Area? ☐Yes☐No

**C. Planning and Zoning**

**C.1. Planning and zoning actions.**

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

**C.2. Adopted land use plans.**

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☐Yes☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes☑No

If Yes, identify the plan(s):

_____

_____

_____

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes☑No

If Yes, identify the plan(s):

_____

_____

_____

**C.3. Zoning**

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Transitional where multifamily is permitted.

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☑ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
*i.* What is the proposed new zoning for the site? _____

**C.4. Existing community services.**

a. In what school district is the project site located? Beacon

b. What police or other public protection forces serve the project site?
Beacon Police

c. Which fire protection and emergency medical services serve the project site?
Beacon Fire department

d. What parks serve the project site?
Memorial Park is 0.4 miles away

**D. Project Details**

**D.1. Proposed and Potential Development**

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?
Residential

b. a. Total acreage of the site of the proposed action? 0.25 acres
b. Total acreage to be physically disturbed? 0.16 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.25 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
*i.* If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
*i.* Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
*ii.* Is a cluster/conservation layout proposed? ☐ Yes ☑ No
*iii.* Number of lots proposed? _____
*iv.* Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☑ Yes ☐ No
*i.* If No, anticipated period of construction: _____ months
*ii.* If Yes:
- Total number of phases anticipated 4
- Anticipated commencement date of phase 1 (including demolition) 6 month 0 year
- Anticipated completion date of final phase 0 month 1 year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:
Building Foundation, Connecting Utilities, Placement of modular building, & Site work

f. Does the project include new residential uses? ☑ Yes ☐ No

If Yes, show numbers of units proposed.

| | One Family | Two Family | Three Family | Multiple Family (four or more) |
|---|---|---|---|---|
| Initial Phase | | | | 0 |
| At completion of all phases | | | | 4 |

g. Does the proposed action include new non-residential construction (including expansions)? ☐ Yes ☑ No

If Yes,

*i.* Total number of structures _____

*ii.* Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length

*iii.* Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

*i.* Purpose of the impoundment: _____

*ii.* If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify: _____

*iii.* If other than water, identify the type of impounded/contained liquids and their source. _____

*iv.* Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

*v.* Dimensions of the proposed dam or impounding structure: _____ height; _____ length

*vi.* Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

**D.2. Project Operations**

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

*i.* What is the purpose of the excavation or dredging? _____

*ii.* How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

*iii.* Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____

*iv.* Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

*v.* What is the total area to be dredged or excavated? _____ acres

*vi.* What is the maximum area to be worked at any one time? _____ acres

*vii.* What would be the maximum depth of excavation or dredging? _____ feet

*viii.* Will the excavation require blasting? ☐ Yes ☐ No

*ix.* Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

*i.* Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

*ii.* Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

*iii.* Will the proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☑ No
If Yes, describe:

*iv.* Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☑ No
If Yes:

- acres of aquatic vegetation proposed to be removed:
- expected acreage of aquatic vegetation remaining after project completion:
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):
- proposed method of plant removal:
- if chemical/herbicide treatment will be used, specify product(s):

*v.* Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use, or create a new demand for water? ☑ Yes ☐ No
If Yes:

*i.* Total anticipated water usage/demand per day: 880 gallons/day

*ii.* Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No
If Yes:

- Name of district or service area: Beacon Water Department
- Does the existing public water supply have capacity to serve the proposal? ☑ Yes ☐ No
- Is the project site in the existing district? ☑ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☑ No
- Do existing lines serve the project site? ☐ Yes ☑ No

*iii.* Will line extension within an existing district be necessary to supply the project? ☑ Yes ☐ No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project:
  Connect 2" copper line to 6" ductile iron line
- Source(s) of supply for the district:

*iv.* Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☑ No
If, Yes:

- Applicant/sponsor for new district:
- Date application submitted or anticipated:
- Proposed source(s) of supply for new district:

*v.* If a public water supply will not be used, describe plans to provide water supply for the project:

*vi.* If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑ Yes ☐ No
If Yes:

*i.* Total anticipated liquid waste generation per day: 880 gallons/day

*ii.* Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
Sanitary Wastewater

*iii.* Will the proposed action use any existing public wastewater treatment facilities? ☑ Yes ☐ No
If Yes:

- Name of wastewater treatment plant to be used: Beacon Sewage Treatment Plant
- Name of district: Beacon Sewage Treatment Plant
- Does the existing wastewater treatment plant have capacity to serve the project? ☑ Yes ☐ No
- Is the project site in the existing district? ☑ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☑ No

- Do existing sewer lines serve the project site? ☐Yes ☑No
- Will a line extension within an existing district be necessary to serve the project? ☑Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: 4" Pvc pipe from property will connect to 8" VCP in roadway

*iv.* Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

*v.* If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

*vi.* Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐Yes ☑No

If Yes:

*i.* How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

*ii.* Describe types of new point sources. _____

*iii.* Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐Yes ☐No

*iv.* Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes ☑No

If Yes, identify:

*i.* Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

_____

*ii.* Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

_____

*iii.* Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

_____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

*i.* Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☑No

*ii.* In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide ($CO_2$)
- _____Tons/year (short tons) of Nitrous Oxide ($N_2O$)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride ($SF_6$)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

*i.* Estimate methane generation in tons/year (metric): _____

*ii.* Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

*i.* When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

*ii.* For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

*iii.* Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

*iv.* Does the proposed action include any shared use parking? ☐Yes ☐No

*v.* If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

*vi.* Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

*vii* Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

*viii.* Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

*i.* Estimate annual electricity demand during operation of the proposed action: _____

*ii.* Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

*iii.* Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

*i.* During Construction:

- Monday - Friday: 7-5
- Saturday: 8-4
- Sunday: 8-4
- Holidays: None

*ii.* During Operations:

- Monday - Friday: 24/7 Residential
- Saturday: 24/7 Residential
- Sunday: 24/7 Residential
- Holidays: 24/7 Residential

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☐Yes ☑No

If yes:

*i.* Provide details including sources, time of day and duration:

*ii.* Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐Yes ☑No

Describe:

n. Will the proposed action have outdoor lighting? ☑Yes ☐No

If yes:

*i.* Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Light fixtures will be added on the building

*ii.* Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐Yes ☑No

Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐Yes ☑No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐Yes ☑No

If Yes:

*i.* Product(s) to be stored

*ii.* Volume(s) _____ per unit time _____ (e.g., month, year)

*iii.* Generally, describe the proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑No

If Yes:

*i.* Describe proposed treatment(s):

*ii.* Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☑No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑No

If Yes:

*i.* Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

*ii.* Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction:
- Operation:

*iii.* Proposed disposal methods/facilities for solid waste generated on-site:

- Construction:
- Operation:

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

*i.* Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

*ii.* Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

*iii.* If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

*i.* Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

*ii.* Generally describe processes or activities involving hazardous wastes or constituents: _____

*iii.* Specify amount to be handled or generated _____ tons/month

*iv.* Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

*v.* Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☑ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

**E. Site and Setting of Proposed Action**

**E.1. Land uses on and surrounding the project site**

a. Existing land uses.

*i.* Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

*ii.* If mix of uses, generally describe: _____

b. Land uses and covertypes on the project site.

| Land use or Covertype | Current Acreage | Acreage After Project Completion | Change (Acres +/-) |
|---|---|---|---|
| • Roads, buildings, and other paved or impervious surfaces | 0.12 | 0.16 | +0.04 |
| • Forested | 0 | 0 | 0 |
| • Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural) | 0.13 | 0.09 | -0.04 |
| • Agricultural (includes active orchards, field, greenhouse etc.) | 0 | | |
| • Surface water features (lakes, ponds, streams, rivers, etc.) | 0 | | |
| • Wetlands (freshwater or tidal) | 0 | | |
| • Non-vegetated (bare rock, earth or fill) | 0 | | |
| • Other Describe: _____ | 0 | | |

c. Is the project site presently used by members of the community for public recreation? ☐Yes ☑No

*i.* If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐Yes ☑No

If Yes,

*i.* Identify Facilities:

_____

_____

e. Does the project site contain an existing dam? ☐Yes ☑No

If Yes:

*i.* Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

*ii.* Dam's existing hazard classification: _____

*iii.* Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐Yes ☑No

If Yes:

*i.* Has the facility been formally closed? ☐Yes ☑ No

- If yes, cite sources/documentation: _____

*ii.* Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

*iii.* Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐Yes ☑No

If Yes:

*i.* Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐Yes ☑ No

If Yes:

*i.* Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐Yes ☑No

☐ Yes – Spills Incidents database — Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

*ii.* If site has been subject of RCRA corrective activities, describe control measures: _____

_____

_____

*iii.* Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑Yes ☐No

If yes, provide DEC ID number(s): B00130

*iv.* If yes to (i), (ii) or (iii) above, describe current status of site(s):

As of 2004 remediation has been satisfactory completed under remedial program as per NYDEC

_____

_____

*v.* Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☑ No
- Explain: _____

**E.2. Natural Resources On or Near Project Site**

a. What is the average depth to bedrock on the project site? _____ feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☐ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site: _____ _____%
_____ _____%
_____ _____%

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils: ☐ Well Drained: _____% of site
☐ Moderately Well Drained: _____% of site
☐ Poorly Drained _____% of site

f. Approximate proportion of proposed action site with slopes: ☐ 0-10%: _____% of site
☐ 10-15%: _____% of site
☐ 15% or greater: _____% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

*i.* Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

*ii.* Do any wetlands or other waterbodies adjoin the project site? ☐ Yes ☑ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

*iii.* Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☐ Yes ☑ No

*iv.* For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

*v.* Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

*i.* Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: _____

n. Does the project site contain a designated significant natural community? ☐Yes ☑No

If Yes:

*i.* Describe the habitat/community (composition, function, and basis for designation): _____

*ii.* Source(s) of description or evaluation: _____

*iii.* Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐No

If Yes:

*i.* Species and listing (endangered or threatened): _____

Indiana Bat

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐Yes ☑No

If Yes:

*i.* Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐Yes ☑No

If yes, give a brief description of how the proposed action may affect that use: _____

**E.3. Designated Public Resources On or Near Project Site**

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐Yes ☑No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐Yes ☐No

*i.* If Yes: acreage(s) on project site? _____

*ii.* Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐Yes ☑No

If Yes:

*i.* Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

*ii.* Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐Yes ☑No

If Yes:

*i.* CEA name: _____

*ii.* Basis for designation: _____

*iii.* Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

*i.* Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

*ii.* Name: _____

*iii.* Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

*i.* Describe possible resource(s): _____

*ii.* Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

*i.* Identify resource: _____

*ii.* Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

*iii.* Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

*i.* Identify the name of the river and its designation: _____

*ii.* Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

**F. Additional Information**

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

**G. Verification**

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Angelo Perrucci III Date 12/30/24

Signature Angelo Perrucci Title Owner

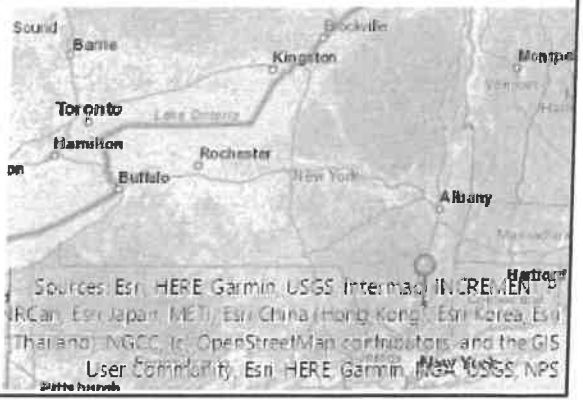
PRINT FORM

# EAF Mapper Summary Report

Tuesday, June 13, 2023 12:10 PM



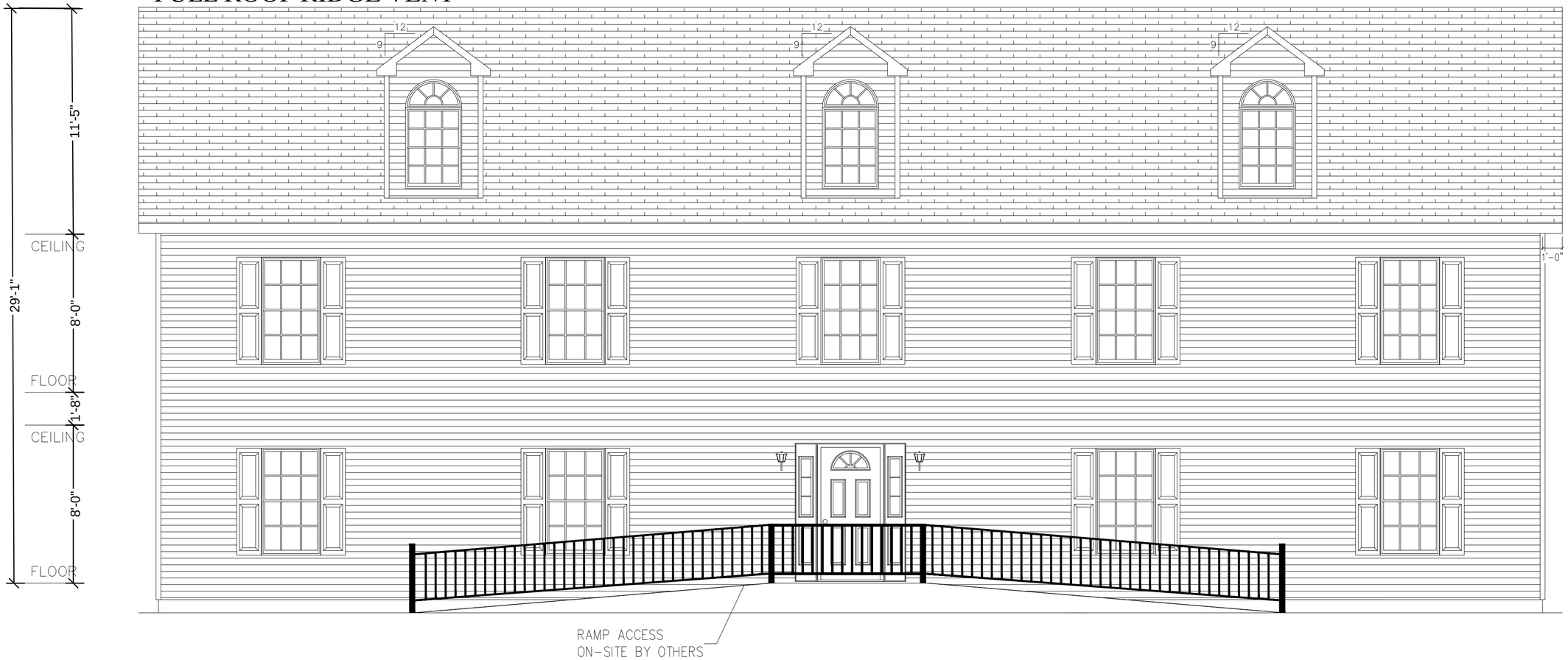

**Disclaimer:** The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.




| | |
|---|---|
| B.i.i [Coastal or Waterfront Area] | No |
| B.i.ii [Local Waterfront Revitalization Area] | Yes |
| C.2.b. [Special Planning District] | Digital mapping data are not available or are incomplete. Refer to EAF Workbook. |
| E.1.h [DEC Spills or Remediation Site - Potential Contamination History] | Digital mapping data are not available or are incomplete. Refer to EAF Workbook. |
| E.1.h.i [DEC Spills or Remediation Site - Listed] | Digital mapping data are not available or are incomplete. Refer to EAF Workbook. |
| E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database] | Digital mapping data are not available or are incomplete. Refer to EAF Workbook. |
| E.1.h.iii [Within 2,000' of DEC Remediation Site] | Yes |
| E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID] | B00130 |
| E.2.g [Unique Geologic Features] | No |
| E.2.h.i [Surface Water Features] | No |
| E.2.h.ii [Surface Water Features] | No |
| E.2.h.iii [Surface Water Features] | No |
| E.2.h.v [Impaired Water Bodies] | No |
| E.2.i. [Floodway] | No |
| E.2.j. [100 Year Floodplain] | No |
| E.2.k. [500 Year Floodplain] | No |
| E.2.l. [Aquifers] | No |
| E.2.n. [Natural Communities] | No |
| E.2.o. [Endangered or Threatened Species] | Yes |

| | |
|---|---|
| E.2.o. [Endangered or Threatened Species - Name] | Indiana Bat |
| E.2.p. [Rare Plants or Animals] | No |
| E.3.a. [Agricultural District] | No |
| E.3.c. [National Natural Landmark] | No |
| E.3.d [Critical Environmental Area] | No |
| E.3.e. [National or State Register of Historic Places or State Eligible Sites] | Digital mapping data are not available or are incomplete. Refer to EAF Workbook. |
| E.3.f. [Archeological Sites] | Yes |
| E.3.i. [Designated River Corridor] | No |

# FULL ROOF RIDGE VENT




SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

☐ APPROVED
☐ APPROVED AS NOTED
☐ PROCEED TO STRUCTURAL CALCULATIONS
☐ PROCEED TO APPROVALS PACKAGE
☐ PROCEED TO PRODUCTION RELEASE

CLIENT SIGNATURE _____ DATE _____

MBSP MODULAR BUILDING SYSTEMS OF PA

Custom Building Systems LLC
200 Custom Ave.
Middleburg, PA 17842
(888) 553-1414
www.custombuildingsystems.net

CUSTOM BUILDING SYSTEMS LLC

27'-6"x 70' BELMONT

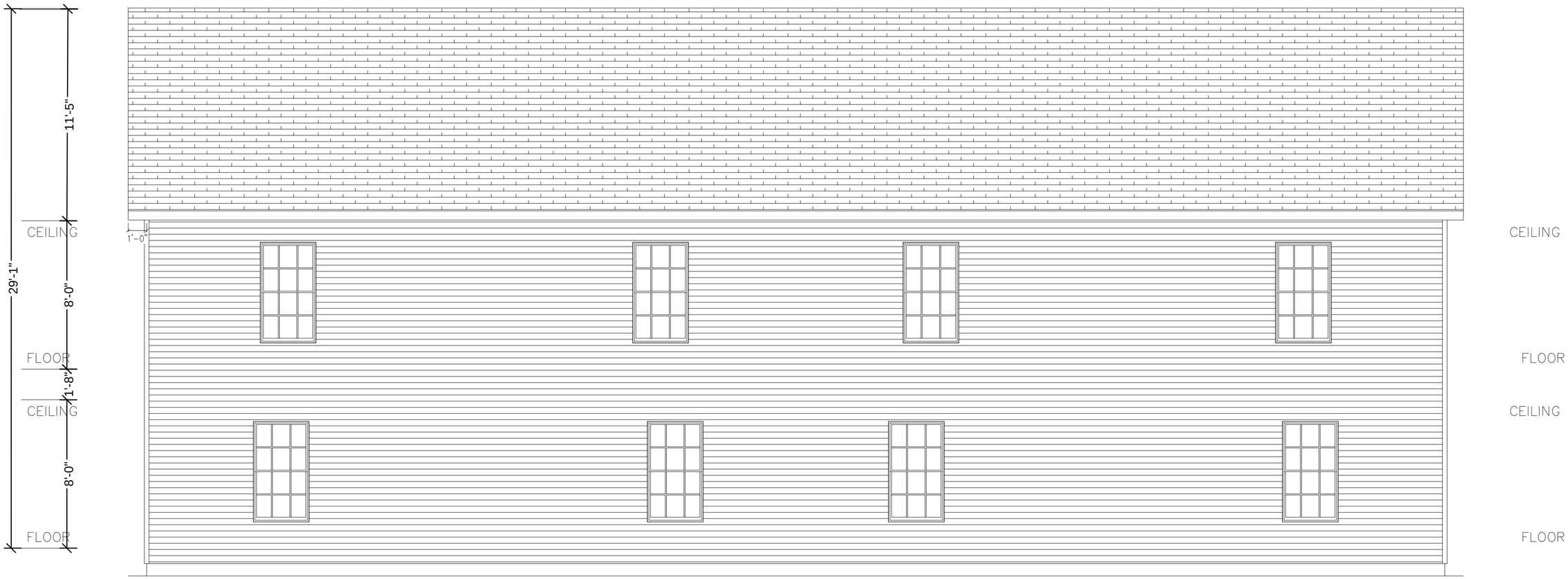
| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | | STATE: NY |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

FRONT ELEVATION

| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 2.1

# FULL ROOF RIDGE VENT




NOTE – ACTUAL HOUSE MAY VARY FROM ELEVATION

SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ PROCEED TO STRUCTURAL CALCULATIONS
- ☐ PROCEED TO APPROVALS PACKAGE
- ☐ PROCEED TO PRODUCTION RELEASE

CLIENT SIGNATURE _____ DATE _____

MBSP MODULAR BUILDING SYSTEMS OF PA

Custom Building Systems LLC
200 Custom Ave.
Middleburg, PA 17842
(888) 553-1414
www.custombuildingsystems.net

CUSTOM BUILDING SYSTEMS LLC

27'-6"x 70' BELMONT

| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | | STATE: NY |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

REAR ELEVATION

| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 2.2




NOTE – ACTUAL HOUSE MAY VARY FROM ELEVATION

SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ PROCEED TO STRUCTURAL CALCULATIONS
- ☐ PROCEED TO APPROVALS PACKAGE
- ☐ PROCEED TO PRODUCTION RELEASE

CLIENT SIGNATURE _____ DATE _____

MBSP MODULAR BUILDING SYSTEMS OF PA

Custom Building Systems LLC
200 Custom Ave.
Middleburg, PA 17842
(888) 553-1414
www.custombuildingsystems.net

CUSTOM BUILDING SYSTEMS LLC

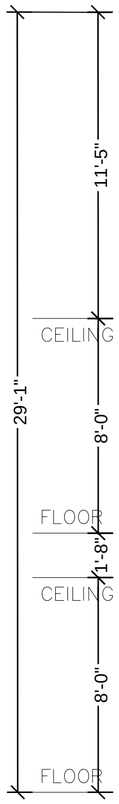
27'-6"x 70' BELMONT

| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | | STATE: NY |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

LEFT SIDE ELEVATION

| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 2.3







CEILING

FLOOR

CEILING

FLOOR

NOTE – ACTUAL HOUSE MAY VARY FROM ELEVATION

SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

☐ APPROVED
☐ APPROVED AS NOTED
☐ PROCEED TO STRUCTURAL CALCULATIONS
☐ PROCEED TO APPROVALS PACKAGE
☐ PROCEED TO PRODUCTION RELEASE

CLIENT SIGNATURE _____ DATE _____

MBSP MODULAR BUILDING SYSTEMS OF PA

Custom Building Systems LLC
200 Custom Ave.
Middleburg, PA 17842
(888) 553-1414
www.custombuildingsystems.net

CUSTOM BUILDING SYSTEMS LLC

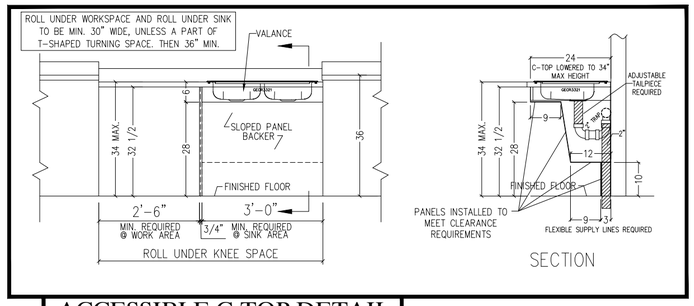
27'-6"x 70' BELMONT

| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | STATE: NY | |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

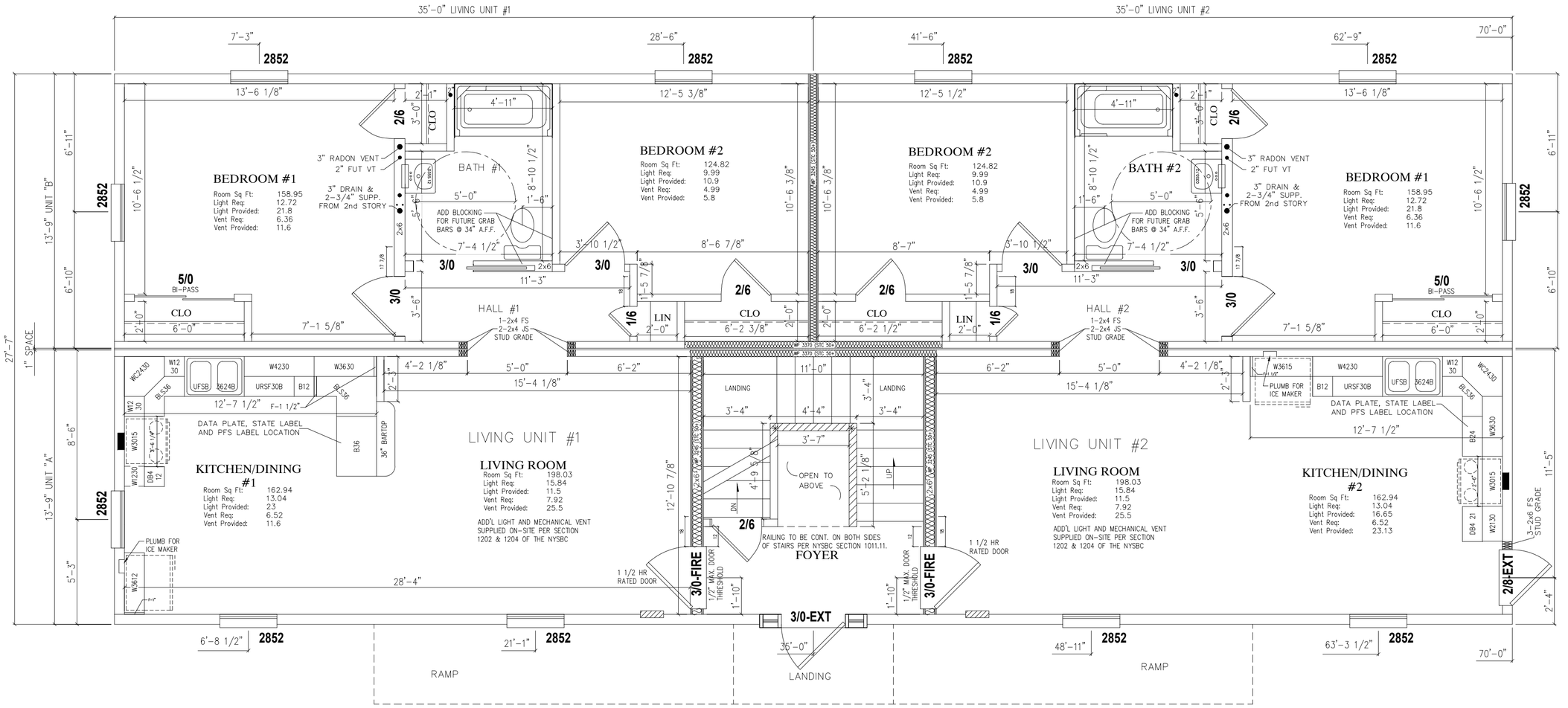
RIGHT SIDE ELEVATION

| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 2.4




## ACCESSIBLE C-TOP DETAIL




L539 CLG ASSEMBLY
THROUGH OUT

SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ PROCEED TO STRUCTURAL CALCULATIONS
- ☐ PROCEED TO APPROVALS PACKAGE
- ☐ PROCEED TO PRODUCTION RELEASE

CLIENT SIGNATURE _____ DATE _____

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www.custombuildingsystems.net

CUSTOM BUILDING SYSTEMS LLC

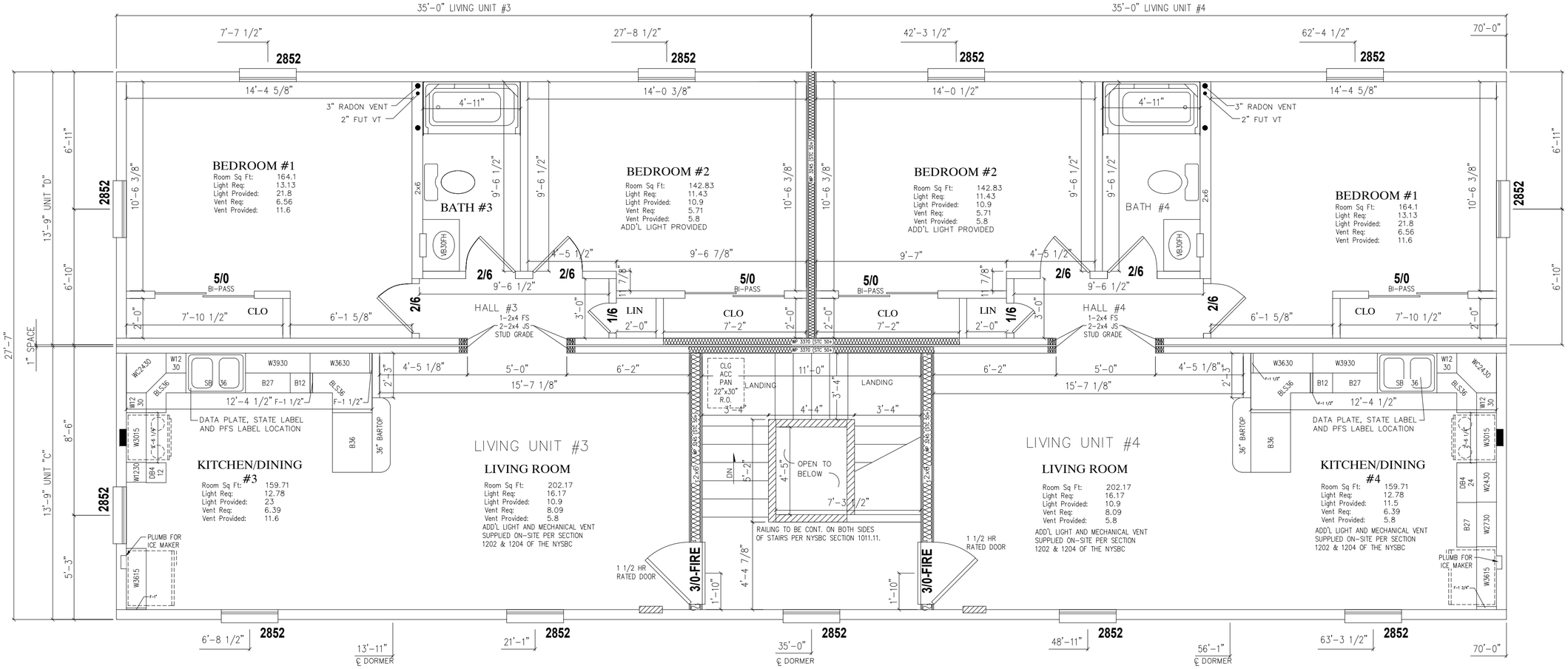
27'-6"x 70' BELMONT

| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | | STATE: NY |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

1st FLOOR PLAN

| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 3.1




L539 FLR ASSEMBLY
THROUGH OUT

RC2601 CLG ASSEMBLY
THROUGH OUT

SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

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- ☐ APPROVED AS NOTED
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- ☐ PROCEED TO APPROVALS PACKAGE
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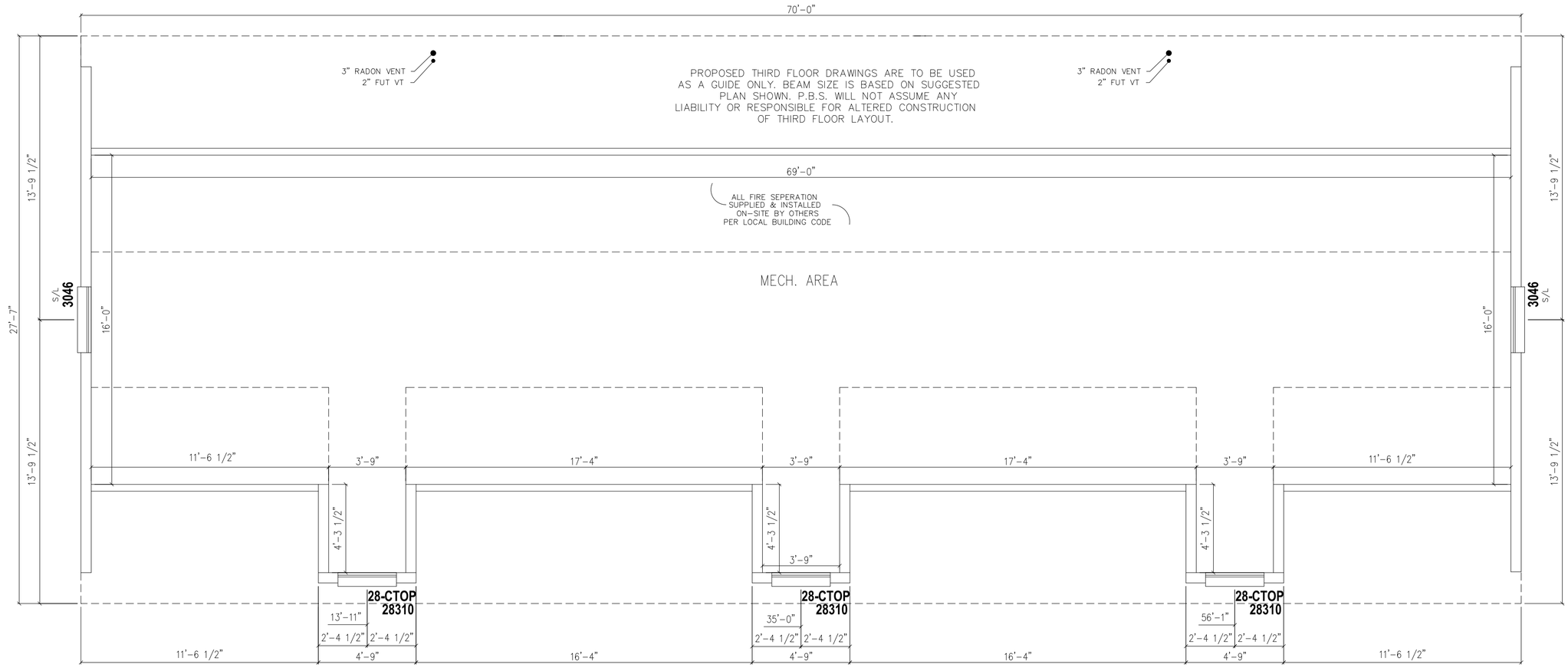
27'-6"x 70' BELMONT

| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | | STATE: NY |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

2nd FLOOR PLAN

| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 3.2




SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ PROCEED TO STRUCTURAL CALCULATIONS
- ☐ PROCEED TO APPROVALS PACKAGE
- ☐ PROCEED TO PRODUCTION RELEASE

CLIENT SIGNATURE _____ DATE _____

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CUSTOM BUILDING SYSTEMS LLC

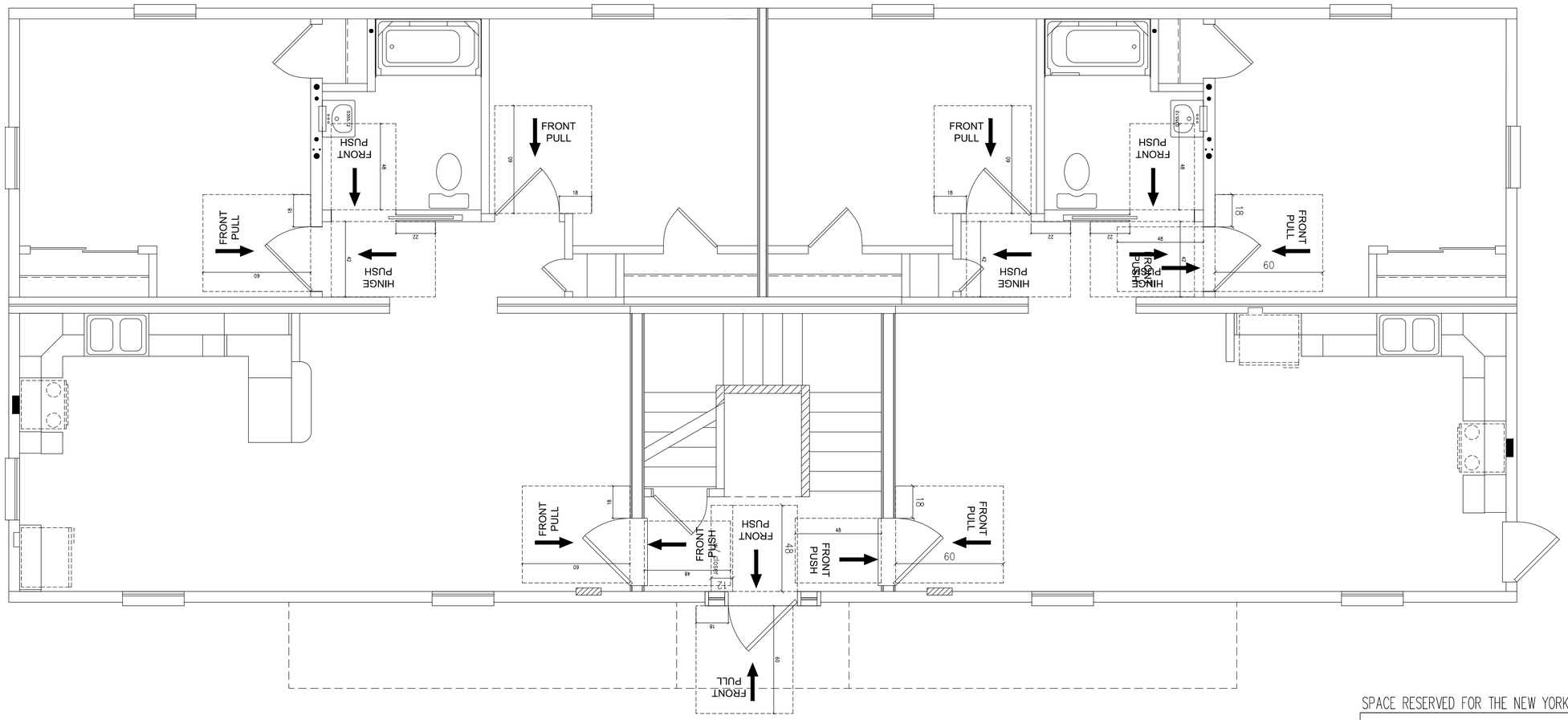
27'-6"x 70' BELMONT

| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | | STATE: NY |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

3rd FLOOR PLAN

| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 3.3




SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ PROCEED TO STRUCTURAL CALCULATIONS
- ☐ PROCEED TO APPROVALS PACKAGE
- ☐ PROCEED TO PRODUCTION RELEASE

CLIENT SIGNATURE _____ DATE _____

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CUSTOM BUILDING SYSTEMS LLC

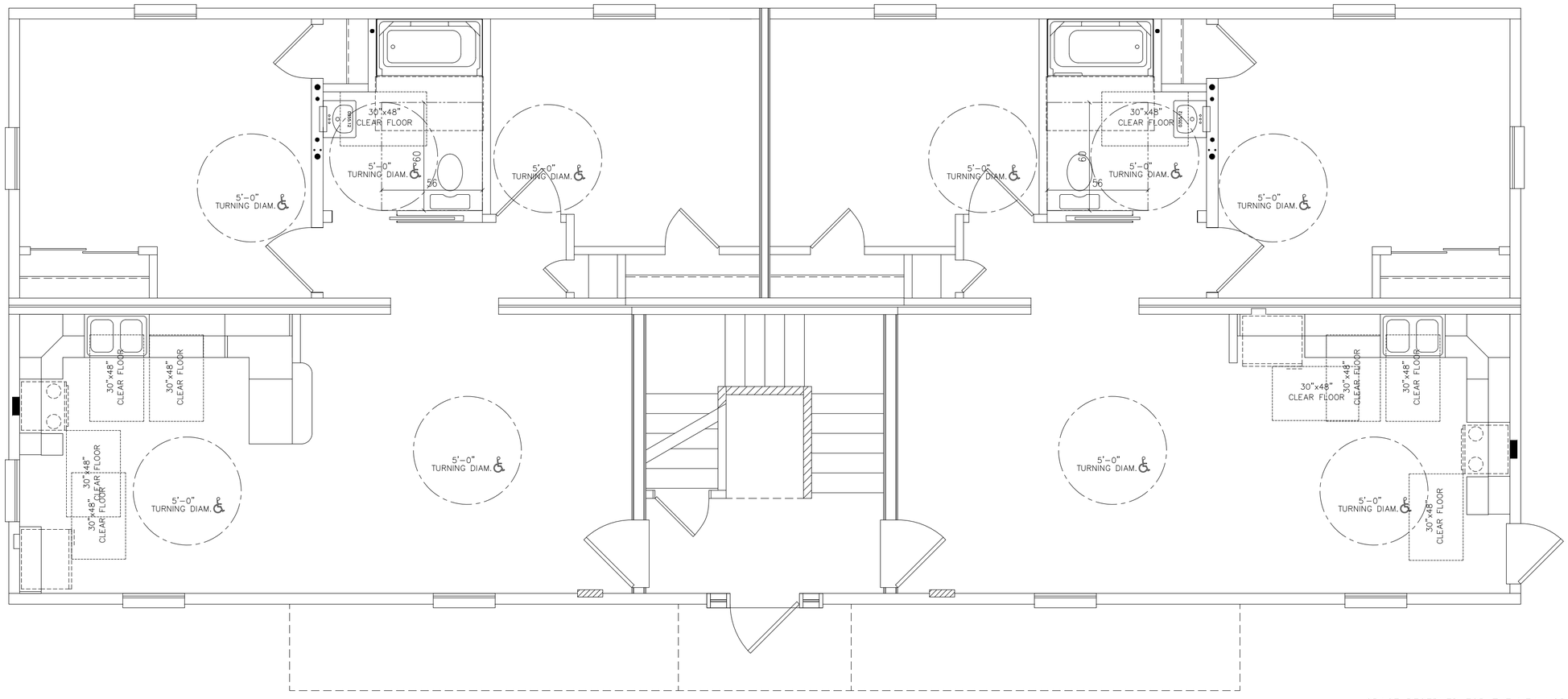
27'-6"x 70' BELMONT

| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | | STATE: NY |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

MANUVERING CLEARANCES

| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 12.1




SPACE RESERVED FOR THE NEW YORK STATE STAMP OF APPROVAL

PROJECT DESIGN CONFIRMATION

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ PROCEED TO STRUCTURAL CALCULATIONS
- ☐ PROCEED TO APPROVALS PACKAGE
- ☐ PROCEED TO PRODUCTION RELEASE

CLIENT SIGNATURE _____ DATE _____

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Middleburg, PA 17842
(888) 553-1414
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CUSTOM BUILDING SYSTEMS LLC

27'-6"x 70' BELMONT

| | | | |
|---|---|---|---|
| BUILDER: ASHLEY HOMES CONSTRUCTION | | CUSTOMER: PERUCCI – BELMONT | |
| CITY: BEACON | COUNTY: DUTCHESS | | STATE: NY |
| WIND SPEED: 130 Vult | | SNOW LOAD: 30 PSF | SQ. FT.: 3850 |
| ORDER NO.: P113869 | SERIAL NO.: | FILE NO.: P113869 | SCALE: |

CLEAR FLOOR SPACES

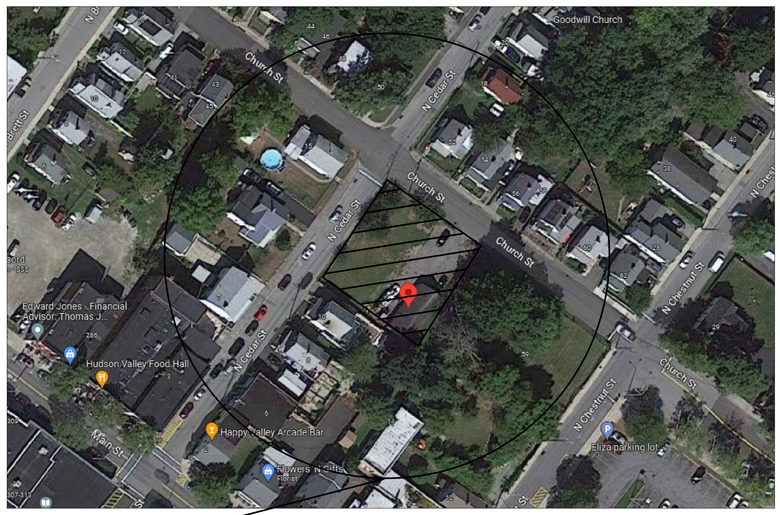
| DATE | BY | STATUS |
|---|---|---|
| 6/19/24 | JAB | PRELIM |

PAGE: 12.2

# SITE PLAN
# 14 NORTH CEDAR STREET
# BEACON, NEW YORK




TAX MAP
N.T.S




200 FT RADIUS

SITE LOCATION MAP
SCALE: 1"=100'


OWNER:
CERVONE–PERRUCCI REALTY, L.L.C.
111 North Walnut Street
Beacon, New York.12508

Tax Map Designation:
5954–28–943881

Deed Reference:
Document 50299

SURVEYED BY:
JOHN J. POST Jr.
LAND SURVEYOR, LIC. NO.50643


## PARKING CALCULATIONS

1 SPACE PER UNIT

4 UNITS = 4 SPACES

PROPOSED SPACES = 5

## NEIGHBORS TABLE

| ADDRESS | OWNER | TAX MAP # |
|---|---|---|
| 10 N.CEDAR ST | AARON KETRY | 943875 |
| 11 N.CEDAR ST | EILEEN OHARE | 933886 |
| 15 N.CEDAR ST | THOMAS HOYT | 938892 |
| 52 CHURCH ST | LAWRENCE NAST | 953894 |
| 54 CHURCH ST | LOWER MANHATTAN MANAGEMENT | 957891 |
| 56 CHURCH ST | KATHERINE MCCULOCH | 960889 |
| CHURCH ST | JOSEPH NEVILLE | 951876 |

## DRAWING LIST

| | |
|---|---|
| T–1 | COVER SHEET |
| C–1 | EXISTING CONDITIONS |
| C–2 | DEMOLITION PLAN |
| C–3 | SITE PLAN |
| C–4 | GRADING PLAN |
| L–1 | LIGHTING PLAN |
| SE–1 | SOIL EROSION |
| D–1 | CONSTRUCTION DETAILS |
| D–2 | CONSTRUCTION DETAILS |
| D–3 | CONSTRUCTION DETAILS |

## ZONING TABLE

| ZONING REQUIREMENTS FOR ZONE T | | | |
|---|---|---|---|
| ITEM | REQUIRED | EXISTING | PROPOSED |
| LOT AREA | 10,000 S.F. | 10,800 S.F. | XX |
| LOT WIDTH | 50 Ft. | 108 Ft. | XX |
| LOT DEPTH | 100 Ft. | 100 Ft. | XX |
| FRONT YARD | 10 Ft. | XX | 7 |
| SIDE YARD | 10 Ft. | XX | 13 |
| REAR YARD | 20 Ft. | XX | 65 |
| PER DWELLING | 2500 S.F. | XX | 3920 |
| MAXIMUM BUILDING COVERAGE | 40% | 10% | 28% |

E:\UPDATED FOLDER\1 SHEET T–1 .DWG

| No. | DATE | REVISION |
|---|---|---|
| 2 | 12/2024 | Revisions after Planning Board meeting on 7/2024 |
| 1 | 7/2024 | ADDITIONAL PLANS WERE NEEDED T–1,C–1,C–2, C–4,L–1,SE–1 |

FILE NO:

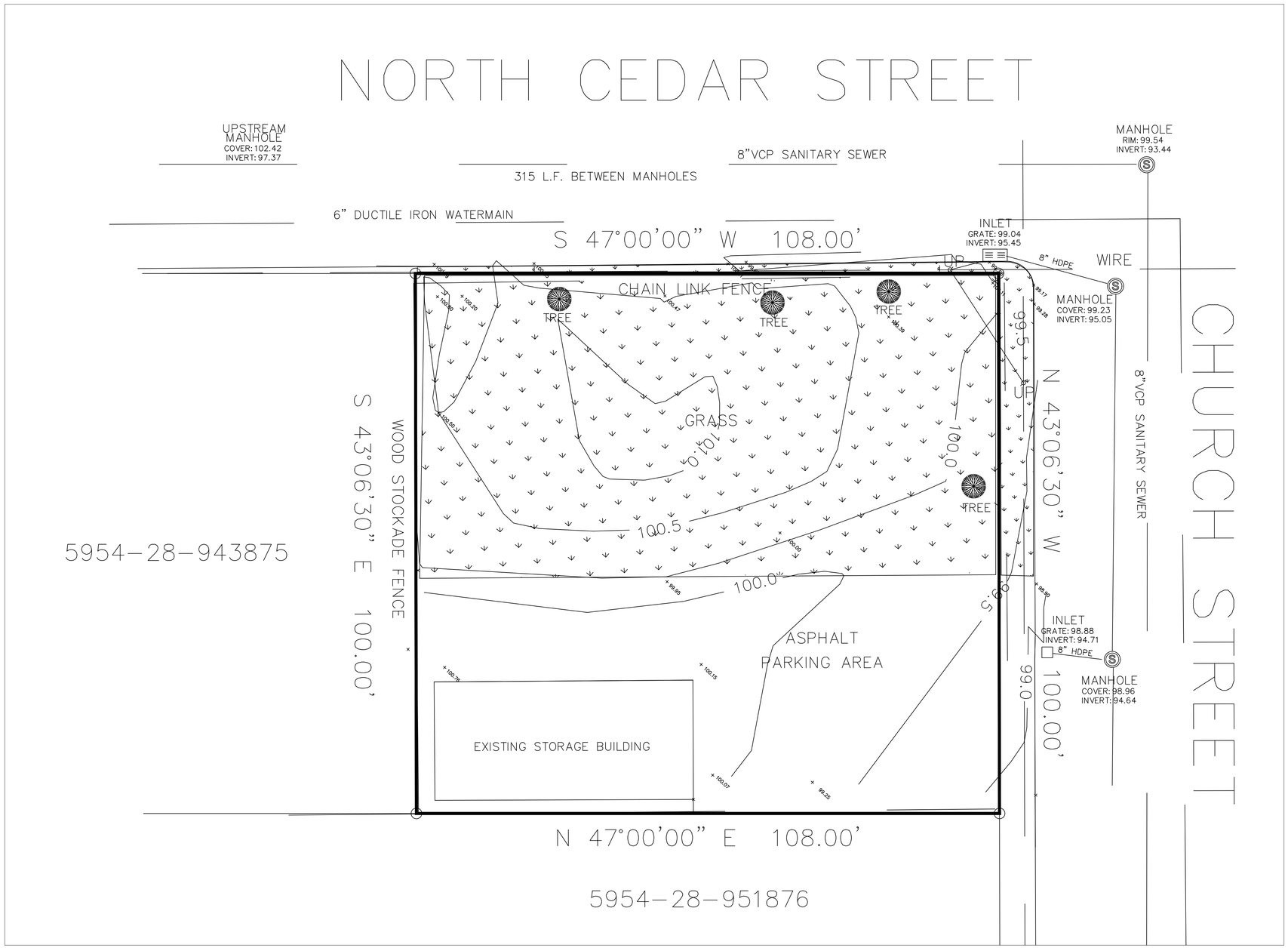
SCALE: XX
DATE: 7/2024
DRAWN BY: XX

ANGELO M. PERRUCCI III P.E.
NEW YORK
PROFESSIONAL ENGINEER
LIC. NO.109938–01

PROJECT: SITE PLAN 14 NORTH CEDAR STREET BEACON, NEW YORK

TITLE: TITLE SHEET

SHEET NO. 1 of10
JOB No. XX
DWG. No. T–1



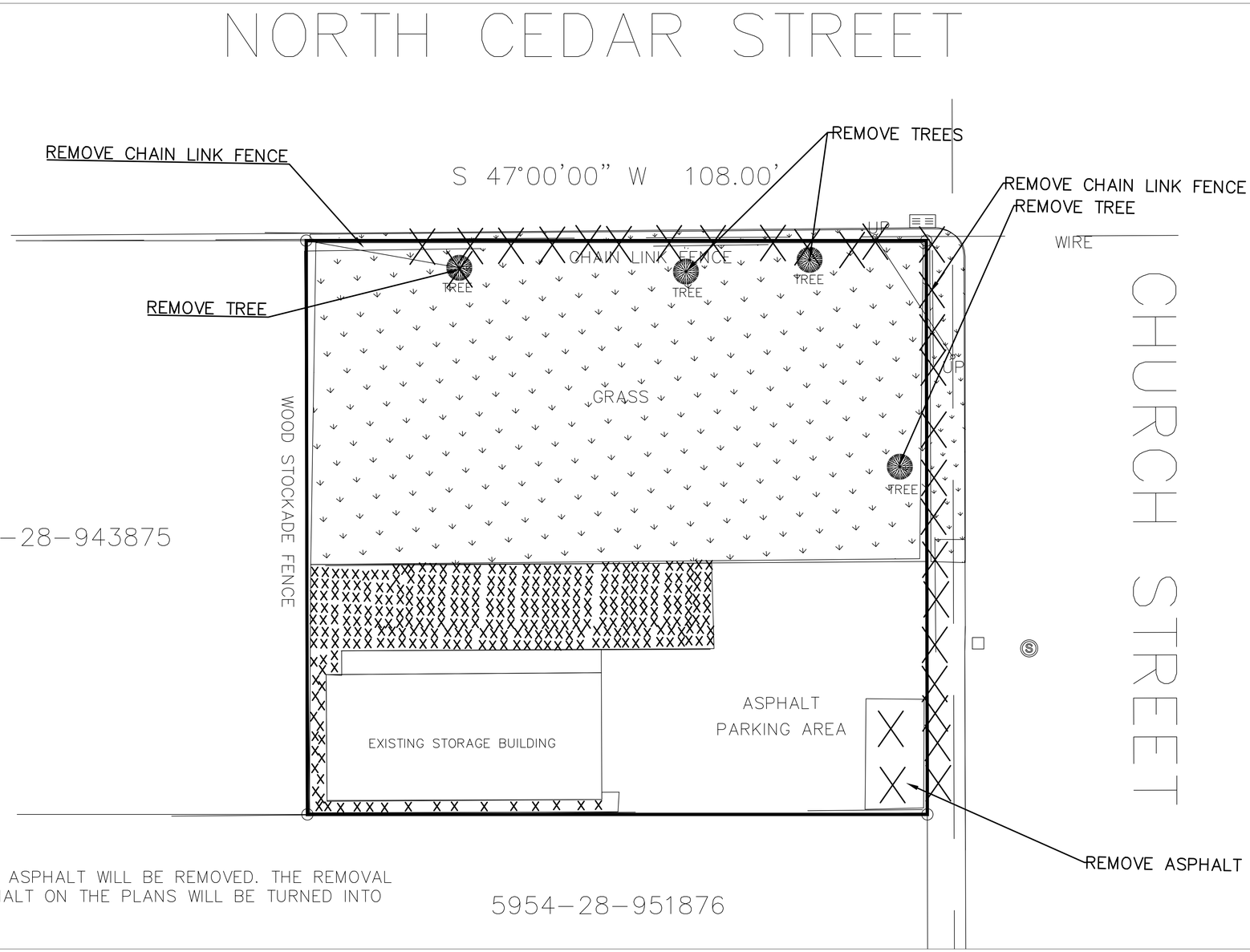

SURVEY WAS PERFORMED BY JOHN J POST JR, L.L.S. LICENSE NO.50643

0 10 20 30 40

SCALE: 1"=10'
GRAPHIC SCALE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | REVISION | SCALE: 1" = 10' | ANGELO M. PERRUCCI III P.E. | | PROJECT: SITE PLAN 14 NORTH CEDAR STREET BEACON, NEW YORK | SHEET NO. 2 of10 |
| | 12/2024 | DATE | DATE: 10/2023 | | | | JOB No. |
| FILE NO: | 2 | No. | DRAWN BY: XX | NEW YORK PROFESSIONAL ENGINEER LIC. NO.109938-01 | | TITLE: EXISTING CONDITIONS | DWG. No. C-1 |

E:\UPDATED FOLDER\2 SHEET C-1 EXISTING CONDITIONS.DWG




0 10 20 30 40

SCALE: 1"=10'

GRAPHIC SCALE

| | | | | | | |
|---|---|---|---|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | REVISION | SCALE: 1" = 10' | ANGELO M. PERRUCCI III P.E. | | PROJECT: SITE PLAN 14 NORTH CEDAR STREET BEACON, NEW YORK |
| | 12/2024 | DATE | DATE: 10/2023 | NEW YORK PROFESSIONAL ENGINEER LIC. NO.109938-01 | | TITLE: DEMOLITION PLAN |
| FILE NO: | 2 | No. | DRAWN BY: XX | | | SHEET NO. 3of10 / JOB No. / DWG. No. C-2 |

E:\UPDATED FOLDER\3 SHEET C-2 DEMO.DWG

Calculating the Required Water Quality Storage Volume (WQV)

I = percent of impervious coverage
A = Total Area(acres)
$A_{imp}$ = Area of existing impervious coverage (acres)

$$I = (\frac{A_{imp}}{A}) \times 100$$

$$44 = (\frac{.114}{.261}) \times 100$$

$R_V$ = Volumetric runoff coefficient

$R_V = 0.05 + (.009 \times I)$

$0.44 = 0.05 + (.009 \times 44)$

P = 90% Rainfall Event Number =1.4 (as per Figure 4.1 Stormwater Management Design Manual)

$$WQ_V = \frac{P \times Rv \times A}{12}$$

$$0.013 \text{ Acre-Foot} = \frac{1.4 \times .44 \times .261}{12}$$

Calculating the Area Reduction (WQV)

A = Total Impervious Area (acres)

$$WQ_V = \frac{P \times Rv \times A}{12}$$

$$0.006 \text{ Acre-Foot} = \frac{1.4 \times 0.44 \times .114}{12}$$

Calculating the Runoff Reduction Volume Provided ($RR_V$)

$RR_V$ PROVIDED = REQUIRED $WQ_V$ - AREA REDUCTION $WQ_V$

0.007 Acre-foot = 0.013 – 0.006
0.007 Acre -foot = 305 c.f.

Calculating the Minimum $RR_V$

Aic = Total Area of New Impervious Area(acres)
$RR_V$ = Minimum Reduction Volume Required from Impervious area
S = Hydrologic Soil Group B =.4
$R_V$ = Volumetric runoff coefficient = .95
P = 90% Rainfall Event Number = 1.4(as per Figure 4.1 Stormwater Management Design Manual)

$$RR_V = \frac{P \times Rv \times Aic \times S}{12}$$

$$305 \text{ c.f. } (0.007 \text{ Acre-Foot}) = \frac{1.4 \times 0.95 \times .167 \times .4}{12}$$

Calculating the WQV for Dry Well

WQV = Water Quality Volume 337 c.f.
N = Number of dry wells = 1
Vw = Volume provided per dry well =205 c.f.
Vi = Inside volume of dry well 205 c.f.
Vs = Volume of stone reservoir = 132 c.f.
ID = Inside diameter of dry well = 9.33 ft
r = half of inside diameter = 4.65 ft
H = Inside height of dry well = 3 ft
t = Thickness of dry well wall = 0.33 ft
$t_S$ = Thickness of stone reservoir = 3 ft

$$V_s = (pi \times [(r + t + t_s)^2 - (r + t)^2]) \times H \times 0.4$$

$$146 \text{ c.f.} = (pi \times [(4.65 + 3 + 0.33) - (4.65 + .33)^2]) \times 3 \times 0.4$$

$$Vi = pi \times ID^2 \times H$$

$$205 \text{ c.f.} = pi \times 4.65^2 \times 3$$

$WQV = Vs + Vi$

$351 \text{ c.f.} = 205 + 146$

$WQ_v = N \times Vw$

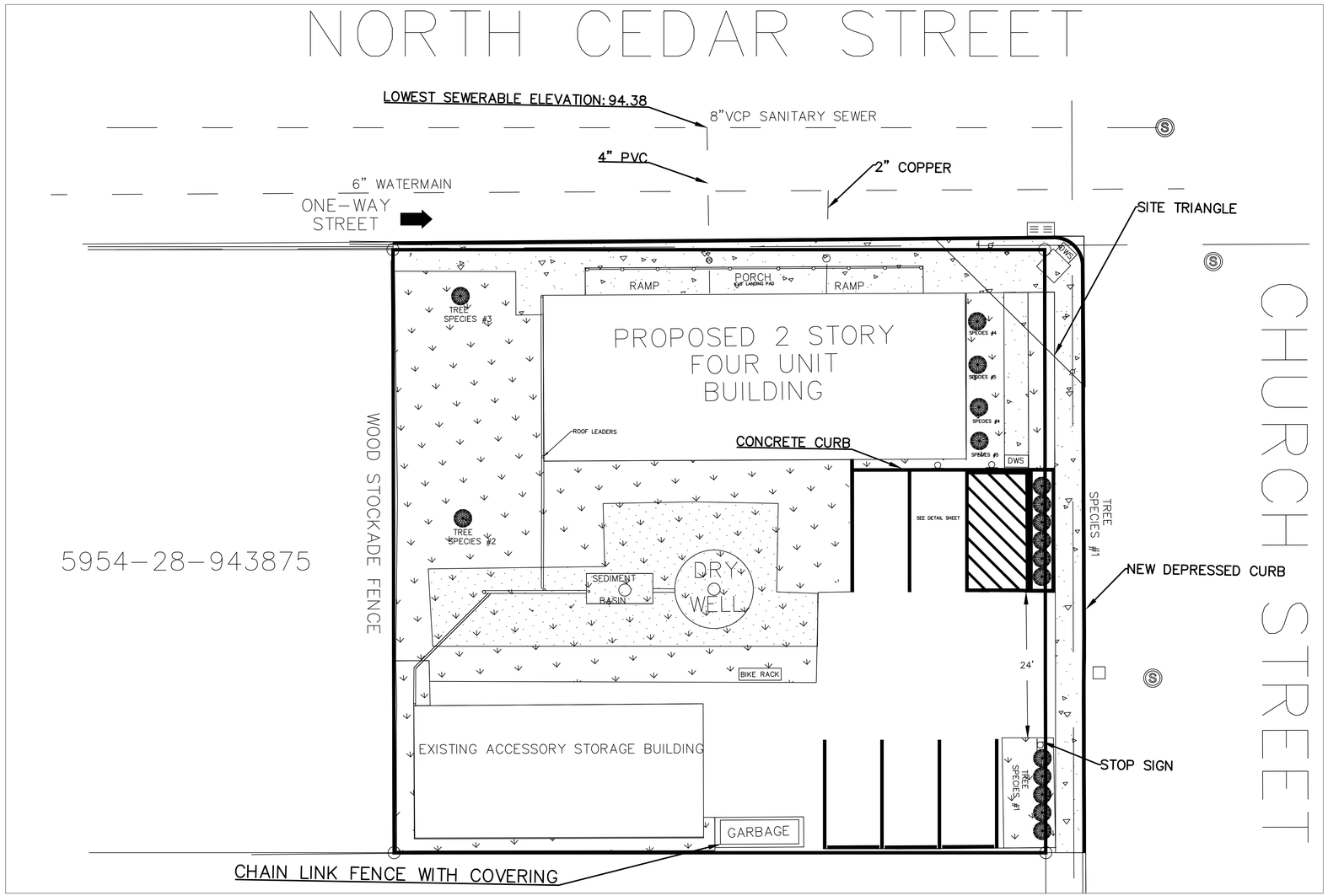
$351 \text{ c.f.}(0.008 \text{ acre-ft}) = 1 \times 351 \text{ c.f.}$

Calculating the WQV from Roofs

A = Total Surface Area of the R (acres)= 0.07
$R_V$ = Volumetric runoff coefficient = .95
P = 90% Rainfall Event Number = 1.4(as per Figure 4.1 Stormwater Management Design Manual)

$$WQ_V = \frac{P \times Rv \times A}{12}$$

$$337 \text{ c.f.}(0.0077) \text{ Acre-Foot} = \frac{1.4 \times 0.95 \times .07}{12}$$




Note:
EXISTING STORAGE BUILDING TO REMAIN AS EXISTING ACCESSORY STORAGE BUILDING. THE BUILDING WILL STORE EQUIPMENT FOR LAWN CARE, EQUIPMENT FOR SNOW REMOVAL AND PICNIC TABLES DURING THE WINTER.

PLANTING TABLE

| SPECIES # | SPECIES | PLANTING HEIGHT | # OF PLANTS |
|---|---|---|---|
| 1 | Thuja occidentalis smaragd | 5 Ft | 11 |
| 2 | Prunus Serotina (Cherry Tree) | 5 Ft | 1 |
| 3 | Acer Saccharum (Sugur Maple) | 5 Ft | 1 |
| 4 | BUDDLEJA | 3 Ft | 2 |
| 5 | HYDRANGEA PANICULATA | 3 Ft | 2 |

SNOW STORAGE LOCATION

0 10 20 30 40
SCALE: 1"=10'
GRAPHIC SCALE

E:\UPDATED FOLDER\4 SHEETC-3 SITE PLAN.DWG

| No. | REVISION | DATE |
|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | 12/2024 |
| | | 2 |

SCALE: 1" = 10'
DATE: 12/2024
DRAWN BY: XX

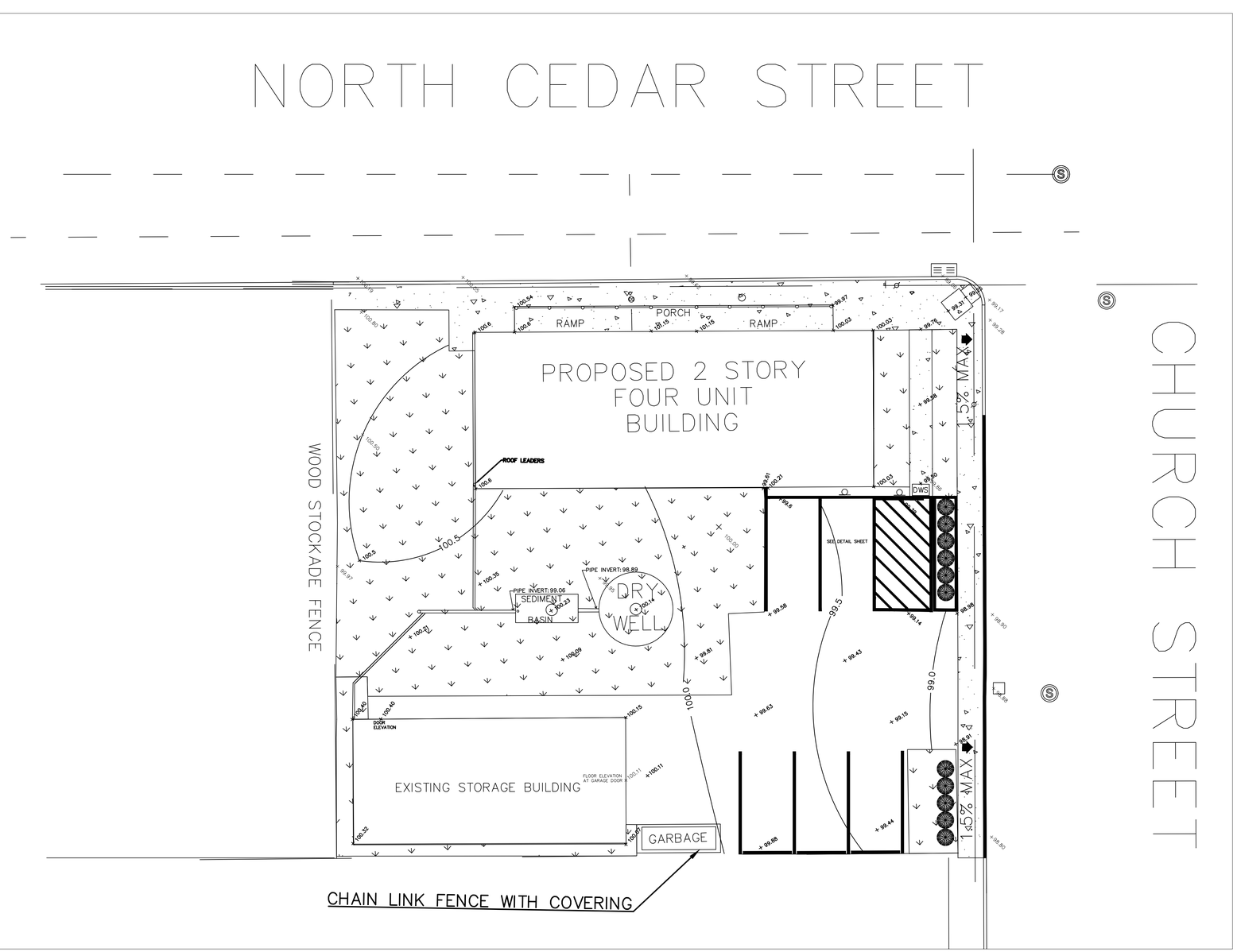
ANGELO M. PERRUCCI III P.E.
NEW YORK
PROFESSIONAL ENGINEER
LIC. NO.109938-01

FILE NO:

PROJECT
SITE PLAN
14 NORTH CEDAR STREET
BEACON, NEW YORK

TITLE
SITE PLAN

SHEET NO. 4of10
JOB No.
DWG. No. C-3




NOTE:

1. THE PROPOSED BUILDING WILL HAVE NO BASEMENT.
2. FIRST FLOOR ELEVATION: 101.15'
3. SECOND FLOOR ELEVATION: 110.82'

0 10 20 30 40

SCALE: 1"=10'
GRAPHIC SCALE

E:\UPDATED FOLDER\5 SHEET GRADING PLAN - .DWG

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | REVISION | SCALE: 1" = 10' | ANGELO M. PERRUCCI III P.E. | | PROJECT: SITE PLAN 14 NORTH CEDAR STREET BEACON, NEW YORK | SHEET NO.: 5 of10 |
| | 12/2024 | DATE | DATE: 10/2023 | NEW YORK PROFESSIONAL ENGINEER LIC. NO.109938-01 | | | JOB No. |
| FILE NO: | 2 | No. | DRAWN BY: XX | | | TITLE: GRADING PLAN | DWG. No.: C-4 |

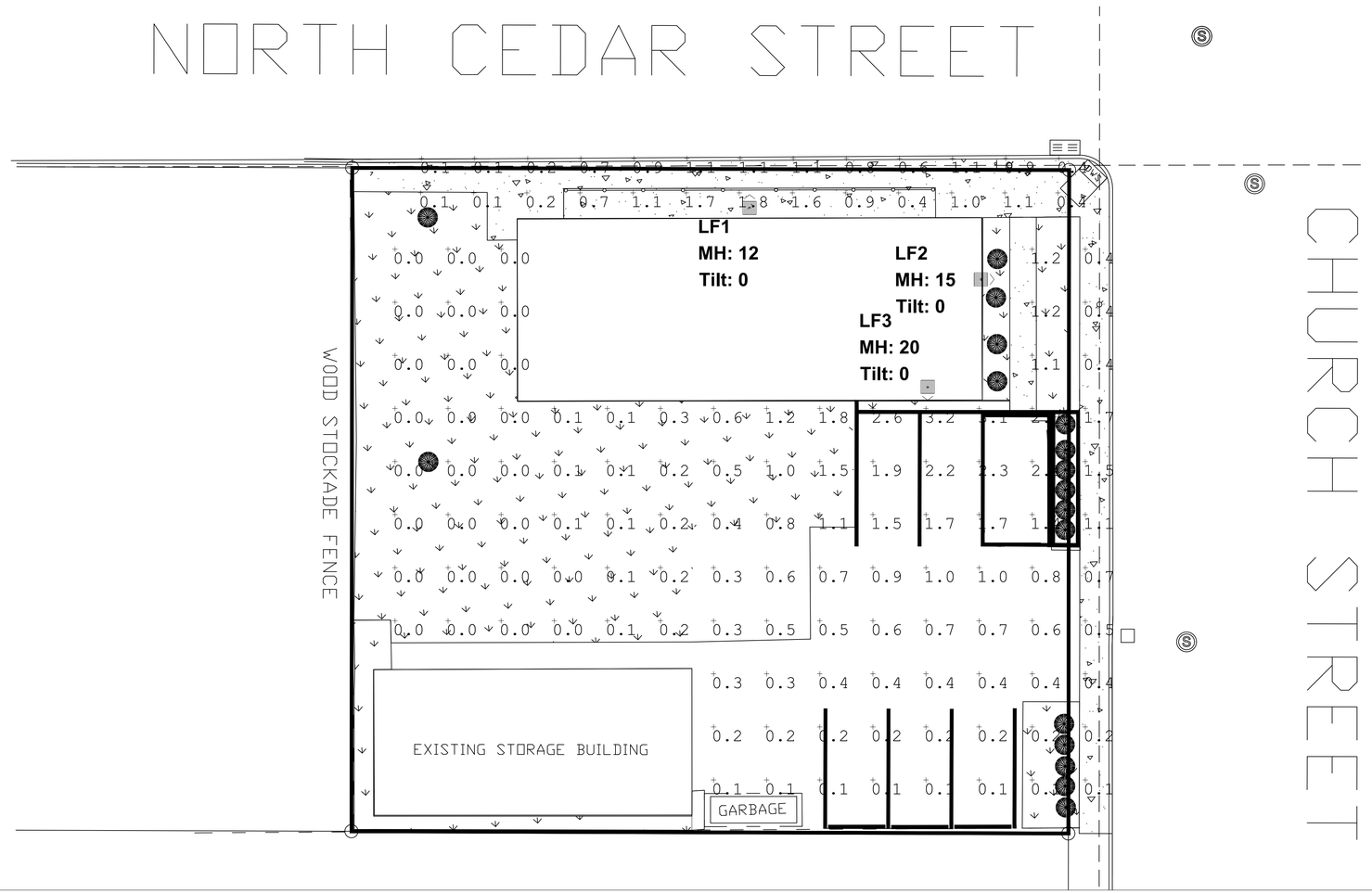
# MANUFACTURED BY CREE LIGHTING

**Luminaire Schedule**

| Symbol | Qty | Label | Arrangement | LMF | Lum. Lumens | Lum. Watts | Part Number | BUG Rating | CCT/CRI |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | LF1 | SINGLE | 0.930 | 2550 | 16 | OSQW-C-2L-40K7-3M-UL-WM-XX | B1-U0-G1 | 4000K/70-80 |
| | 1 | LF2 | SINGLE | 0.930 | 2550 | 16 | OSQW-C-2L-40K7-3M-UL-WM-XX | B1-U0-G1 | 4000K/70-80 |
| | 1 | LF3 | SINGLE | 0.930 | 6075 | 40 | OSQW-C-6L-40K7-4M-UL-WM-XX | B2-U0-G1 | 4000K/70-80 |

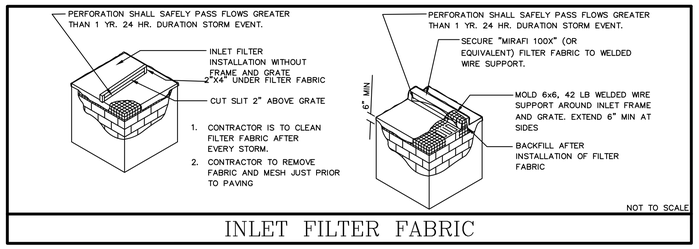
**Calculation Summary (Footcandles calculated using predicted lumen values @ 50K hrs of operation)**

| Label | Units | Avg | Max | Min | Avg/Min | Max/Min |
|---|---|---|---|---|---|---|
| CalcPts_1 | Fc | 0.26 | 3.2 | 0.0 | N.A. | N.A. |
| PAVED AREA | Fc | 1.17 | 3.2 | 0.1 | 11.70 | 32.00 |

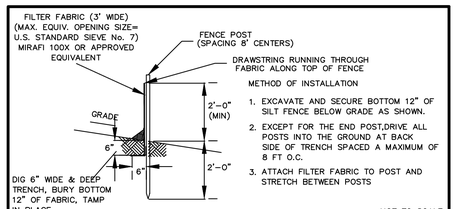



E:\UPDATED FOLDER\6 SHEET LIGHT PLAN.DWG

| | | | | | | |
|---|---|---|---|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | REVISION | SCALE: 1" = 10' | ANGELO M. PERRUCCI III P.E. | PROJECT: SITE PLAN<br>14 NORTH CEDAR STREET<br>BEACON, NEW YORK | SHEET NO. 6 of10 |
| | 12/2024 | DATE | DATE: 9/2024 | NEW YORK PROFESSIONAL ENGINEER LIC. NO.109938-01 | | JOB No. |
| FILE NO: | 2 | No. | DRAWN BY: XX | | TITLE: LIGHTING PLAN | DWG. No. L-1 |




INLET FILTER FABRIC




SILT FENCE

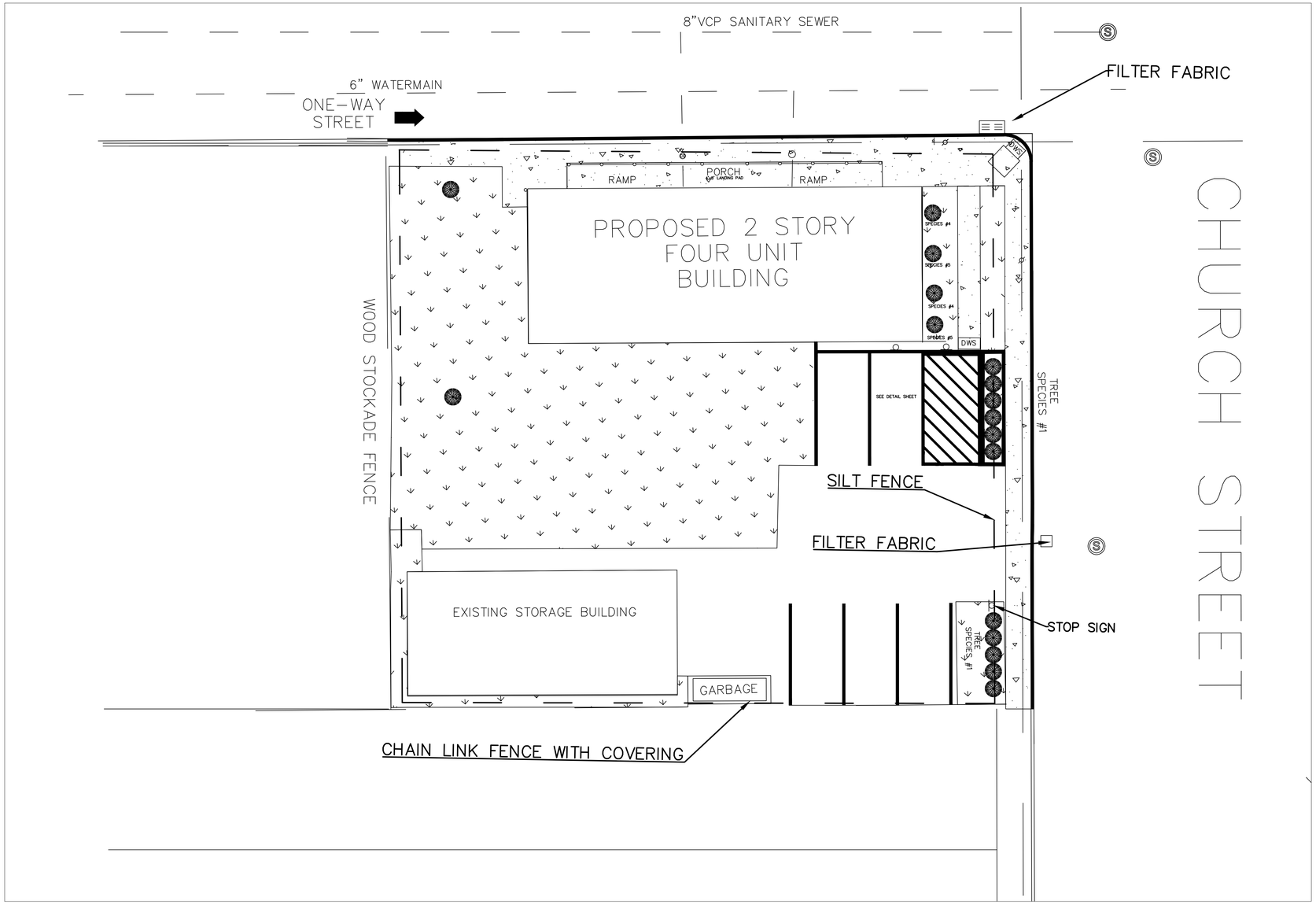
*PROPOSED DEVELOPMENT*

THE PROPOSED DEVELOPMENT CONSISTS OF A 2 STORY 4 UNIT APARTMENT BUILDING CONSTRUCTION WILL INCLUDE CLEARING TREES, INSTALLATION OF UTILITIES, BUILDING, SIDEWALKS, PAVEMENT AND LANDSCAPING. ALL SOIL REMOVAL SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL LAWS GOVERNING SUCH ACTIVITIES. AREA OF DISTURBANCE IS 0.25 ACRES.

| *SCHEDULE OF CONSTRUCTION OPERATIONS* | *TIME LINE* |
|---|---|
| 1. INSTALL PERIMETER SILT FENCE AND STABILIZED CONSTRUCTION ENTRANCE | 2 DAYS |
| 5. UTILITY INSTALLATION | 14 DAYS |
| 6. BUILDING CONSTRUCTION | 6 MONTHS |
| 7. SIDEWALKS & LANDSCAPING | 7 DAYS |
| 8. FINAL CLEANUP AND REMOVALS | 2 DAYS |

EXISTING IMPERVIOUS AREA = 0.12 ACRES
EXISTING PERVIOUS AREA = 0.13 ACRES

PROPOSED IMPERVIOUS AREA = 0.16 ACRES
PROPOSED PERVIOUS AREA = 0.09 ACRES




0 10 20 30 40

SCALE: 1"=10'

GRAPHIC SCALE

E:\UPDATED FOLDER\7 SHEET S-1 SOIL EROSION PLAN.DWG

FILE NO:

| No. | REVISION | DATE |
|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | 12/2024 |
| | | 2 |

SCALE: 1" = 10'

DATE: 9/2024

DRAWN BY: XX

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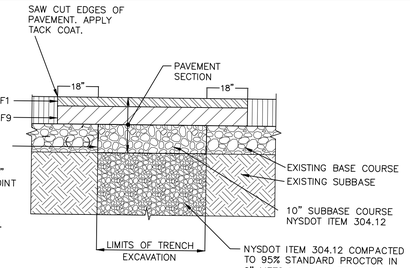
PROJECT
SITE PLAN
14 NORTH CEDAR STREET
BEACON, NEW YORK

TITLE
SOIL EROSION PLAN

SHEET NO. 7 of10

JOB No.

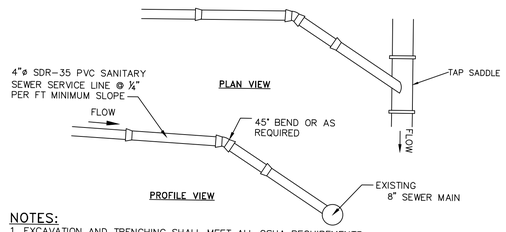
DWG. No. SE-1




NOTES:

1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

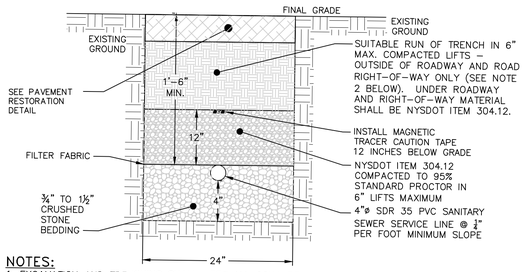
## PAVEMENT RESTORATION DETAIL
NOT TO SCALE




NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. TAPPING SADDLE FOR CONNECTION OF THE PROPOSED SERVICE LINE TO THE EXISTING SEWER MAIN TO BE A 4" WYE TAP SADDLE AND STRAPS– MODEL FERNCO TSW–4

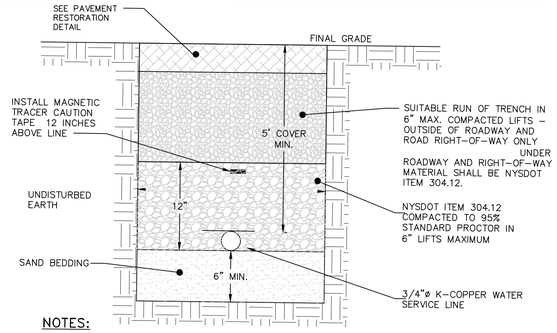
## SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE




NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

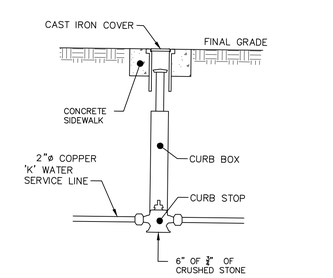
## SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE




NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.

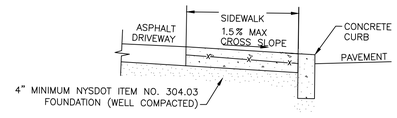
## WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE




NOTES:

1. CURB STOP TO BE MUELLER MODEL #A–728
2. VALVE AND VALVE BOX SHALL BE INSTALLED PLUMB WITH GROUND SURFACE.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH CRUSHED STONE

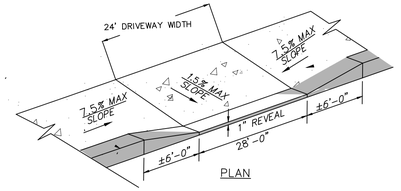
## WATER SHUT–OFF VALVE DETAIL
NOT TO SCALE



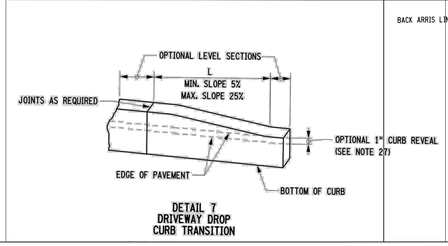

NOTE:

1. CONCRETE DRIVEWAYS SHALL BE 6" THICK WITH WIRED MESH
2. THE CROSS WIDTH WILL VARY FROM 4' TO 5'

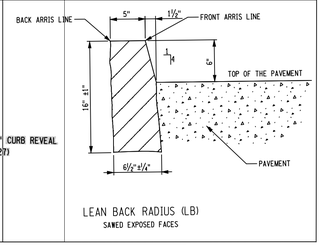
## DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE



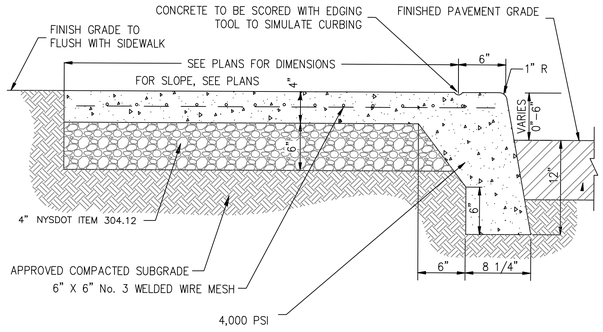

PLAN




**DETAIL 7**
**DRIVEWAY DROP**
**CURB TRANSITION**



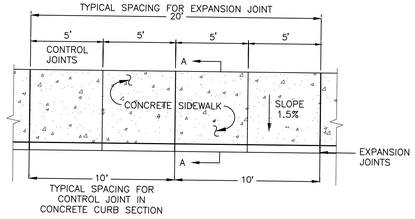

LEAN BACK RADIUS (LB)
SAWED EXPOSED FACES



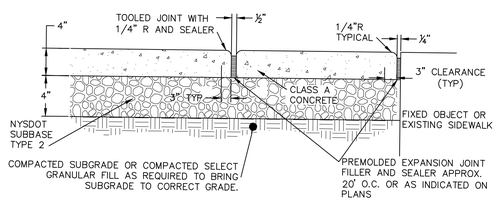

## SECTION
MONOLITHIC CURB AND SIDEWALK

NOTE:

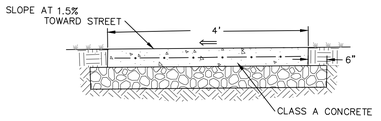
1. CONCRETE DRIVEWAYS AND HANDICAPPED RAMPS SHALL BE 6" THICK WITH WIRED MESH
2. THE CROSS WIDTH WILL VARY FROM 4' TO 5'
3. ½" CELLULOSE CONCRETE EXPANSION JOINTS WILL BE PLACED AT 10' INTERVALS.
4. 1" DEEP CONTRACTION JOINTS SHALL BE PLACED AT 5' INTERVALS.
5. THE TOP SURFACE SHALL HAVE A BROOM FINISH
6. ALL CONCRETE WILL BE 3500 PSI



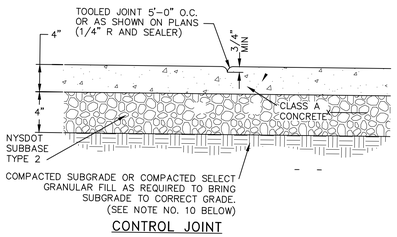

PLAN



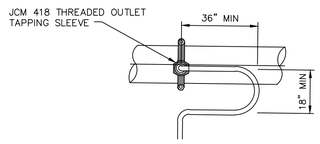

EXPANSION JOINT



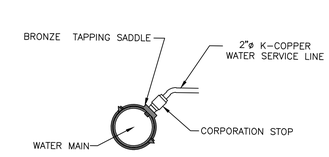

SECTION A–A




CONTROL JOINT




PLAN VIEW

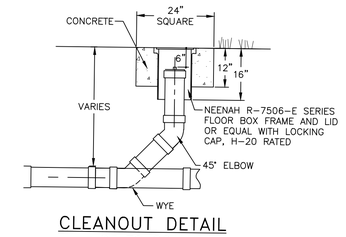



SECTION VIEW

NOTES:

1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL WATER MAIN DEPTH).
2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER.
3. WATER SERVICE LINE TO HAVE A 'GOOSENECK' NEAR CORPORATION STOP.
4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF THE WATER MAIN AT AN ANGLE OF APPROXIMATELY 45° FROM HORIZONTAL.
5. THE CONTRACTOR SHALL INSTALL A FULL BODIED STAINLESS STEEL TAPPING SLEEVE AT THE PROPOSED WATER SERVICE LOCATION.

## WATER SERVICE CONNECTION DETAIL
NOT TO SCALE




## CLEANOUT DETAIL
NOT TO SCALE

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FILE NO:

| No. | REVISION | DATE |
|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | 12/2024 |
| | | 2 |

SCALE: 1" = 10'
DATE: 9/2024
DRAWN BY: XX

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LIC. NO.109938–01

PROJECT
SITE PLAN
14 NORTH CEDAR STREET
BEACON, NEW YORK

TITLE
DETAIL SHEET

SHEET NO. 8of10
JOB No.
DWG. No. D–1

GENERAL NOTES:

1. THESE SHEETS ARE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), AND THE REQUIREMENTS OF THE 2013 PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT OF WAY (PROWAG).

2. THE DIMENSIONS SHOWN IN THE DETAILS AS MINIMUMS AND MAXIMUMS ARE THE LIMITS FOR DESIGN AND FIELD LAYOUT. FOR WORK ACCEPTANCE VALUES SEE "CRITICAL ELEMENTS FOR THE DESIGN, LAYOUT, AND ACCEPTANCE OF PEDESTRIAN FACILITIES" ON SHEET 11 OF 12 AND SHEET 12 OF 12.

   A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL ELEVATIONS AND DIMENSIONS TO ENSURE THAT THE FINAL LAYOUT OF PEDESTRIAN FACILITIES MEETS ADA REQUIREMENTS. ANY SURVEY WORK NECESSARY TO MEET THESE REQUIREMENTS SHALL BE PAID FOR UNDER ITEM 625.01 - SURVEY OPERATIONS. A CONTRACT CONTROL PLAN IS NOT NECESSARY FOR WORK LIMITED TO SIDEWALKS AND CURB RAMPS.

3. FACILITIES THAT CANNOT BE CONSTRUCTED TO MEET THE DESIGN STANDARDS, DUE TO DESIGN CONSTRAINTS, SHALL BE CONSTRUCTED TO MEET THE STANDARDS TO THE GREATEST EXTENT PRACTICABLE. FEATURES THAT CANNOT MEET THE VALUES FOR WORK ACCEPTANCE SHALL BE JUSTIFIED AS NONSTANDARD PER HIGHWAY DESIGN MANUAL CHAPTER 2.

4. TO CHECK FIELD LAYOUT AND TO VERIFY WORK ACCEPTANCE, ALL MEASUREMENTS SHALL BE MADE IN ACCORDANCE WITH THE "NOTES ON INSPECTION METHODS (MEASUREMENT)" ON SHEET 11 OF 12.

5. JOINTS BETWEEN SIDEWALKS, CURB RAMPS, TURNING SPACES AND ROADWAYS SHALL BE FLUSH AND FREE FROM ABRUPT VERTICAL CHANGES GREATER THAN ¼". VERTICAL SURFACE DISCONTINUITIES BETWEEN ¼" AND ½" SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE JOINT. SEE "VERTICAL SURFACE DISCONTINUITIES" DETAIL ON SHEET 2 OF 12.

6. SIDEWALKS ARE CONNECTED TO ROADWAYS BY BLENDED TRANSITIONS OR CURB RAMPS. BLENDED TRANSITIONS ARE CONNECTIONS BETWEEN THE SIDEWALK LEVEL AND THE ROADWAY LEVEL THAT HAVE A MAXIMUM GRADE (RUNNING SLOPE) OF 5%. CONNECTIONS WITH A MAXIMUM GRADE (RUNNING SLOPE) GREATER THAN 5% ARE CONSIDERED CURB RAMPS.

7. CURB RAMPS AND BLENDED TRANSITIONS MAY REQUIRE THE INSTALLATION OF DETECTABLE WARNINGS. SEE ADDITIONAL "DETECTABLE WARNING NOTES" AND THE DETAILS ON DIMENSIONS AND ORIENTATION ON SHEET 2 OF 12.

8. GRADE BREAKS WITHIN THE PEDESTRIAN ACCESS ROUTE SHOULD BE PERPENDICULAR TO THE DIRECTION OF TRAVEL AND SHALL NOT BE ROUNDED. VERTICAL ALIGNMENT SHALL BE GENERALLY PLANAR.

9. MATERIAL DEPTHS SHOWN ON THESE SHEETS ARE TYPICAL MINIMUM VALUES AND MAY BE DIFFERENT IN THE CONTRACT DOCUMENTS.

10. SIDEWALK GRADE (RUNNING SLOPE) SHALL NOT EXCEED 4.5% FOR DESIGN AND LAYOUT OR 5% FOR WORK ACCEPTANCE, EXCEPT WHEN MATCHING INTO EXISTING SIDEWALK OR WHEN THE ADJACENT HIGHWAY GRADE IS STEEPER THAN 5%. WHEN THE ADJACENT HIGHWAY GRADE IS GREATER THAN 5%, THE SIDEWALK GRADE SHALL NOT EXCEED THE HIGHWAY GRADE.

11. THE CROSS SLOPE OF PEDESTRIAN ACCESS ROUTES SHALL BE 1.5% MAXIMUM FOR DESIGN AND LAYOUT, AND 2% MAXIMUM FOR WORK ACCEPTANCE. THE FOLLOWING EXCEPTIONS ARE ALLOWED:

    A. WHERE PEDESTRIAN STREET CROSSINGS ARE PROVIDED AT INTERSECTIONS WHERE THERE IS NO YIELD OR STOP SIGN, OR WHERE THERE IS A TRAFFIC SIGNAL THAT IS DESIGNED FOR THE GREEN PHASE, THE CROSS SLOPE OF A PEDESTRIAN ACCESS ROUTE CONTAINED WITHIN A STREET CROSSING (CROSSWALK) SHALL BE 4.5% MAXIMUM FOR DESIGN AND LAYOUT, AND 5% MAXIMUM FOR WORK ACCEPTANCE.

    B. WHERE MIDBLOCK PEDESTRIAN STREET CROSSINGS ARE PROVIDED, THE CROSS SLOPE OF A PEDESTRIAN ACCESS ROUTE CONTAINED WITHIN A MIDBLOCK STREET CROSSING SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.

12. THE MINIMUM CLEAR WIDTH FOR PEDESTRIAN ACCESS ROUTES IS 4'-0", EXCLUSIVE OF THE CURB. THE DEPARTMENT'S PREFERRED CLEAR WIDTH IS 5'-0". WHEN WALKWAY WIDTHS ARE LESS THAN 5'-0", 5'-0" x 5'-0" PASSING SPACES (SHOWN IN DETAIL A OR B ON THIS SHEET), OR A FEATURE OF EQUAL OR GREATER DIMENSIONS THAT MEETS THE SLOPE AND SURFACE CRITERIA, SHALL BE PROVIDED AT A MAXIMUM INTERVAL OF 200'. EXISTING DRIVEWAYS AND STREET CROSSINGS MAY SERVE AS PASSING SPACES, PROVIDED THEY MEET SLOPE AND SURFACE REQUIREMENTS FOR A PEDESTRIAN ACCESS ROUTE.

13. THE BUFFER ZONE IS A PHYSICAL DISTANCE SEPARATING THE PEDESTRIAN ACCESS ROUTE FROM THE VEHICLE TRAVELED WAY. THE BUFFER ZONE MAY BE PLANTED OR PAVED. WHERE THE BUFFER ZONE WIDTH, EXCLUSIVE OF CURB, IS LESS THAN 3'-0", THE SURFACE SHOULD BE PAVED OR CONSTRUCTED WITH HARDSCAPE MATERIALS.

14. THE MAXIMUM RECOMMENDED CROSS SLOPE OF A TURF BUFFER ZONE OR SLOPE TRANSITION BEHIND SIDEWALK IS 25%. BUFFER ZONES WITH A CROSS SLOPE GREATER THAN 25% SHOULD BE PAVED, PLANTED OR CONSTRUCTED WITH HARDSCAPE MATERIALS.

15. WHEN CROSSING DRIVEWAYS, THE WORK SHALL BE IN CONFORMANCE WITH STANDARD SHEET 608-03.

16. FOR PEDESTRIAN SIGNALS AND PEDESTRIAN PUSH BUTTONS, REFER TO SHEET 12 OF 12 AND STANDARD SHEET 680-10 FOR DETAILS.

17. WHERE EXISTING ROADWAYS ARE SAWCUT TO INSTALL CURBING AND/OR SIDEWALK, THE ROADWAY SHOULD BE SAWCUT AT LEAST 2'-0" FROM THE PROPOSED CURB LINE TO ALLOW FOR ADEQUATE COMPACTION OF ASPHALT. IF THE SAWCUT IS LESS THAN 2'-0" FROM THE PROPOSED CURB LINE, THE ROADWAY SHALL BE REBUILT USING CLASS A, C, OR D CONCRETE. SEE DETAILS ON SHEET 9 OF 12.

CURB RAMP NOTES:

18. THE MINIMUM CLEAR WIDTH OF A CURB RAMP SHALL BE 4'-0". THE DEPARTMENT'S PREFERRED CLEAR WIDTH IS 5'-0".

19. THE MAXIMUM GRADE (RUNNING SLOPE) FOR DESIGN AND LAYOUT OF A CURB RAMP SHALL BE 7.5%. THE GRADE FOR WORK ACCEPTANCE SHALL BE A MAXIMUM OF 8.3%.

20. WHERE THE TERRAIN DOES NOT ALLOW CONSTRUCTION OF A CURB RAMP WITH A GRADE (RUNNING SLOPE) OF 8.3% OR LESS WITHIN 15'-0", THE RAMP LENGTH SHALL NOT BE REQUIRED TO EXCEED 15'-1" FOR DESIGN AND LAYOUT OR 15'-0" FOR WORK ACCEPTANCE.

21. THE CROSS SLOPE OF THE CURB RAMP SHALL BE AS FLAT AS POSSIBLE AND STILL PROVIDE POSITIVE DRAINAGE. THE CROSS SLOPE OF A CURB RAMP SHALL BE 1.5% MAXIMUM FOR DESIGN AND LAYOUT, AND 2% MAXIMUM FOR WORK ACCEPTANCE. THE FOLLOWING EXCEPTIONS ARE ALLOWED:

    A. WHERE PEDESTRIAN STREET CROSSINGS ARE PROVIDED AT INTERSECTIONS WHERE THERE IS NO YIELD OR STOP SIGN, OR WHERE THERE IS A TRAFFIC SIGNAL THAT IS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK CROSSINGS, THE CROSS SLOPE OF THE CURB RAMP SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.

22. WHERE THE EXISTING ROADWAY GRADE EXCEEDS THE MAXIMUM ALLOWABLE CROSS SLOPE FOR A CURB RAMP, AND CANNOT BE CORRECTED WITHIN THE SCOPE OF THE PROJECT, THE RAMP SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE "CURB RAMP CROSS SLOPE TRANSITION" DETAIL ON SHEET 8 OF 12. THE RAMP MAY NEED TO BE JUSTIFIED AS A NONSTANDARD FEATURE. SEE NOTE 3 ON THIS SHEET.

23. RAMP SIDE OPTIONS ARE DETAILED ON SHEET 3 OF 12. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES SHALL BE INSTALLED WITH A MAXIMUM SLOPE OF 9.5% FOR DESIGN AND LAYOUT, AND 10% MAXIMUM FOR WORK ACCEPTANCE. A PEDESTRIAN CIRCULATION PATH IS ASSUMED TO CROSS THE CURB RAMP WHEN AREA ADJACENT TO THE RAMP IS PAVED AND FREE OF VERTICAL OBSTRUCTIONS THAT WOULD PREVENT PEDESTRIAN PASSAGE. THERE IS NO MAXIMUM FLARE SLOPE FOR A RAMP THAT IS NOT CROSSED BY A PEDESTRIAN CIRCULATION PATH.

24. THE BACK SIDE OF A PARALLEL RAMP SHOULD BE GRADED TO A MAXIMUM SLOPE OF 25% TO MATCH EXISTING TERRAIN, UNLESS OTHERWISE SHOWN IN THE CONTRACT DOCUMENTS. WHERE GRADING IS NOT FEASIBLE DUE TO LIMITED ROW OR PHYSICAL CONSTRAINTS, A BACK CURB MAY BE INSTALLED. SEE DETAILS ON SHEET 3 OF 12 AND SHEET 9 OF 12.

25. THE DEPARTMENT'S PREFERENCE IS TO INSTALL TWO SEPARATE CURB RAMPS AT A STREET CORNER THAT SERVES TWO SEPARATE PEDESTRIAN CROSSINGS, WITH EACH RAMP ALIGNED TO THE CROSSING THAT IT SERVES. WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT SEPARATE RAMPS, A SINGLE CURB RAMP (I.E., A DIAGONAL CURB RAMP) IS PERMITTED TO SERVE BOTH PEDESTRIAN CROSSINGS.

TURNING SPACE AND CLEAR SPACE NOTES:

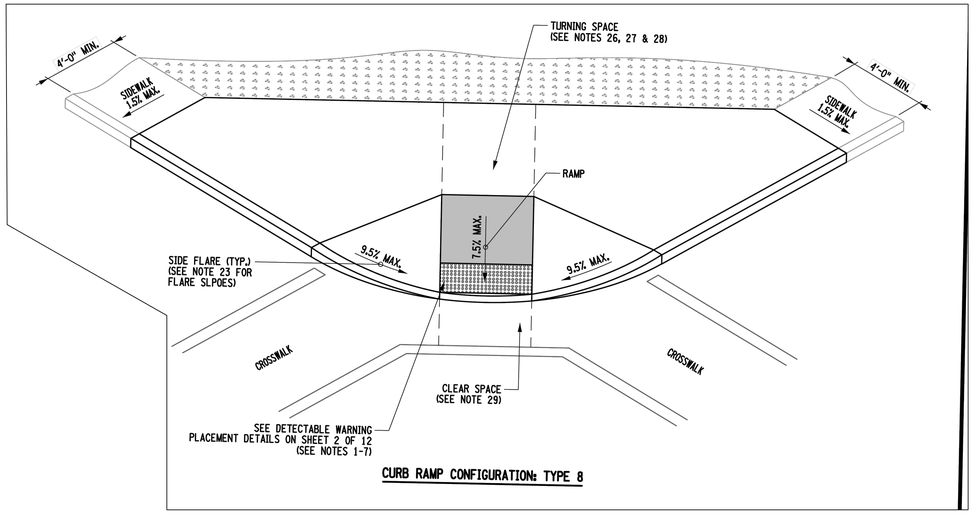
26. WHERE A CHANGE IN DIRECTION IS REQUIRED TO UTILIZE A CURB RAMP, A TURNING SPACE SHALL BE PROVIDED AT THE BASE OR THE TOP OF CURB RAMP, AS APPLICABLE. TURNING SPACES SHALL BE PERMITTED TO OVERLAP CLEAR SPACES.

27. WHERE THERE ARE NO VERTICAL CONSTRAINTS AT THE BACK OF SIDEWALK, (E.G., VERTICAL CURBS, BUILDINGS, FENCES) THE TURNING SPACE DIMENSIONS SHALL BE 4'-0" x 4'-0" MINIMUM. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4'-0" X 5'-0" MINIMUM. THE 5'-0" DIMENSION SHALL BE IN THE DIRECTION OF THE RAMP RUN.

28. TURNING SPACES SHALL NOT BE DESIGNED WITH A SLOPE GREATER THAN 1.5% IN ANY DIRECTION, WHILE PROVIDING POSITIVE DRAINAGE. THE MAXIMUM SLOPE FOR WORK ACCEPTANCE IS 2.0%.THE FOLLOWING EXCEPTIONS ARE ALLOWED:

    A. WHERE PEDESTRIAN STREET CROSSINGS ARE PROVIDED AT INTERSECTIONS WHERE THERE IS NO YIELD OR STOP SIGN, OR WHERE THERE IS A TRAFFIC SIGNAL THAT IS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK CROSSINGS, THE CROSS SLOPE OF THE TURNING SPACE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE. WHEN A RAMP EXISTS BETWEEN THE TURNING SPACE AND THE CURB, THE CROSS SLOPE OF THE TURNING SPACE SHOULD BE LESS STEEP THAN THE ROADWAY GRADE AND AS FLAT AS PRACTICABLE WHENEVER POSSIBLE.

29. BELOW THE BOTTOM GRADE BREAK OF A CURB RAMP, A CLEAR SPACE OF 4'-0" x 4'-0" MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN CROSSWALK, AND OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE. THE CLEAR SPACE MAY OVERLAP TURNING SPACES, DETECTABLE WARNING SURFACES, AND DROP CURBS.




CURB RAMP CONFIGURATION: TYPE 8

1. DETECTABLE WARNING SURFACES (DWS) SHALL BE PROVIDED AT THE FOLLOWING LOCATIONS ON PEDESTRIAN ACCESS ROUTES:

   A. CURB RAMPS AND BLENDED TRANSITIONS AT PEDESTRIAN STREET CROSSINGS.

   B. PEDESTRIAN REFUGE ISLANDS (WHERE THE LENGTH OF THE PEDESTRIAN ACCESS ROUTE ACROSS THE REFUGE ISLAND IS GREATER THAN OR EQUAL TO 6').

   C. PEDESTRIAN AT-GRADE RAIL CROSSINGS NOT LOCATED WITHIN A STREET OR HIGHWAY.

2. DETECTABLE WARNING SURFACES SHALL BE PROVIDED WHERE THE PESESTRIAN ACCESS ROUTE CROSSES DRIVEWAYS WITH SIGNAL, YIELD OR STOP CONTROL. DETECTABLE WARNING SURFACES SHALL NOT BE PROVIDED AT CROSSINGS OF UNCONTROLLED DRIVEWAYS.

3. WITH THE EXCEPTION OF THE "DETECTABLE WARNING SURFACE TRUNCATED DOME DETAILS" DETECTABLE WARNING DOMES ON THIS SHEET ARE NOT DEPICTED TO SCALE.

4. DETECTABLE WARNING FIELDS SHALL EXTEND 24" MINIMUM IN THE DIRECTION OF PEDTRIAN TRAVEL ACROSS THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUDING ANY FLARED SIDES.

5. SOME DETECTABLE WARNING PRODUCTS REQUIRE A CONCRETE BORDER FOR PROPER INSTALLATION. BORDERS CANNOT BE INCLUDED AS PART OF THE 24" MINIMUM DIMENSION DESCRIBED IN NOTE 4.

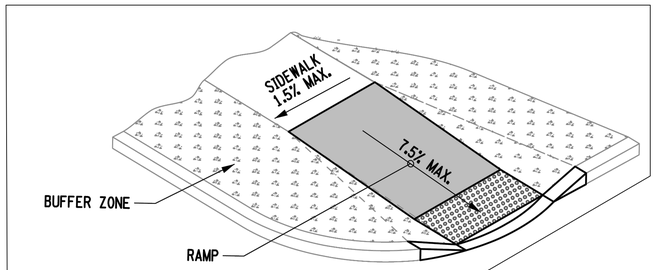
   A. WHEN PLACED AT THE BACK OF CURB, DETECTABLE WARNING FIELDS SHOULD BE PLACED AS CLOSE TO THE BACK OF CURB AS PRACTICABLE. BOTH FRONT CORNERS OF THE DETECTABLE WARNING FIELD SHALL NOT BE LOCATED MORE THAN 2" FROM THE BACK OF CURB. WHERE THE BACK OF THE CURB EDGE IS TOOLED TO PROVIDE A RADIUS, THE BORDER DIMENSION SHALL BE MEASURED FROM THE INSIDE EDGE OF THE CURB RADIUS. WHERE CURB IS NOT USED, THE EDGE OF PAVEMENT SHALL BE SUBSTITUTED FOR THE BACK OF CURB FOR PLACEMENT OF DETECTABLE WARNINGS.

   B. WHEN PLACED ABOVE THE LOWER GRADE BREAK OF A CURB RAMP, DETECTABLE WARNING UNITS SHOULD BE PLACED AS CLOSE TO THE JOINT AS PRACTICABLE. BOTH FRONT CORNERS OF RECTILINEAR DETECTABLE WARNING FIELDS SHALL NOT BE LOCATED MORE THAN 2" FROM THE JOINT.

   C. WHEN RADIAL DWS UNITS ARE PLACED AT THE BACK OF CURB, THE FRONT EDGE OF THE DWS FIELD SHOULD BE AS CLOSE AS POSSIBLE TO THE BACK OF CURB, I.E., THE RADIUS OF THE FRONT OF THE DWS FIELD SHOULD MATCH THE RADIUS ALONG THE BACK OF CURB AS CLOSELY AS POSSIBLE. THE OUTSIDE CORNERS OF THE DWS FIELD MUST BE LOCATED NO MORE THAN 2 INCHES FROM THE BACK OF CURB.

6. ON SLOPES OF 5% OR GREATER, THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE LOWER GRADE BREAK ON THE RAMP RUN. WHERE DOMES ARE ARRAYED RADIALLY, THEY MAY DIFFER IN DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET. DOME ALIGNMENT THAT IS PERPENDICULAR OR RADIAL TO THE LOWER GRADE BREAK IS NOT REQUIRED ON SLOPES OF LESS THAN 5%.

7. THE DETECTABLE WARNING FIELD SHALL BE THE COLOR SPECIFIED IN THE CONTRACT DOCUMENTS OR MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. DETECTABLE WARNING SURFACES CONTRAST VISUALLY WITH ADJACENT GUTTER, STREET OR HIGHWAY, OR PEDESTRIAN ACCESS ROUTE SURFACE, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.




RAMP SIDE OPTION B: GRADED EARTH

E:\UPDATED FOLDER\8 SHEET S-1 DETAIL SHEET.DWG

FILE NO:

| No. | REVISION | DATE |
|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | 12/2024 |
| | | 2 |

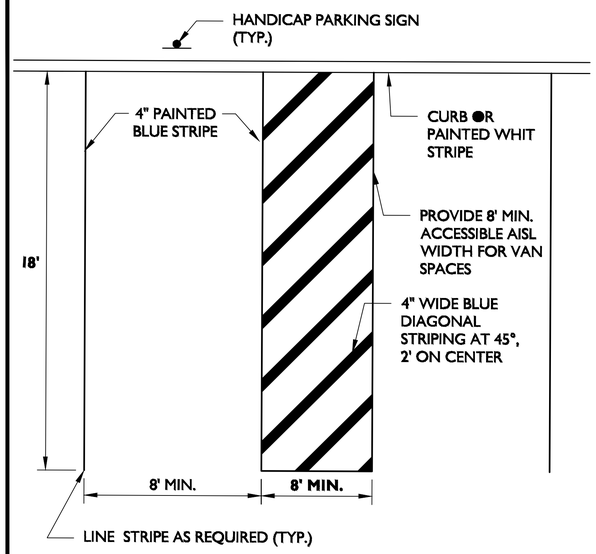
SCALE: 1" = 10'
DATE: 9/2024
DRAWN BY: XX

ANGELO M PERRUCCI III P.E.
NEW YORK
PROFESSIONAL ENGINEER
LIC. NO.109938-01

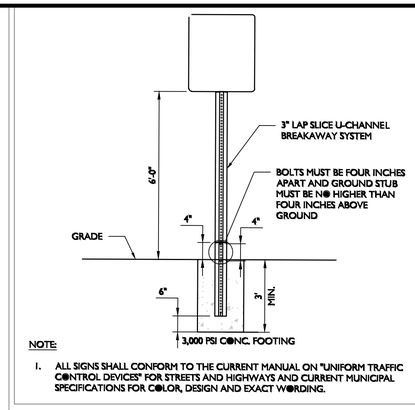
PROJECT: SITE PLAN
14 NORTH CEDAR STREET
BEACON, NEW YORK

TITLE: DETAIL SHEET

SHEET NO. 9of10
JOB No.
DWG. No. D-2



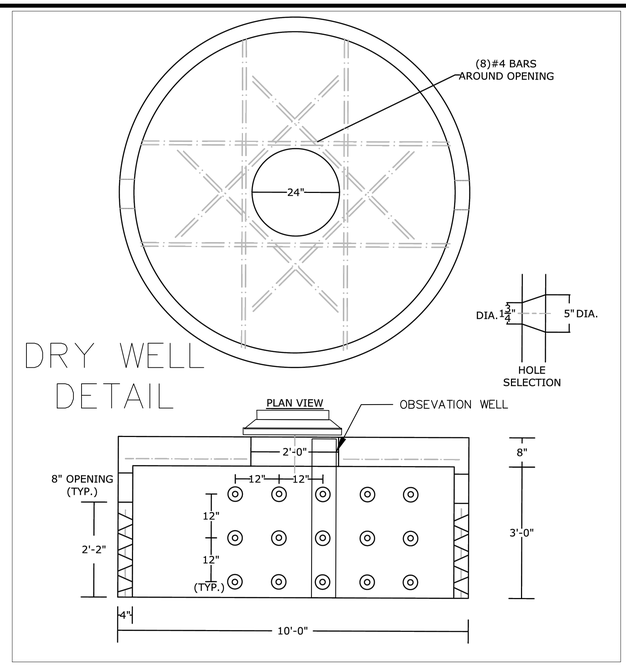

ACCESSIBLE PARKING DETAIL




NOTE:

1. ALL SIGNS SHALL CONFORM TO THE CURRENT MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS AND CURRENT MUNICIPAL SPECIFICATIONS FOR COLOR, DESIGN AND EXACT WORDING.

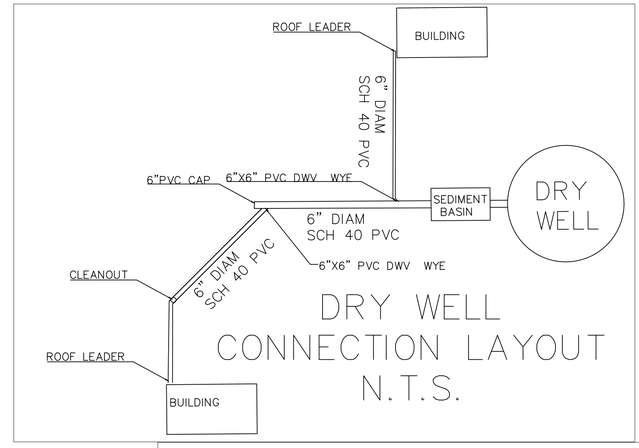
BREAKAWAY SIGN POST DETAIL



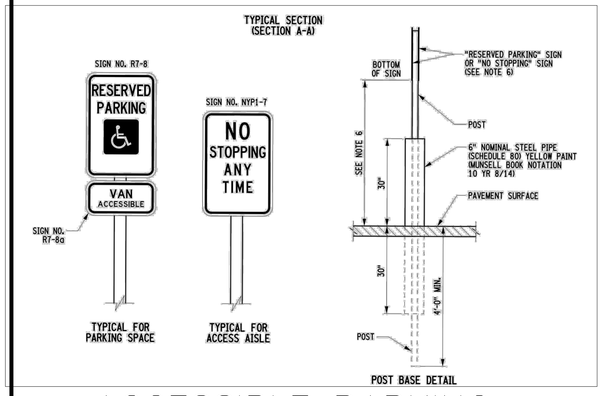

DRY WELL DETAIL

NOTES:

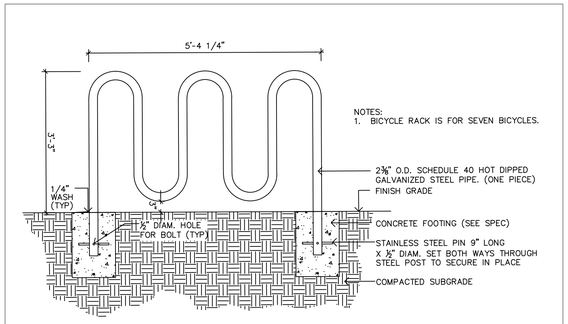
1. THE DRY WELL WILL BE SURROUNDED WITH 12" No.2 STONE BY 3' ON THE SIDES AND BOTTOM OF THE DRY WELL. DRAINAGE FILTER FABRIC WILL OUTLINE THE STONE.
2. ALL PVC PIPE FROM ROOF LEADERS WILL HAVE 4" MINIMUM COVER.
3. PIPE WILL HAVE ¾" CRUSHED STONE BEDDING, 4"MINIMUM BELOW PIPE.
4. SEDIMENT BASIN WILL BE INSPECTED MONTHLY AND CLEANED QUARTERLY UNLESS EARLIER MAINTENANCE IS NEEDED.



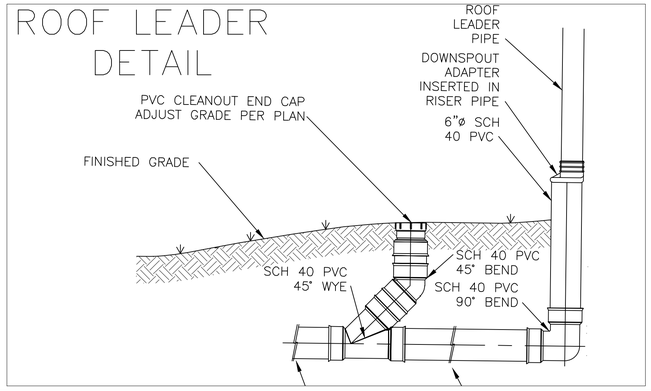

DRY WELL CONNECTION LAYOUT N.T.S.

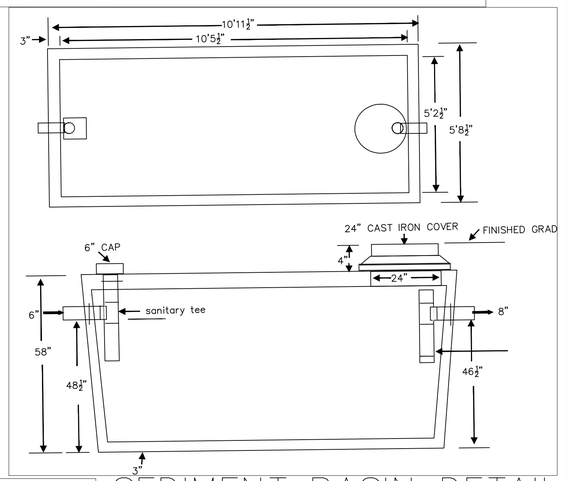



ACCESSIBLE PARKING SIGN DETAIL




BIKE RACK DETAIL




SEDIMENT BASIN DETAIL

**TYPICAL ACCESSIBLE PARKING LOT LAYOUTS**

NOTES:

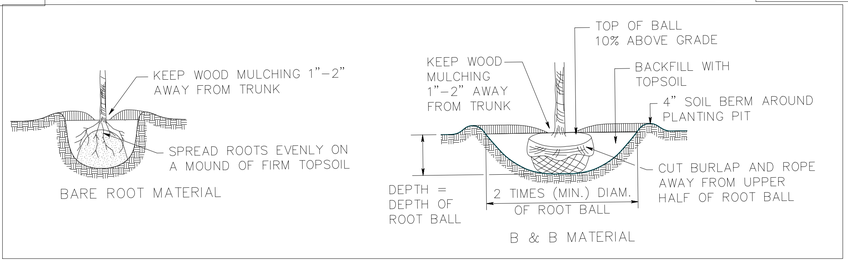
1. THIS SHEET IS INTENDED TO DEPICT THE DIMENSIONAL REQUIREMENTS OF TYPICAL ACCESSIBLE PARKING LOT SPACES, THE SIDEWALK, CURBING, AND PAVEMENT MATERIALS SHALL BE AS SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS.
2. MINIMUM NUMBER OF ACCESSIBLE SPACES:

| TOTAL SPACES IN LOT | MINIMUM NUMBER OF ACCESSIBLE SPACES | TOTAL SPACES IN LOT | MINIMUM NUMBER OF ACCESSIBLE SPACES |
|---|---|---|---|
| 1 TO 25 | 1 | 201 TO 300 | 7 |
| 26 TO 50 | 2 | 301 TO 400 | 8 |
| 51 TO 75 | 3 | 401 TO 500 | 9 |
| 75 TO 100 | 4 | 501 TO 1,000 | 2% OF TOTAL |
| 101 TO 150 | 5 | 1,001 AND OVER | 20, PLUS ONE FOR EACH 100, OR FRACTION THEREOF, OVER 1,000 |
| 151 TO 200 | 6 | | |

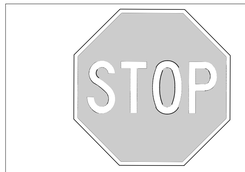
EXCEPTION: PARKING AREAS ON THE PREMISES OF, OR IMMEDIATELY ADJACENT TO, MEDICAL SERVICES FACILITIES PROVIDING TREATMENT FOR MOBILITY IMPAIRED PERSONS AND OTHER SIMILAR LOCATIONS MAY REQUIRE A GREATER NUMBER OF ACCESSIBLE PARKING SPACES THAN INDICATED ABOVE. REFER TO THE APPLICABLE ACCESSIBILITY STANDARD.

3. LOCATION - PARKING SPACES FOR USE BY PERSONS WITH DISABILITIES SHALL BE IN THE SPACES CLOSEST TO THE NEAREST ACCESSIBLE BUILDING OR FACILITY ENTRANCE ON AN ACCESSIBLE ROUTE.
4. DIMENSIONS - ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 8' WIDE AND SHALL HAVE AN ADJACENT ACCESS AISLE 8' WIDE MEASURED PERPENDICULAR TO THE STALL STRIPE TO ACCOMMODATE VANS WITH LIFTS.
5. COMMON ACCESS AISLES FOR 90° PARKING - TWO ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE. FOR ACUTE ANGLED PARKING, SUCH AS 60° PARKING, OR WHERE ONE WAY DRIVEWAY AISLES WOULD PREVENT VANS WITH PASSENGER SIDE LIFTS FROM BACKING INTO ACCESSIBLE SPACES, AN ACCESSIBLE ACCESS AISLE MUST BE PROVIDED FOR EACH ACCESSIBLE PARKING SPACE. WIDTH OF ACCESS AISLES AND PARKING SPACES ARE MEASURED PERPENDICULAR TO THE STRIPING.
6. SIGNING - EACH ACCESSIBLE PARKING SPACE SHALL BE MARKED BY PERMANENTLY INSTALLED GROUND MOUNTED SIGNS WHICH DISPLAY THE INTERNATIONAL SYMBOL FOR ACCESS. EACH ACCESS AISLE SHALL BE MARKED BY PERMANENTLY INSTALLED GROUND MOUNTED SIGNS INDICATING THAT STOPPING IS NOT PERMITTED IN THE AISLE. SIGNS SHALL NOT BLOCK THE ACCESSIBLE CLEAR WIDTH OF ADJACENT WALKWAYS. SIGNS LOCATED WHERE THEY MAY BE HIT BY VEHICLES BEING PARKED SHALL BE INSTALLED AS SHOWN IN THE POST BASE DETAIL. THE BOTTOMS OF THE SIGNS LOCATED ON POSTS INSTALLED IN PAVED AREAS SHALL BE 7' MINIMUM ABOVE THE WALKWAY SURFACE. THE BOTTOMS OF SIGNS LOCATED IN UNPAVED AREAS SHALL BE 7' MINIMUM ABOVE THE PAVEMENT SURFACE.
7. SURFACE SLOPES - SLOPES AT ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ADJOINING WALKWAYS SHALL NOT EXCEED 1.5% MAXIMUM IN ANY DIRECTION FOR DESIGN AND LAYOUT, AND 2.0% MAXIMUM FOR WORK ACCEPTANCE, WHILE PROVIDING POSTIVE DRAINAGE.
8. OVERHEAD CLEARANCE - VEHICLE ACCESS ROUTES TO AND FROM ACCESSIBLE PARKING SPACES, INCLUDING IN GARAGES AND OPEN PARKING STRUCTURES, SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 8'-2".
9. PAVEMENT MARKING COLORS - REQUIRED ACCESSIBLE PARKING SPACE AND ACCESS AISLE STRIPING AND OTHER OPTIONAL PAVEMENT MARKINGS, SUCH AS THE INTERNATIONAL ACCESS SYMBOL, SHALL BE PAINTED WHITE OR BLUE.
10. REFER TO STANDARD SHEETS 608-01 TITLED "SIDEWALK AND CURB RAMP DETAILS" FOR CURB RAMP REQUIREMENTS. DETECTABLE WARNING SURFACES ARE NOT REQUIRED.
11. A SMOOTH, FLUSH TRANSITION MUST BE PROVIDED BETWEEN ALL PEDESTRIAN WALKWAYS, ACCESSIBLE PARKING SPACES AND AISLES.
12. WHERE A CHANGE IN DIRECTION IS REQUIRED TO UTILIZE A CURB RAMP, A TURNING SPACE 4'-0" x 4'-0" MINIMUM SHALL BE PROVIDED AT THE BASE OR THE TOP OF CURB RAMP, AS APPLICABLE. THE CROSS SLOPE OF TURNING SPACES SHALL NOT EXCEED 1.5% IN ANY DIRECTION FOR DESIGN AND LAYOUT, AND 2.0% FOR WORK ACCEPTANCE, WHILE PROVIDING POSITIVE DRAINAGE.

ACCESSIBLE PARKING SIGN DETAIL




SHRUB AND TREE PLANTING DETAIL




30" x 30"

COLORS:
LEGEND = WHITE (RETROREFLECTIVE)
BACKGROUND = RED (RETROREFLECTIVE)

STOP SIGN DETAIL

E:\UPDATED FOLDER\8 SHEET S-1 DETAIL SHEET.DWG

FILE NO:

| No. | REVISION | DATE |
|---|---|---|
| | Revisions after Planning Board meeting on 7/2024 | 12/2024 |
| | | 2 |

SCALE: 1" = 10'
DATE: 9/2024
DRAWN BY: XX

ANGELO M PERRUCCI III P.E.
NEW YORK
PROFESSIONAL ENGINEER
LIC. NO.109938-01

PROJECT
SITE PLAN
14 NORTH CEDAR STREET
BEACON, NEW YORK

TITLE
DETAIL SHEET

SHEET NO. 10of10
JOB No.
DWG. No. D-3

KARC
PLANNING CONSULTANTS, INC.

**TO:** John Gunn, Chair, and the City of Beacon Planning Board

**FR:** KARC Planning Consultants, Inc.

**DATE:** January 9, 2025

**RE:** 14 N Cedar St Site Plan Application, Angelo M. Perucci III, P.E.

---

I have reviewed the following materials regarding the proposed multifamily development at 14 N Cedar St:

- Response letter to Engineer by Angelo M. Perrucci III, P.E., dated Dec. 22, 2024
- Full Environmental Assessment Form part 1 by Angelo M. Perrucci III, P.E., dated Dec. 30, 2024
- Site Plan Set (10 sheets) by Angelo M. Perrucci, P.E., dated July 2024, last revised Dec. 2024
- Elevations and Floor Plans (9 sheets) by Custom Building Systems LLC, dated June 19, 2024

**Project Description:**

The applicant is proposing to construct a two-story, four-unit multifamily residential building at 14 N Cedar Street. The site contains an existing single-story garage that will be retained. The 0.24-acre site is located in the Transitional (T) zoning district where multi-family is a permitted use.

1. **Front Yard Setbacks:** The setbacks of buildings within 250 feet on the same side of the street appear to range from 5-10 feet. Consistent with Section 223-13K, the building should be no more than 10 feet from the front property lines. The proposed 7ft front yard fronting N. Cedar Street meets this requirement. Per Section 223-13(J), the yard fronting Church Street should be reduced from 13 feet to no more than 10 feet to be equal in depth. This would improve compatibility with existing front yards across Church Street.

2. **Proposed Use of Existing Storage Building:** The applicant should clarify if the accessory storage building will be utilized for tenant storage, commercial storage, property management equipment, or other.

3. **Required Parking:** Pursuant to Section 223-26, residential uses within the T -District require a minimum of 1 space per dwelling unit and permit a maximum of 3 spaces per dwelling unit. Thus, a minimum of 4 spaces are required for the proposed project, but no more than 12 shall be provided. The applicant has reduced the proposed parking from 8 to 5 off-street parking spaces. The Planning Board should discuss if the provided parking is adequate for the proposed use.

4. **Parking Layout and Design:** The previously proposed parking layout included diagonal spaces with a one-way through driveway, which facilitated larger landscaped areas to screen parking

from Church Street and two curb cuts of approx. 18 feet. The revised parking layout has consolidated the driveways to one 24 ft curb cut on Church Street and reduced the area for screening at the southeast corner of the property. While this revision has reduced the amount of impervious surface onsite, it has also resulted in less off-street parking, less screening, and a less desired circulation layout. The Board should discuss with the applicant the factors driving this design change and the tradeoffs of the two layouts.

5. **Proposed Building Height:** The T district has a 2½-story and 35-foot height limit. The provided elevations show a 3-story building, with two floors of 8 ft and a third floor of 11 ft 5 in. While the proposed building is less than 35-feet in height, the third floor does not meet the definition of a half story, which is defined as "a story with at least two opposite exterior sides meeting a sloping roof *not more than two feet above the floor of such story*." The third floor should be reduced in height to comply with the definition of half-story.

6. **Architectural Elevations:** When appropriate, the proposed elevations should be referred to the Architectural Review Subcommittee for review, with the following considerations:

    a) The proposed four-family structure has a front façade width of 70 ft. Existing residential structures within the vicinity of the proposed project have front facades ranging from 25-40 ft in width. Additional breaks in the facade and roofline, such as structural centerlines (vertical lines not interrupted by fenestration), should be discussed as a means to break up the façade width and improve compatibility with the existing built form in the neighborhood.
    b) To improve design compatibility with the surrounding single-family house forms, the applicant may want to consider the addition of a covered porch(es), awning, or other architectural features found within the neighborhood.
    c) The elevations should be labeled with cardinal directions rather than "Left Side" and "Right Side" to avoid any confusion.

7. **Lighting Plan:**
   The proposed Lighting Plan should clearly demonstrate compliance with all requirements of Section 223-14B. The applicant should provide details for all proposed fixtures and confirm that fixtures are full cutoff and will not emit light above the horizontal plane.

8. **Sidewalks & Street Trees:** The addition of sidewalks on both Church Street and N Cedar Street is applaudable. The Planning Board may wish to discuss the feasibility of providing street trees at regular 30-40 foot spacing, or alternatively, swapping out some of the proposed shrubs and arborvitae along Church Street for shade trees.

If you have any questions or need additional information, please feel free to contact me.

KARC
PLANNING CONSULTANTS, INC.

Natalie Quinn
Beacon Planning Consultant

Cc: Bruce Flower, Building Inspector
Jennifer L. Gray, Esq., City Attorney
John Russo, P.E., City Engineer

LANC & TULLY
Engineering and Surveying, P.C.

January 12, 2025

Mr. John Gunn
Beacon Planning Board Chair
City of Beacon
1 Municipal Plaza
Beacon, NY 12508

RE: Site Plan
14 North Cedar Street
Tax No. 5954-28-943881
City of Beacon

Dear Mr. Gunn:

My office has received the following regarding a site plan for 14 North Cedar Street:

- Response correspondence to Planning Board, dated December 22, 2024, from Angelo Perrucci III, P.E.
- Full Environmental Assessment Form dated December 30, 2024.
- Elevation and Floor Layout plans, consisting of 9 sheets dated June 19, 2024, as prepared by Custom Building Systems LLC.
- Plan set titled "Site Plan – 14 North Cedar Street", as prepared by Angelo Perrucci III, P.E., and consisting of the following drawings:
  a) Title Sheet, with a revision date of December 2024.
  b) Existing Conditions, with a revision date of December 2024.
  c) Demolition Plan, with a revision date of December 2024.
  d) Site Plan, with a revision date of December 2024.
  e) Grading Plan, with a revision date of December 2024.
  f) Lighting Plan, with a revision date of December 2024.
  g) Soil Erosion Plan, with a revision date of December 2024.

The applicant is proposing to construct a 4-unit multi-family residential building at 14 North Cedar Street, at the intersection of North Cedar Stret and Church Street. The site is located in the T Zone. Based on our review of the above documents and plans, we would like to offer the following comments:

General Comments:

1. The architectural plans submitted include notes on the elevation plans that state "Actual house may vary from elevation". The plans submitted shall represent that as to actually be constructed.

2. As the occupancy classification for the proposed 4-unit apartment building would be Residential Group R-2 per the 2020 NYS Building Code, the proposed structure may require the installation of a sprinkler system. It is recommended that the applicant consult with the City of Beacon Building Department at this time to determine if a sprinkler system is required, and the type of sprinkler system that may be required. This may impact the size or number of water service lines being brought into the building. ***Applicant notes that a sprinkler system is required for the project. A note shall be added to the plans stating the building shall be sprinkled in accordance with NFPA 13-R.***

3. Although the applicant has provided some storm water drainage calculations on Sheet C-3, as previously requested, the applicant shall prepare a pre & post storm drainage analysis to show what is current drainage from the site as well as that under proposed conditions. The drainage study would be further expanded upon to detail how the additional stormwater runoff from the site would be handled.

Existing Conditions Plan:

1. The plan shall be revised to show and callout all traffic signage adjacent to the project site.

Site Plan:

1. As the lower two units of the proposed building appear to be accessible units, the plans should include accessible parking stalls. The location of the ADA compliant stalls shall be noted on the plan, along with the required signage for such stall(s) and access aisle. All signage on the plan shall be labeled.

2. An ADA compliant ramp will need to be installed as part of the sidewalk at the intersection of North Cedar Street and Church Street. A construction detail shall be added to the plans for the ramp. ***Applicant notes that a new ADA ramp will be installed at the intersection.***

3. As the applicant is proposing an infiltration practice on site to handle drainage, soil testing shall be conducted to verify existing soils on site, depth to groundwater and rock, as well as the percolation rate of the soils in the area of the proposed dry well. Soil testing shall be conducted with the City's Engineers office present.

4. The plan shall call-out the new sidewalks adjacent to the project as proposed monolithic curb and sidewalk.

5. The plan shall show the limits of the driveway apron proposed for access to the parking area.

6. The applicant shall account for the design of the new sidewalks proposed around the site to account for the utility poles. It should be noted that a minimum of 48" clearance is required around an obstacle within a sidewalk.

7. As the detail sheet includes a "Cleanout" detail, the location of the proposed cleanouts shall be shown on the plan.

Grading Plan:

1. The grading plan shall depict the existing topography of the site and that of the immediate area of adjacent parcels, along with the proposed grading for the site.

2. The proposed grading around the building should be reviewed to ensure that it is properly draining away from the building.

3. The proposed grading at the driveway entrance in comparison to the spot elevations provided in the road should be reviewed further, as there appears to be only 3 hundredths to 8 hundredths in grade difference between finished grade at the back of walk and the road pavement. With will not allow for the 1" reveal proposed for the driveway drop curb at the entrance, as well as the 1.5% cross slope on the walk.

Soil Erosion Plan:

1. The plan shall include and show areas for topsoil stock piling, and concrete washout basin. Construction details for both shall be provided on the plan.

Detail Sheet D-1:

1. All references to curb depth shall reflect curbs as being 20" in full depth. Details shall be revised to reflect this.

2. The water service connection detail calls out a "bronze" tapping saddle" in the drawing, but a "stainless steel" saddle in the notes. The drawing and notes shall correspond to one another.

Detail Sheet D-2:

1. As the need for a "STOP" does not appear to be warranted, the detail for the sign should be removed from the plan.

This completes our review at this time. Further comments may be provided based on future submissions. **A written response letter addressing each of the above comments should be provided with the next submission.** If you have any questions, or require any additional information, please do not hesitate to contact our office.

Very truly,

LANC & TULLY, P.C.

John Russo, P.E.

cc: Natalie Quinn, Planner
Jennifer Gray, Esq.
Bruce Flower, Building Inspector

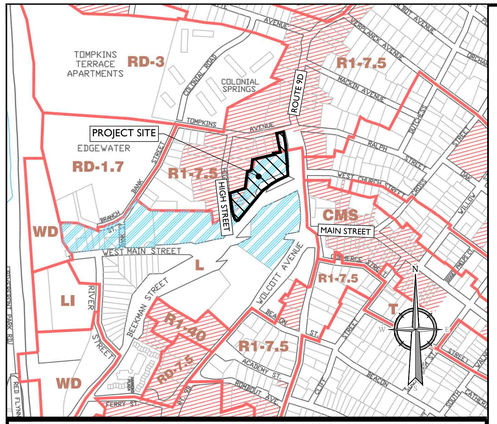
# PRELIMINARY SITE PLAN

FOR

# BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

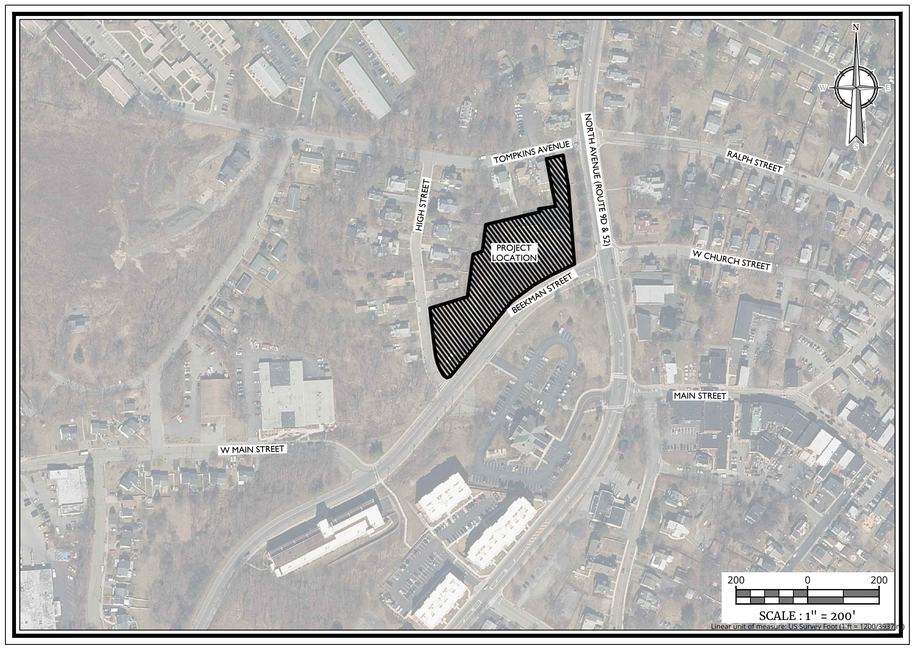
# TAX LOTS: 5955-19-706012, 5954-26-689990, 5954-26-781983

## CITY OF BEACON
## DUTCHESS COUNTY
## NEW YORK STATE




ZONING MAP

SCALE: 1" =500'
SOURCE: CITY OF BEACON ZONING MAP




# LOCATION MAP

SOURCE: NEW YORK STATE G.I.S. CLEARINGHOUSE

## INDEX OF SHEETS


| SHT. No. | DESCRIPTION | LATEST REVISION |
|---|---|---|
| 1 | COVER SHEET | 12/31/2024 |
| 2 | EXISTING CONDITIONS & SITE DEMOLITION PLAN | 12/31/2024 |
| 3 | TREE REMOVAL PLAN | 12/31/2024 |
| 4 | DIMENSION PLAN | 12/31/2024 |
| 5-7 | GRADING PLANS | 12/31/2024 |
| 8-9 | UTILITY PLANS | 12/31/2024 |
| 10 | SOIL EROSION & SEDIMENT CONTROL PLAN | 12/31/2024 |
| 11 | SOIL EROSION & SEDIMENT CONTROL DETAILS | 12/31/2024 |
| 12 | LANDSCAPE PLAN | 12/31/2024 |
| 13 | LIGHTING PLAN | 12/31/2024 |
| 14-19 | CONSTRUCTION DETAILS | 12/31/2024 |



UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.


## GENERAL INFORMATION

1. THE SUBJECT PROPERTIES ARE KNOWN BY THE FOLLOWING TAX IDS: 5955-19-706012, 5954-26-689990, 5954-26-781983 AS SHOWN ON THE DUTCHESS COUNTY TAX MAP OF THE CITY OF BEACON, DUTCHESS COUNTY, NEW YORK, TAX YEAR 2023.

2. THE PROPERTY IS LOCATED IN THE L (LINKAGE) ZONING DISTRICT AND IN THE R1-7.5 (RESIDENTIAL) CONTAINS A TOTAL TRACT AREA OF 2.06 ACRES.

OWNERS/APPLICANTS:
BEEKMAN ARTS CENTER LLC (TAX ID: 5955-19-706012)
268 MAIN STREET
BEACON, NY 12508

BAY RIDGE STUDIOS LLC (TAX ID: 5954-26-781983 & 5954-26-689990)
268 MAIN STREET
BEACON, NY 12508

3. BOUNDARY AND TOPOGRAPHICAL MAPPING IS TAKEN FROM A SURVEY TITLED "BOUNDARY SURVEY OF THE LANDS OF BEEKMAN ARTS CENTER, LLC & BAYRIDGE STUDIOS, LLC" PREPARED BY JONATHAN N. MILLEN NY, P.L.S. (LICENSE NO. 050746) OF AUTOMATED CONSTRUCTION ENHANCED SOLUTIONS, INC., DATED NOVEMBER 03, 2023 AND REVISED TO JUNE 06, 2024.

4. THIS SET OF PLANS IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS. COLLIERS ENGINEERING & DESIGN HAS PERFORMED NO EXPLORATORY OR TESTING SERVICES, INTERPRETATIONS, CONCLUSIONS OR OTHER SITE ENVIRONMENTAL SERVICES RELATED TO THE DETERMINATION OF THE POTENTIAL FOR CHEMICAL, TOXIC, RADIOACTIVE OR OTHER TYPE OF CONTAMINANTS AFFECTING THE PROPERTY AND THE UNDERSIGNED PROFESSIONAL IS NOT QUALIFIED TO DETERMINE THE EXISTENCE OF SAME. SHOULD ENVIRONMENTAL CONTAMINATION OR WASTE BE DISCOVERED, THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS.

5. THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HERON, IS NOT A SURVEY.

6. NO 100 YEAR FLOOD PLAINS ARE KNOW TO EXIST ON THE SITE PER THE FLOOD INSURANCE RATE MAP 36027C0463E DATED 05/02/2012, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

7. DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS ARE SHOWN THERETO.

8. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS REQUIRED HAVE BEEN OBTAINED, ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS HAVE BEEN STAMPED "ISSUED FOR CONSTRUCTION". THIS SHALL INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE PROJECT OWNER AND/OR MUNICIPAL ENGINEER.

9. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.

10. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL 811 TO REQUEST A UTILITY MARKOUT.

11. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES, A PRE-CONSTRUCTION MEETING SHALL BE CONDUCTED IN ACCORDANCE WITH MS4'S GP-0-24-001. PRESENT AT THE MEETING SHALL BE THE MS4 OPERATOR, CONTRACTOR(S) RESPONSIBLE FOR IMPLEMENTING THE SWPPP FOR CONSTRUCTION ACTIVITY, AND QUALIFIED STORMWATER INSPECTOR FOR THE PROJECT.

12. UPON COMPLETION OF PROJECT CONSTRUCTION, AN AS-BUILT SURVEY SHALL BE PREPARED OF THE PROJECT. THE AS-BUILT SURVEY SHALL INCLUDE THE LOCATION, SIZE, AND MATERIAL OF ALL UTILITIES INSTALLED ON THE PROJECT SITE.

13. INFORMATION HEREON INCORPORATES THE CONTENT IN THE FOLLOWING REPORTS:

- "PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN (PRELIMINARY SWPPP)" PREPARED FOR BEEKMAN ARTS CENTER LLC & BAYRIDGE STUDIOS LLC PREPARED BY COLLIERS ENGINEERING & DESIGN, DATED JANUARY 30, 2024.
- "TRAFFIC & PARKING STUDY" PREPARED FOR BEEKMAN ARTS CENTER LLC & BAYRIDGE STUDIOS LLC PREPARED BY COLLIERS ENGINEERING & DESIGN, DATED NOVEMBER 28, 2023 AND REVISED TO JUNE 24, 2024.

SITE NOTES

1. BUILDING FOOTPRINT DIMENSIONS SHOWN HEREON ARE APPROXIMATE. FINAL BUILDING FOOTPRINT DIMENSIONS FOR EACH BUILDING SHALL BE FURNISHED ON THE INDIVIDUAL ARCHITECTURAL PLANS AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. ALL STRUCTURES SHALL CONFORM TO THE APPROVED BULK ZONING REQUIREMENTS.

2. CURBS SHALL BE DEPRESSED FLUSH WITH PAVEMENT, AND ACCESSIBLE RAMPS INSTALLED WHERE SIDEWALKS AND CROSSWALKS INTERSECT SAME. DETECTABLE WARNINGS SHALL BE INCLUDED ON ACCESSIBLE RAMPS.

3. TRAFFIC SIGNAGE AND STRIPING SHALL CORRESPOND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

4. REFUSE AND RECYCLABLES SHALL BE STORED WITHIN OUTSIDE SCREENED TRASH ENCLOSURES AS NOTED ON THE PLANS, AND PICKED UP BY PRIVATE WASTE DISPOSAL HAULER.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL WASTE MATERIALS IN ACCORDANCE WITH GOVERNING REGULATIONS AND AGENCIES.

6. THERE SHALL BE NO ON-SITE BURIAL OF CONSTRUCTION MATERIALS, TREE BRANCHES, STUMPS, OR OTHER DELETERIOUS MATERIALS.

7. MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:

A. NEW YORK STATE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", 2018; AS SUPPLEMENTED.
B. CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS, AND REQUIREMENTS.
C. CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
D. CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.

UTILITY NOTES

1. EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTIONS, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS, AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE UNDER SIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.

2. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.

3. STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS OR INTERNALLY PRELUBRICATED GASKET (TYLOX SUPERSEAL OR EQUIVALENT. ADS N-12 HIGH DENSITY POLYETHYLENE PIPE (HDPE), AS NOTED ON THE PLAN, OR APPROVED EQUAL. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

4. WATER SERVICE SHALL BE PROVIDED FROM THE CITY OF BEACON. THE PROJECT SHALL CONNECT TO THE MUNICIPAL SYSTEM VIA THE EXISTING WATER MAINS IN TOMPKINS AVENUE AND HIGH STREET SUBJECT TO THE APPLICABLE REGULATIONS AND THE APPROVAL OF THE MUNICIPALITY & THE DUTCHESS COUNTY DEPARTMENT OF HEALTH.

5. SANITARY SEWER SERVICE SHALL BE PROVIDED BY CONNECTION TO THE EXISTING CITY OF BEACON SANITARY MAIN LOCATED IN HIGH STREET.

6. ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY SEWER LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE MUNICIPALITY.

7. AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.

8. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE OR LOCAL UTILITY COMPANIES REQUIREMENTS.

9. ALL UTILITY CONNECTION LOCATIONS MUST BE CONFIRMED WITH THE GOVERNING AUTHORITY & WITH A TEST PIT BY THE CONTRACTOR PRIOR TO INSTALLATION.

10. UTILITY INSTALLATION WITHIN THE NYSDOT RIGHT-OF-WAY TO BE COORDINATED WITH THE APPLICABLE NYSDOT PERMIT PLANS.

THESE GENERAL NOTES SHALL APPLY TO ALL SHEETS IN THIS SET.

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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| - | - | - | - |
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| - | - | - | - |

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ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Digitally signed by Justin E. Dates
Date: 2025.01.02 10:22:34-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE


Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING


| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-COVER

SHEET TITLE: COVER SHEET

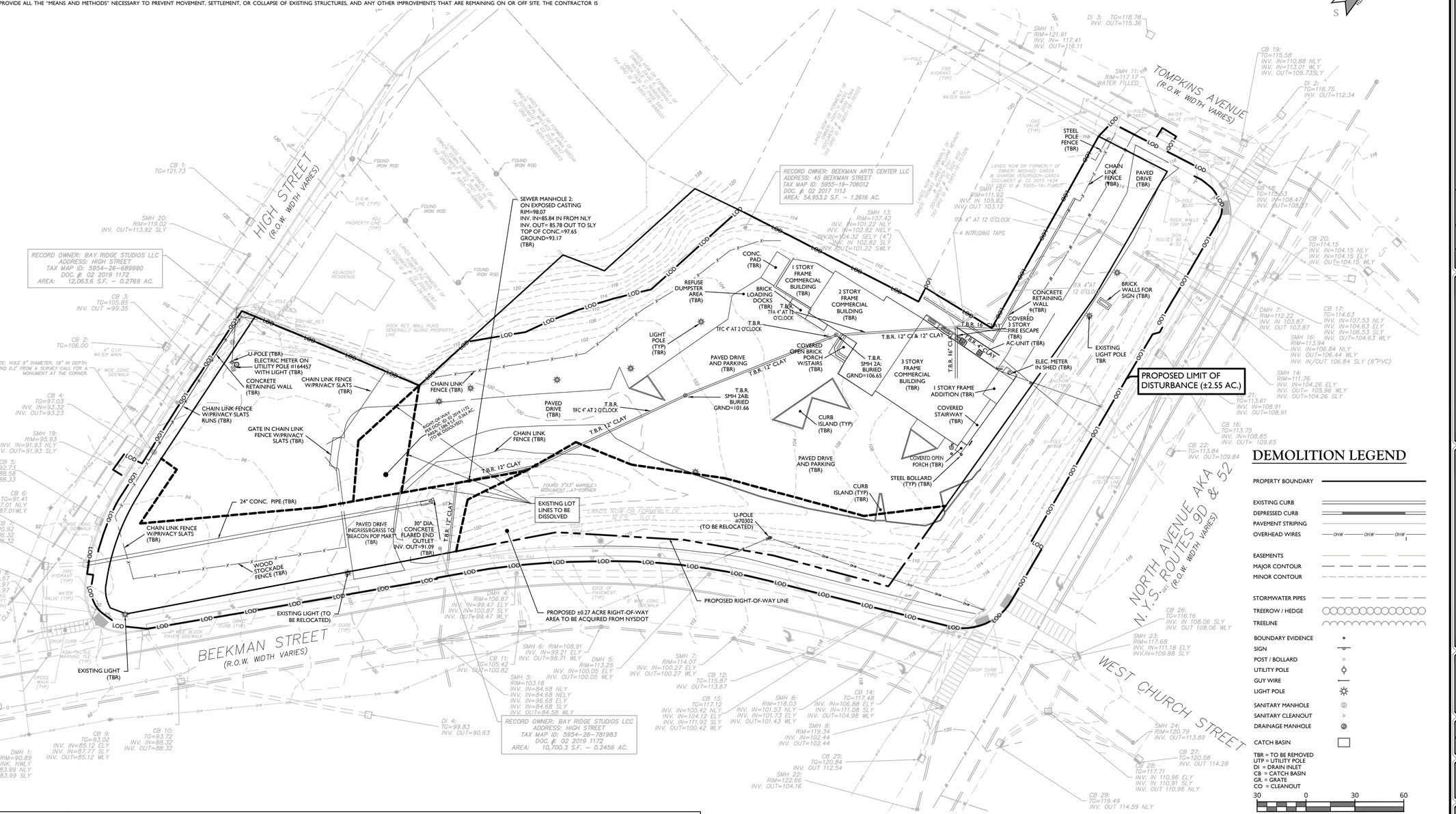
SHEET NUMBER: 01 of 19


2023\23010468A\Engineering\Site Plans\C-COVER.dwg|C-01 COVER By: KYLE SHALLOW


NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

# DEMOLITION NOTES:

1. THIS PLAN REFERENCES THE FOLLOWING DOCUMENTS AND INFORMATION:
   A. BOUNDARY AND TOPOGRAPHICAL MAPPING IS TAKEN FROM A SURVEY TITLED "BOUNDARY SURVEY OF THE LANDS OF BEEKMAN ARTS CENTER, LLC & BAYRIDGE STUDIOS, LLC" PREPARED BY JONATHAN N. MILLEN NY, P.L.S. (LICENSE NO. 050746) OF AUTOMATED CONSTRUCTION ENHANCED SOLUTIONS, INC., DATED NOVEMBER 03, 2023.
2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (29 U.S.C. 651 ET SEQ.) AND THE NEW YORK PROTECTION OF UNDERGROUND FACILITIES ACT (DIG SAFE LAW, 16 NYCRR PART 753) AS AMENDED.
3. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR SHALL ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
4. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK OF THIS PROJECT SHALL BE RAISED WITH ENGINEER, IN WRITING AND RESPONDED TO BY ENGINEER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY.
5. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR/TO:
   A. OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES HAVING JURISDICTION.
   B. NOTIFYING, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL DEPARTMENT OF PUBLIC WORKS, 72 HOURS PRIOR TO START OF WORK.
   C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
   D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT IN ADVANCE OF ANY EXCAVATION.
   E. LOCATING AND PROTECTING ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
   F. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
   G. ARRANGING FOR AND COORDINATING WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
   H. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
   I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY CEASE ALL WORK AND NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS.
6. COLLIERS ENGINEERING & DESIGN 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.
7. 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 CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION. SUCH REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.
8. THE CONTRACTOR SHALL NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE UNLESS IT IS IN STRICT ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
9. CONTRACTOR SHALL BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL SHALL BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS, AND SHALL BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND IN COMPLIANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. BACKFILLING SHALL OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND SHALL BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES SHALL BE GRADED TO PROMOTE POSITIVE DRAINAGE.
10. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND ALL APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
11. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS WELL AS FEDERAL, STATE AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT-OF-WAY.
12. CONTRACTOR SHALL 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 AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
13. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE AND/OR LIMIT OF DISTURBANCE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.
14. THE CONTRACTOR SHALL USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. 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.
15. 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.
16. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT LIMITED TO THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
17. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION AS TO THE MEANS AND METHODS TO BE USED TO ACCOMPLISH THAT WORK. ALL MEANS AND METHODS UTILIZED ARE TO BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
18. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROVIDED TO THE OWNER UPON REQUEST.
19. CONTRACTOR SHALL MAINTAIN A RECORD SET OF PLANS UPON WHICH IS INDICATED THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT SHALL BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER, AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK.
20. CONTRACTOR IS RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS, PAVEMENT, DRAINAGE STRUCTURES, ETC. WHICH ARE TO REMAIN. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING DAMAGE DONE TO THE AFOREMENTIONED ITEMS. THE REPAIR SHALL RESTORE SUCH TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS AND IN ACCORDANCE WITH ALL APPLICABLE CODES.
21. TREE CLEARING AND REMOVAL SHALL OCCUR BETWEEN OCTOBER 1ST TO MARCH 31ST, TO MITIGATE POTENTIAL IMPACTS TO THE INDIANA BAT.


HIGH STREET (R.O.W. WIDTH VARIES)
BEEKMAN STREET (R.O.W. WIDTH VARIES)
TOMPKINS AVENUE (R.O.W. WIDTH VARIES)
NORTH AVENUE AKA N.Y.S. ROUTES 9D & 52 (R.O.W. WIDTH VARIES)
WEST CHURCH STREET
RECORD OWNER: BAY RIDGE STUDIOS LLC
ADDRESS: HIGH STREET
TAX MAP ID: 5954-26-689990
DOC. #: 02 2019 1172
AREA: 12,063.6 S.F. - 0.2769 AC.
RECORD OWNER: BEEKMAN ARTS CENTER LLC
ADDRESS: 45 BEEKMAN STREET
TAX MAP ID: 5955-19-706012
DOC. #: 02 2017 1113
AREA: 54,953.2 S.F. - 1.2616 AC.
RECORD OWNER: BAY RIDGE STUDIOS LCC
ADDRESS: HIGH STREET
TAX MAP ID: 5954-26-781983
DOC. #: 02 2019 1172
AREA: 10,700.3 S.F. - 0.2456 AC.
PROPOSED LIMIT OF DISTURBANCE (±2.55 AC.)
EXISTING LOT LINES TO BE DISSOLVED
PROPOSED ±0.27 ACRE RIGHT-OF-WAY AREA TO BE ACQUIRED FROM NYSDOT
PROPOSED RIGHT-OF-WAY LINE
SEWER MANHOLE 2: ON EXPOSED CASTING RIM=98.07 INV. IN=85.84 IN FROM NLY INV. OUT= 85.78 OUT TO SLY TOP OF CONC.=97.65 GROUND=93.17 (TBR)
CHAIN LINK FENCE W/PRIVACY SLATS (TBR)
CHAIN LINK FENCE (TBR)
STEEL POLE FENCE (TBR)
PAVED DRIVE INGRESS/EGRESS TO "BEACON POP MART" (TBR)
30" DIA. CONCRETE FLARED END OUTLET INV. OUT=91.09 (TBR)
24" CONC. PIPE (TBR)
WOOD STOCKADE FENCE (TBR)
EXISTING LIGHT (TO BE RELOCATED)
EXISTING LIGHT (TBR)
U-POLE (TBR) ELECTRIC METER ON UTILITY POLE #164457 WITH LIGHT (TBR)
CONCRETE RETAINING WALL (TBR)
GATE IN CHAIN LINK FENCE W/PRIVACY SLATS (TBR)
CHAIN LINK FENCE W/PRIVACY SLATS RUNS (TBR)
U-POLE #70302 (TO BE RELOCATED)
CONC. PAD (TBR)
REFUSE DUMPSTER AREA (TBR)
BRICK LOADING DOCKS (TBR)
1 STORY FRAME COMMERCIAL BUILDING (TBR)
2 STORY FRAME COMMERCIAL BUILDING (TBR)
3 STORY FRAME COMMERCIAL BUILDING (TBR)
LIGHT POLE (TYP) (TBR)
PAVED DRIVE AND PARKING (TBR)
COVERED OPEN BRICK PORCH W/STAIRS (TBR)
T.B.R. SMH 2A: BURIED GRND=106.65
T.B.R. SMH 2AB: BURIED GRND=101.66
CURB ISLAND (TYP) (TBR)
COVERED 3 STORY FIRE ESCAPE (TBR)
AC-UNIT (TBR)
ELEC. METER IN SHED (TBR)
CONCRETE RETAINING WALL (TBR)
BRICK WALLS FOR SIGN (TBR)
EXISTING LIGHT POLE TBR
I STORY FRAME ADDITION (TBR)
COVERED STAIRWAY (TBR)
COVERED OPEN PORCH (TBR)
STEEL BOLLARD (TYP) (TBR)
CHAIN LINK FENCE (TBR)
T.B.R. 12" CLAY
T.B.R. 17" CLAY
T.B.R. 16" CLAY
T.B.R. 12" CY & 12" CLAY
T.B.R. 14" CLAY
T.B.R. 8" CLAY
T.B.R. TFA 4' AT 7th O'CLOCK
T.B.R. TFC 4' AT 2 O'CLOCK
T.B.R. TFA 4' AT 12 O'CLOCK
T.B.R. TFA 4"AT 12 O'CLOCK
4 INTRUDING TAPS
SMH 1: RIM=121.91 INV. IN= 117.41 INV. OUT=116.11
SMH 11: RIM=117.17 WATER FILLED
SMH 12: RIM=111.92 INV. IN 105.82 INV. OUT 103.12
SMH 13: RIM=107.42 INV. IN=101.22 NLY INV. IN=102.82 NELY INV.IN=104.32 SELY (4") INV. IN 102.82 SLY INV. OUT=101.22 SWLY
SMH 20: RIM=119.02 INV. OUT=113.92 SLY
SMH 19: RIM=95.93 INV. IN=91.93 NLY INV. OUT=91.93 SLY
SMH 18: RIM=91.79 INV. IN=86.79 NLY INV. IN=86.79 SLY
SMH 3: RIM=89.82 INV. IN=80.82 NLY INV. OUT=80.82 SLY
SMH 6: RIM=108.91 INV. IN=99.21 ELY INV. OUT=98.71 WLY
SMH 5: RIM=113.25 INV. IN=100.05 ELY INV. OUT=100.05 WLY
SMH 7: RIM=114.07 INV. IN=100.27 ELY INV. OUT=100.27 WLY
SMH 8: RIM=118.03 INV. IN=101.53 NLY INV. IN=101.73 ELY INV. OUT=101.43 WLY
SMH 9: RIM=119.34 INV. IN=102.44 INV. OUT=102.44
SMH 22: RIM=122.66 INV. OUT=104.16
SMH 23: RIM=117.68 INV. IN=111.18 ELY INV.IN=109.88 SLY
SMH 24: RIM=120.79 INV. OUT=113.89
SMH 14: RIM=111.76 INV. IN=104.26 ELY INV. OUT= 105.96 WLY INV. OUT=104.26 SLY
DMH 1: RIM=90.89 INV. IN=UNK. NWLY INV. IN=83.99 NLY INV. OUT=83.99 SLY
DMH 4: RIM=106.87 INV. IN=99.47 ELY INV. IN=100.87 SLY INV. OUT=99.47 WLY
DMH 5: RIM=100.05 INV. OUT=100.05 WLY
DMH 7: RIM=112.22 INV. IN 103.87 INV. OUT 103.87
CB 1: TG=121.73
CB 2: TG=106.00
CB 3: TG=105.85 INV. OUT =99.35
CB 4: TG=97.03 INV. IN=93.32 INV. OUT=93.23
CB 5: TG=92.73 INV. IN=88.58 INV. OUT=88.33
CB 6: TG=91.41 INV. IN=87.01 NLY INV. OUT=87.01WLY
CB 7: TG=90.92 INV. IN=86.32 INV. OUT=86.32
CB 8: TG=90.57 INV. IN= 85.97 INV. OUT=85.97
CB 9: TG=93.02 INV. IN=85.12 ELY INV. IN=87.77 SLY INV. OUT=85.12 WLY
CB 10: TG=93.72 INV. IN=88.32 INV. OUT=88.32
CB 11: TG=105.42 INV. OUT=100.82
CB 12: TG=115.87 INV. OUT=113.67
CB 14: TG=117.48 INV. IN=106.88 ELY INV. IN=111.08 SLY INV. OUT=104.98 WLY
CB 15: TG=117.12 INV. IN=100.42 NLY INV. IN=104.12 ELY INV. IN=111.92 SLY INV. OUT=100.42 WLY
CB 16: TG=113.75 INV. IN=108.85 INV. OUT= 109.65
CB 17: TG=114.63 INV. IN=107.53 NLY INV. IN=104.63 ELY INV. IN=106.53 SLY INV. OUT=104.63 WLY
CB 18: TG=115.53 INV. IN=108.47 INV. OUT=108.27
CB 19: TG=115.58 INV. IN=110.88 NLY INV. IN=113.01 WLY INV. OUT=109.73SLY
CB 20: TG=114.15 INV. IN=104.15 NLY INV. IN=104.15 ELY INV. OUT=104.15 WLY
CB 21: TG=113.61 INV. IN=108.91 INV. OUT=108.91
CB 22: TG=113.84 INV. OUT=109.84
CB 25: TG=120.84 INV. OUT 112.54
CB 26: TG=116.16 INV. IN 108.06 SLY INV. OUT 108.06 WLY
CB 27: TG=120.58 INV. OUT 114.28
CB 28: TG=117.71 INV. IN 110.96 ELY INV. IN 110.91 SLY INV. OUT 110.96 NLY
CB 29: TG=119.49 INV. OUT 114.59 NLY
DI 2: TG=116.75 INV. OUT=112.34
DI 3: TG=118.78 INV. OUT=115.36
DI 4: TG=99.83 INV. OUT=90.63
U-POLE #3
U-POLE #4
U-POLE #5
U-POLE #6
U-POLE #7
U-POLE #8
U-POLE #9
U-POLE #10
U-POLE #11
U-POLE #12
U-POLE #13
U-POLE #14
U-POLE #15
U-POLE #16
U-POLE #17
U-POLE #18
U-POLE #19
U-POLE #20
U-POLE #21
U-POLE #22
U-POLE

# DEMOLITION NOTES:

| TREE NUMBER | TREE SIZE IN INCHES AT DBH | COMMON NAME |
|---|---|---|
| 1 | 9" | BRADFORD PEAR |
| 2 | 23" | RED OAK |
| 3 | 14" | WHITE PINE |
| 4 | 19" | RED OAK |
| 5 | 13"/9" | WHITE PINE |
| 6 | 19.5" | RED OAK |
| 7 | 8" | BRADFORD PEAR |
| 8 | 7.5" | WHITE PINE |
| 9 | 10"/8" | WHITE PINE |
| 10 | 15.5" | RED OAK |
| 11 | 7" | BRADFORD PEAR |
| 12 | 18" | NORWAY MAPLE |
| 13 | 15" | NORWAY MAPLE |
| 14 | 26" | BLACK LOCUST |
| 15 | 24"/18" | BLACK LOCUST |
| 16 | 6" | BLACK CHERRY |
| 17 | 20" | BLCK LOCUST |
| 18 | 6" | BLACK LOCUST |
| 19 | 6" | BLACK WALNUT |
| 20 | 20" | NORWAY MAPLE |
| 21 | 16" | NORWAY MAPLE |
| 22 | 6"/8" | NORWAY MAPLE |
| 23 | 15" | NORWAY MAPLE |
| 24 | 8" | BLACK LOCUST |
| 25 | 23" | NORWAY MAPLE |
| 26 | 6" | NORWAY MAPLE |

| TREE NUMBER | TREE SIZE IN INCHES AT DBH | COMMON NAME |
|---|---|---|
| 27 | 7" | NORWAY MAPLE |
| 28 | 7" | NORWAY MAPLE |
| 29 | 6"/7" | NORWAY MAPLE |
| 30 | 23" | BIGTOOTH ASPEN |
| 31 | 23" | BIGTOOTH ASPEN |
| 32 | 11" | NORWAY MAPLE |
| 33 | 12" | BOX ELDER |
| 34 | 12" | NORWAY MAPLE |
| 35 | 8" | MULBERRY |
| 36 | 6" | NORWAY MAPLE |
| 37 | 6" | NORWAY MAPLE |
| 38 | 6" | NORWAY MAPLE |
| 39 | 12" | RED OAK |
| 40 | 6" | BOX ELDER |
| 41 | 6"/8" | NORWAY MAPLE |
| 42 | 6" | NORWAY MAPLE |
| 43 | 12" | RED OAK |
| 44 | 6"/6" | NORWAY MAPLE |
| 45 | 6"/6"/7" | NORWAY MAPLE |
| 46 | 14" | RED OAK |
| 47 | 6" | NORWAY MAPLE |
| 48 | 6" | NORWAY MAPLE |
| 49 | 12" | BLACK CHERRY |
| 50 | 11"/17" | BLACK LOCUST |
| 51 | 8" | BLACK LOCUST |
| 52 | 8" | NORWAY MAPLE |

| TREE NUMBER | TREE SIZE IN INCHES AT DBH | COMMON NAME |
|---|---|---|
| 53 | 8" | BLACK LOCUST |
| 54 | 9" | NORWAY MAPLE |
| 55 | 16" | BLACK WALNUT |
| 56 | 15"/11"/11" | BLACK LOCUST |
| 57 | 6" | NORWAY MAPLE |
| 58 | 13" | BLACK LOCUST |
| 59 | 16" | CATALPLA |
| 60 | 14"/14"/14" | SYCAMORE |
| 61 | 6" | CATALPLA |
| 62 | 15" | RED OAK |
| 63 | 15" | WHITE PINE |
| 64 | 16" | LITTLELEAD LINDEN |
| 65 | 14" | WHITE PINE |
| 66 | 11" | WHITE PINE |
| 67 | 17" | LITTLELEAF LINDEN |
| 68 | 11" | WHITE PINE |
| 69 | 10" | WHITE PINE |
| 70 | 17" | LITTLELEAF LINDEN |
| 71 | 11" | WHITE PINE |
| 72 | 15" | LITTLELEAF LINDEN |
| 73 | 15" | WHITE PINE |
| 74 | 16" | LITTLELEAF LINDEN |
| 75 | 10" | WHITE PINE |
| 76 | 16" | LITTLELEAF LIDNEN |
| 77 | 18" | LITTLELEAF LINDEN |
| 78 | 24"/20" | NORWAY SPRUCE |

| TREE NUMBER | TREE SIZE IN INCHES AT DBH | COMMON NAME |
|---|---|---|
| 79 | 18" | BRADFORD PEAR |
| 80 | 30" | NORWAY MAPLE |
| 81 | 13" | CATALPA |
| 82 | 6" | NORWAY MAPLE |
| 83 | 6"/8" | NORWAY MAPLE |
| 84 | 24" | NORWAY MAPLE |
| 85 | 12" | NORWAY MAPLE |
| 86 | 10" | NORWAY MAPLE |
| 87 | 10" | BRADFORD LOCUST |
| 88 | 17" | NORWAY MAPLE |
| 89 | 6" | NORWAY MAPLE |
| 90 | 30" | NORWAY MAPLE |
| 91 | 6" | NORWAY MAPLE |
| 92 | 24" | NORWAY MAPLE |
| 93 | 12"/14" | NORWAY MAPLE |
| 94 | 10" | NORWAY MAPLE |
| 95 | 31" | NORWAY MAPLE |

## PLAN NOTE

1. IDENTIFICATION OF EXISTING TREE SPECIES AND LOCATION CONDUCTED BY COLLIERS ENGINEERING & DESIGN, JUNE 2024.
2. CONTRACTOR TO STAKE-OUT L.O.D. ALONG THE NORTHERN SIDE OF THE PROJECT SITE AND EXISTING TREES IN CLOSE PROXIMITY TO THE L.O.D. SHALL BE REVIEWED FOR POTENTIAL PRESERVATION.




UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-DEMO.dwg|C-03 TREE REMOVAL By: KYLE SHALLOW

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION



| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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Date: 2025.01.02 10:25:41-04'00'


Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.


SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

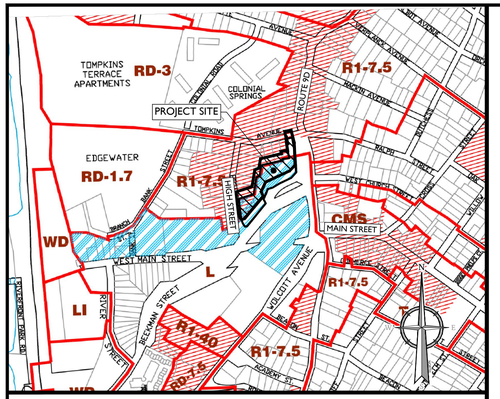
CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE


Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING


| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |
| PROJECT NUMBER: 23010468A | DRAWING NAME: C-DEMO | | |

SHEET TITLE:
TREE REMOVAL PLAN

SHEET NUMBER:
03 of 19




VICINITY MAP
SCALE: 1" = 500'
SOURCE: CITY OF BEACON ZONING MAP

## ZONING DISTRICT:

L: (LINKAGE DISTRICT)
USE PERMITTED BY RIGHT: RETAIL
USE PERMITTED BY RIGHT: OFFICE
USE PERMITTED BY RIGHT: MULTIFAMILY DWELLING
-IF THE BUILDING FACES THE NORTH SIDE OF BEEKMAN STREET BETWEEN ROUTE 9D AND WEST MAIN STREET
-SUBJECT TO A REQUIREMENT THAT ANY DWELLING UNIT SHALL ONLY BE LOCATED ON THE UPPER STORIES OR AT LEAST 50 FEET BEHIND THE FACADE IN THE REAR PORTION OF THE GROUND FLOOR

HDLO: (HISTORIC DISTRICT AND LANDMARK OVERLAY ZONE)

### TABLE OF BULK REQUIREMENTS

L - LINKAGE DISTRICT

| MINIMUM | REQUIRED | PROVIDED | REMARKS |
|---|---|---|---|
| LANDSCAPED AREA | 15% | 35.5% | OK |
| LOT AREA | N/A | N/A | OK |
| LOT AREA PER UNIT | N/A | N/A | OK |
| LOT WIDTH | N/A | N/A | OK |
| LOT DEPTH | 75 FT. | 143 FT. | OK |
| FRONT YARD SETBACK | 0 FT. | 1 FT. | OK |
| SIDE YARD SETBACK | 0 FT. | N/A | OK |
| REAR YARD SETBACK | 25 FT. | 46.7 FT. | OK |
| DISTANCE BETWEEN BUILDINGS SAME LOT | N/A | N/A | OK |
| MAXIMUM | | | |
| BUILDING HEIGHT | 4 STORIES AND 48 FT. | 4 STORIES AND ≤48 FT. | OK |
| BUILDING COVERAGE | N/A | N/A | OK |
| UNITS PER BUILDING | N/A | N/A | OK |
| FRONT YARD SETBACK | 20 FT. | 19.6 FT. | OK |
| SIDE YARD SETBACK | 30 FT. | N/A | OK |

## ZONING DISTRICT:

R1-7.5: (ONE FAMILY RESIDENTIAL DISTRICT (7,500 SF/DWELLING))
NO USE PROPOSED IN R1-7.5 DISTRICT

### TABLE OF BULK REQUIREMENTS

R1-7.5 - ONE FAMILY RESIDENTIAL DISTRICT

| MINIMUM | REQUIRED | PROVIDED | REMARKS |
|---|---|---|---|
| LANDSCAPED AREA | 15% | NO STRUCTURE PROPOSED IN R1-7.5 DISTRICT | OK |
| LOT AREA | 7,500 SF | | OK |
| LOT AREA PER UNIT | 7,500 SF | | OK |
| LOT WIDTH | 75 FT. | | OK |
| LOT DEPTH | 100 FT. | | OK |
| FRONT YARD SETBACK | 15 FT. | | OK |
| SIDE YARD SETBACK | 10 FT. | | OK |
| REAR YARD SETBACK | 25 FT. | | OK |
| DISTANCE BETWEEN BUILDINGS SAME LOT | N/A | | OK |
| WELL-DESIGNED AND LANDSCAPED RECREATION OR USABLE OPEN SPACE AREA IN REAR YARD | 100 SF PER DWELLING UNIT | | OK |
| MAXIMUM | | | |
| BUILDING HEIGHT | 2.5 STORIES AND 35 FT. | | OK |
| BUILDING COVERAGE | 30% | | OK |
| UNITS PER BUILDING | N/A | | OK |
| FRONT YARD SETBACK | 35 FT. | | OK |
| SIDE YARD SETBACK | N/A | | OK |

## PARKING REQUIREMENTS:

MAXIMUM PERMITTED:

RESIDENTIAL:
1 SPACE PER UNIT
64 DWELLING UNITS = 64 SPACES

RETAIL:
3 SPACES PER 1,000 SF OF GFA
14,892 SF OF RETAIL SPACE = 45 SPACES

TOTAL MAXIMUM PARKING PERMITTED = 109 SPACES

PROVIDED

TOTAL PARKING PROVIDED = 91 SPACES
(BASED ON SHARED PARKING ANALYSIS)

## LOADING REQUIREMENTS:

REQUIRED

RETAIL:
1 SPACE FOR THE FIRST 7,500 SF OF GFA AND 1 SPACE FOR EACH ADDITIONAL 10,000 SF OF GFA OR MAJOR PORTION THEREOF, EXCEPT THAT NO BERTHS SHALL BE REQUIRED FOR BUILDINGS OF LESS THAN 5,000 SQUARE FEET OF GFA

BUILDING 1: 10,566 SF OF RETAIL SPACE = 1 LOADING SPACE
BUILDING 2: 4,326 SF OF RETAIL SPACE = 0 LOADING SPACES

PROVIDED

TOTAL LOADING SPACES PROVIDED:
EAST BLDG: = 1 LOADING SPACE
WEST BLDG: = 1 LOADING SPACE

## OWNERS/APPLICANTS:

BEEKMAN ARTS CENTER LLC (TAX ID: 5955-19-706012)
268 MAIN STREET
BEACON, NY 12508

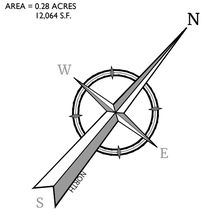
BAYRIDGE STUDIOS LLC (TAX ID: 5954-26-781983 & 5954-26-689990)
268 MAIN STREET
BEACON, NY 12508

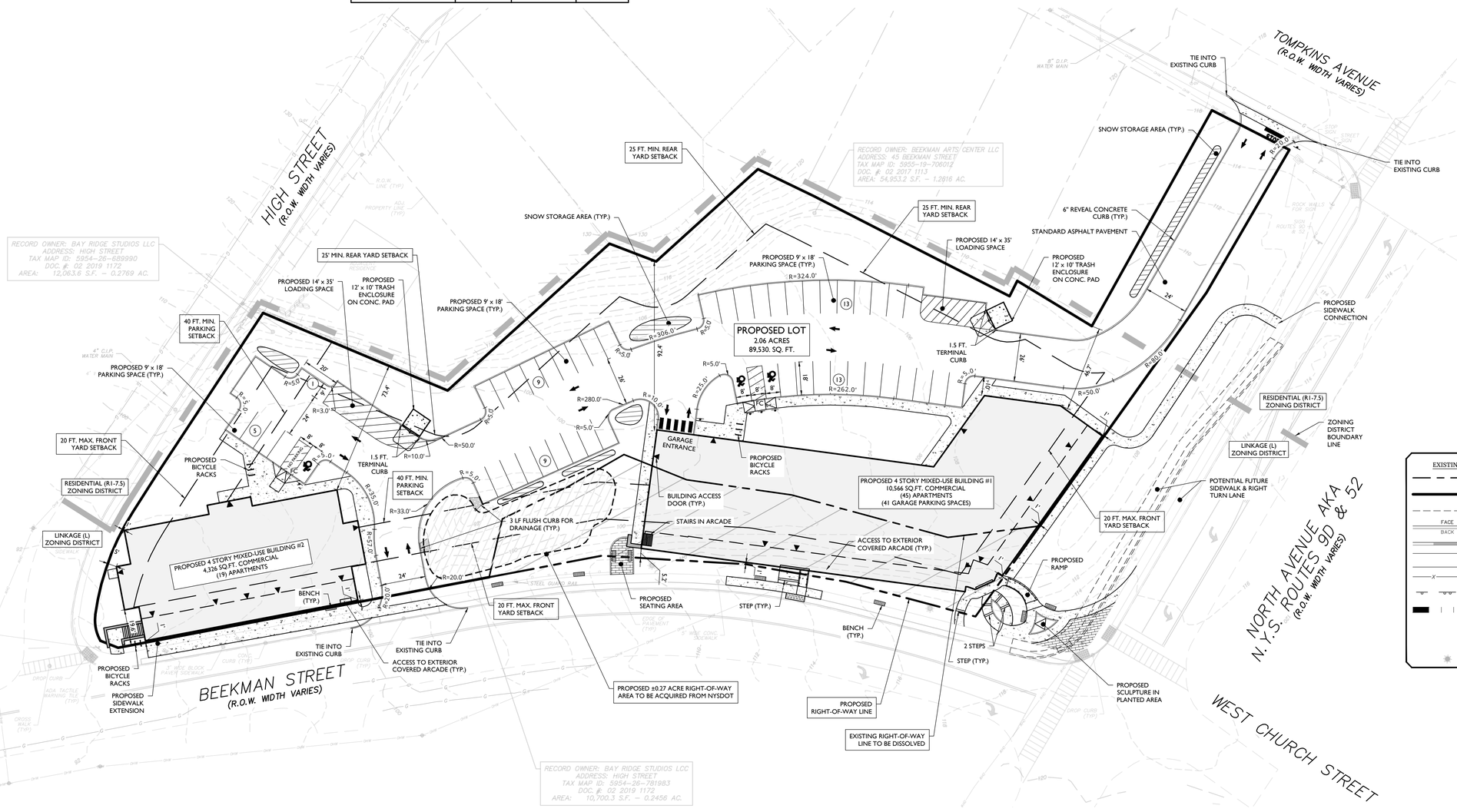
## TAX LOTS:

5955-19-706012
AREA = 1.26 ACRES
54,953 S.F.

5954-26-781983
AREA = 0.25 ACRES
10,700 S.F.

5954-26-689990
AREA = 0.28 ACRES
12,064 S.F.




### LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | RIGHT OF WAY LINE | |
| | PROPERTY LINE | |
| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | ROADWAY SIGNS | |
| | ZONING BOUNDARY LINE | |
| | STALL COUNT | (10) |
| | ADA ACCESSIBLE STALL | |
| | LIGHT POLE | |

30 0 30 60
SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

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2023\23010468A\Engineering\Site Plan\C-LAYT.dwg\C-04-DIMENSION PLAN By: KYLE.SHALLOW

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| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
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| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:41-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

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|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-LAYT

SHEET TITLE: DIMENSION PLAN

SHEET NUMBER: 04 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

## GRADING NOTES:

1. PROPOSED GRADE ELEVATIONS SHOWN AT BUILDING LINE ARE GROUND ELEVATIONS.
2. PROPOSED SPOT ELEVATIONS IN PAVEMENT AREAS ARE TOP OF FINISHED PAVEMENT.
3. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATION.
4. LANDSCAPED AND LAWN AREAS THAT ARE COMPACTED DURING CONSTRUCTION SHALL BE RESTORED PER THE NYS DEC DEEP-RIPPING AND DECOMPACTION MANUAL. (SEE SWPPP APPENDIX 12)

## ADA INSTRUCTIONS TO CONTRACTOR:

1. CONTRACTOR SHALL EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA ACCESSIBLE COMPONENTS FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE LATEST ADA STANDARDS FOR ACCESSIBLE DESIGN. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EGRESS, SHALL COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

   ( NOTE: THIS LIST IS NOT INTENDED TO CAPTURE EVERY APPLICABLE FEDERAL, STATE AND LOCAL RULE AND REGULATION. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE LAW, WHETHER OR NOT STATED SPECIFICALLY HEREIN):

   A. PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.

   B. CURB RAMPS- SLOPES SHALL NOT EXCEED 1:12 (8.3%).

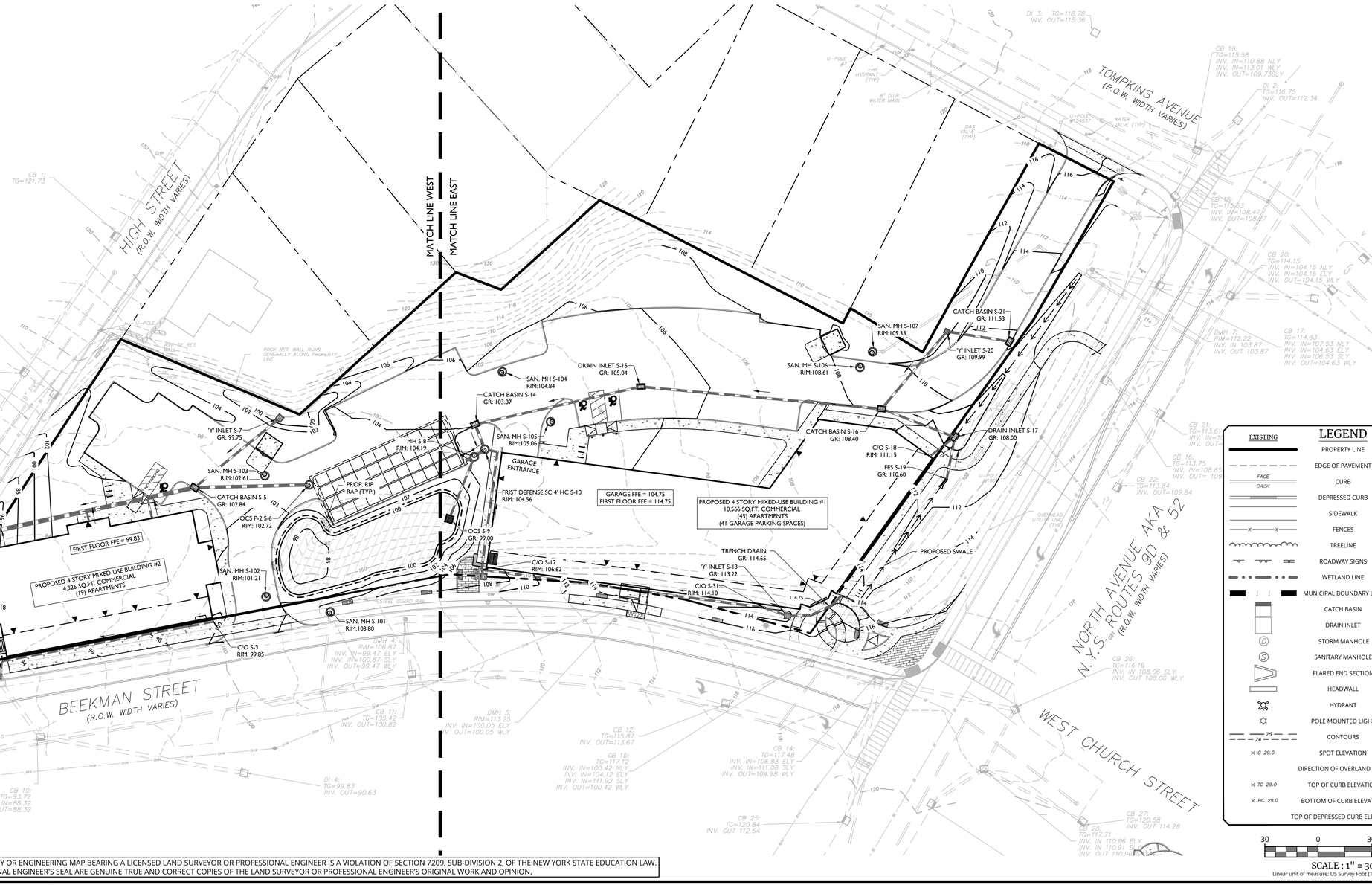
   C. LANDINGS -SHALL BE PROVIDED AT EACH END OF RAMPS, SHALL PROVIDE POSITIVE DRAINAGE, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.

   D. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - SHALL PROVIDE A 36 INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL. (CAR OVERHANGS CANNOT REDUCE THIS MINIMUM WIDTH), THE SLOPE SHALL BE NO GREATER THAN 1 :20 (5.0%) IN THE DIRECTION OF TRAVEL, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE.

   E. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), AN ADA RAMP WITH A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM DISTANCE OF 30 FEET, SHALL BE PROVIDED. THE RAMP SHALL HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.

   F. DOORWAYS - SHALL HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA SHALL BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHER WISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS (SEE APPLICABLE CODE SECTIONS).

2. IT IS RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE OFFICIAL PRIOR TO COMMENCING WORK.




## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE | |
| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | TREELINE | |
| | ROADWAY SIGNS | |
| | WETLAND LINE | |
| | MUNICIPAL BOUNDARY LINE | |
| | CATCH BASIN | |
| | DRAIN INLET | |
| D | STORM MANHOLE | D |
| S | SANITARY MANHOLE | S |
| | FLARED END SECTION | |
| | HEADWALL | |
| | HYDRANT | |
| | POLE MOUNTED LIGHT | |
| 75 / 74 | CONTOURS | 75 / 74 |
| × G 29.0 | SPOT ELEVATION | × G 29.0 |
| | DIRECTION OF OVERLAND FLOW | |
| × TC 29.0 | TOP OF CURB ELEVATION | × TC 29.0 |
| × BC 29.0 | BOTTOM OF CURB ELEVATION | × BC 29.0 |
| | TOP OF DEPRESSED CURB ELEVATION | × TDC 29.0 |

30 0 30 60

SCALE : 1" = 30'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

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2023\23010468A\Engineering\Site Plans\C-GRAD.dwg|C-DS-GRADING Overall By: KYLE SHALLOW

| REV | DATE | DRAWN BY | DESCRIPTION |
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Date: 2025.01.02 10:25:41-04'00'

Justin Eric Dates
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LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
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5954-26-689990
5954-26-781983

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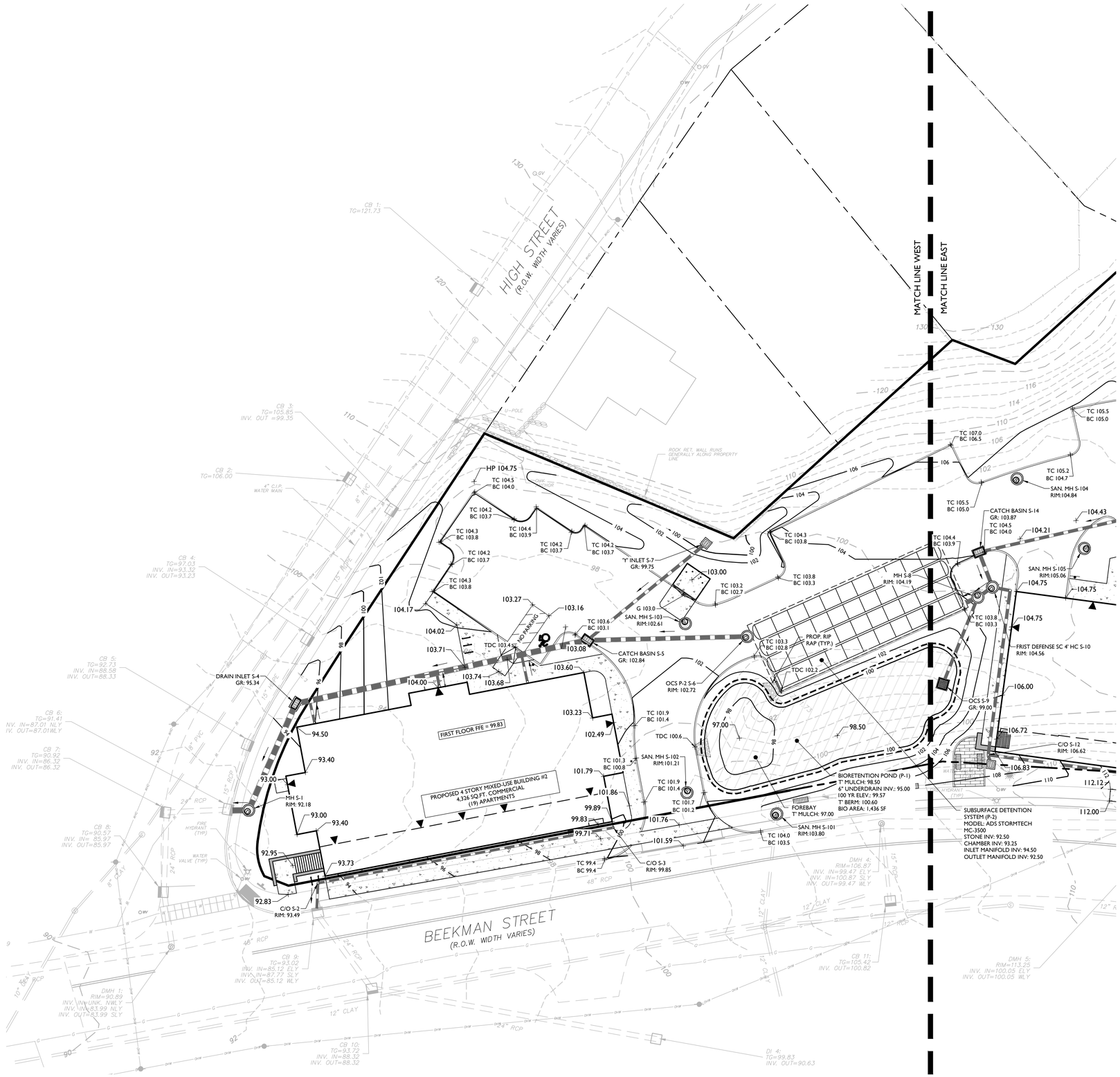
| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-GRAD

SHEET TITLE: GRADING PLAN (OVERALL)

SHEET NUMBER: 05 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION


HIGH STREET
(R.O.W. WIDTH VARIES)
BEEKMAN STREET
(R.O.W. WIDTH VARIES)
MATCH LINE WEST
MATCH LINE EAST
PROPOSED 4 STORY MIXED-USE BUILDING #2
4,326 SQ.FT. COMMERCIAL
(19) APARTMENTS
FIRST FLOOR FFE = 99.83
ROCK RET. WALL RUNS GENERALLY ALONG PROPERTY LINE
BIORETENTION POND (P-1)
T' MULCH: 98.50
6" UNDERDRAIN INV.: 95.00
100 YR ELEV.: 99.57
T' BERM: 100.60
BIO AREA: 1,436 SF
FOREBAY
T' MULCH: 97.00
SUBSURFACE DETENTION SYSTEM (P-2)
MODEL: ADS STORMTECH MC-3500
STONE INV: 92.50
CHAMBER INV: 93.25
INLET MANIFOLD INV: 94.50
OUTLET MANIFOLD INV: 92.50
CB 1: TG=121.73
CB 2: TG=106.00
CB 3: TG=105.85 INV. OUT =99.35
CB 4: TG=97.03 INV. IN=93.39 INV. OUT=93.23
CB 5: TG=92.73 INV. IN=88.58 INV. OUT=88.33
CB 6: TG=91.41 INV. IN=87.01 NLY INV. OUT=87.01WLY
CB 7: TG=90.92 INV. IN=86.32 INV. OUT=86.32
CB 8: TG=90.57 INV. IN= 85.97 INV. OUT=85.97
CB 9: TG=93.02 INV. IN=85.12 ELY INV. IN=87.77 SLY INV. OUT=85.12 WLY
CB 10: TG=93.72 INV. IN=88.32 INV. OUT=88.32
CB 11: TG=105.42 INV. OUT=100.82
DMH 1: RIM=90.69 INV. IN UNK. NYL Y INV. IN=83.99 NLY INV. OUT=83.99 SLY
DMH 4: RIM=106.87 INV. IN=99.47 ELY INV. IN=100.87 SLY INV. OUT=99.47 WLY
DMH 5: RIM=113.25 INV. IN=100.05 ELY INV. OUT=100.05 WLY
DI 4: TG=99.83 INV. OUT=90.63
HP 104.75
TC 104.5 BC 104.0
TC 104.2 BC 103.7
TC 104.3 BC 103.8
TC 104.4 BC 103.9
'Y' INLET S-7 GR: 99.75
103.00
TC 103.2 BC 102.7
G 103.0
SAN. MH S-103 RIM:102.61
TC 103.6 BC 103.1
TDC 103.4
NO PARKING
CATCH BASIN S-5 GR: 102.84
103.08
103.60
103.74
103.68
104.00
DRAIN INLET S-4 GR: 95.34
94.50
93.40
93.00
MH S-1 RIM: 92.18
92.95
93.73
92.83
C/O S-2 RIM: 93.49
103.27
103.16
104.17
104.02
103.71
OCS P-2 S-6 RIM: 102.72
TC 101.9 BC 101.4
103.23
102.49
TDC 100.6
SAN. MH S-102 RIM:101.21
TC 101.3 BC 100.8
101.79
101.86
99.89
99.83
99.71
TC 101.9 BC 101.4
TC 101.7 BC 101.2
101.76
101.59
TC 99.4 BC 99.4
C/O S-3 RIM: 99.85
TC 104.3 BC 103.8
TC 104.4 BC 103.9
TC 104.2 BC 103.7
TC 104.2 BC 103.7
TC 104.3 BC 103.8
TC 103.8 BC 103.3
MH S-8 RIM: 104.19
TC 103.2 BC 102.7
TC 103.3 BC 102.8
PROP. RIP RAP (TYP.)
TDC 102.2
SAN. MH S-101 RIM:103.80
TC 104.0 BC 103.5
CATCH BASIN S-14 GR: 103.87
TC 104.5 BC 104.0
104.43
104.21
SAN. MH S-105 RIM:105.06
104.75
104.75
TC 103.8 BC 103.3
104.75
FRIST DEFENSE SC 4' HC S-10 RIM: 104.56
106.00
OCS S-9 GR: 99.00
106.72
C/O S-12 RIM: 106.62
106.83
112.12
112.00
TC 107.0 BC 106.5
TC 105.5 BC 105.0
TC 105.2 BC 104.7
SAN. MH S-104 RIM:104.84
TC 105.5 BC 105.0
24" C.I.P. WATER MAIN
8" PVC
15" RCP
24" RCP
48" RCP
12" CLAY
10" DIP
FIRE HYDRANT (TYP)
WATER VALVE (TYP)
U/G ELEC
U/G TEL
U/G GAS
U/G CATV
U/G WATER
U/G SEWER
U/G DRAIN
U/G ELEC
U/G TEL
U/G GAS
U/G CATV
U/G WATER
U/G SEWER
U/G DRAIN
U/G ELEC
U/G TEL
U/G GAS
U/G CATV
U/G WATER
U/G SEWER
U/G DRAIN
U-POLE
O/HW
O/HW
O/HW




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## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE | |
| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | TREELINE | |
| | ROADWAY SIGNS | |
| | WETLAND LINE | |
| | MUNICIPAL BOUNDARY LINE | |
| | CATCH BASIN | |
| | DRAIN INLET | |
| (D) | STORM MANHOLE | (D) |
| (S) | SANITARY MANHOLE | (S) |
| | FLARED END SECTION | |
| | HEADWALL | |
| | HYDRANT | |
| | POLE MOUNTED LIGHT | |
| 75 / 74 | CONTOURS | 75 / 74 |
| × G 29.0 | SPOT ELEVATION | × G 29.0 |
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| | TOP OF DEPRESSED CURB ELEVATION | × TDC 29.0 |

20 0 20 40

SCALE : 1" = 20'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

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|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-GRAD

SHEET TITLE: GRADING PLAN (EAST)

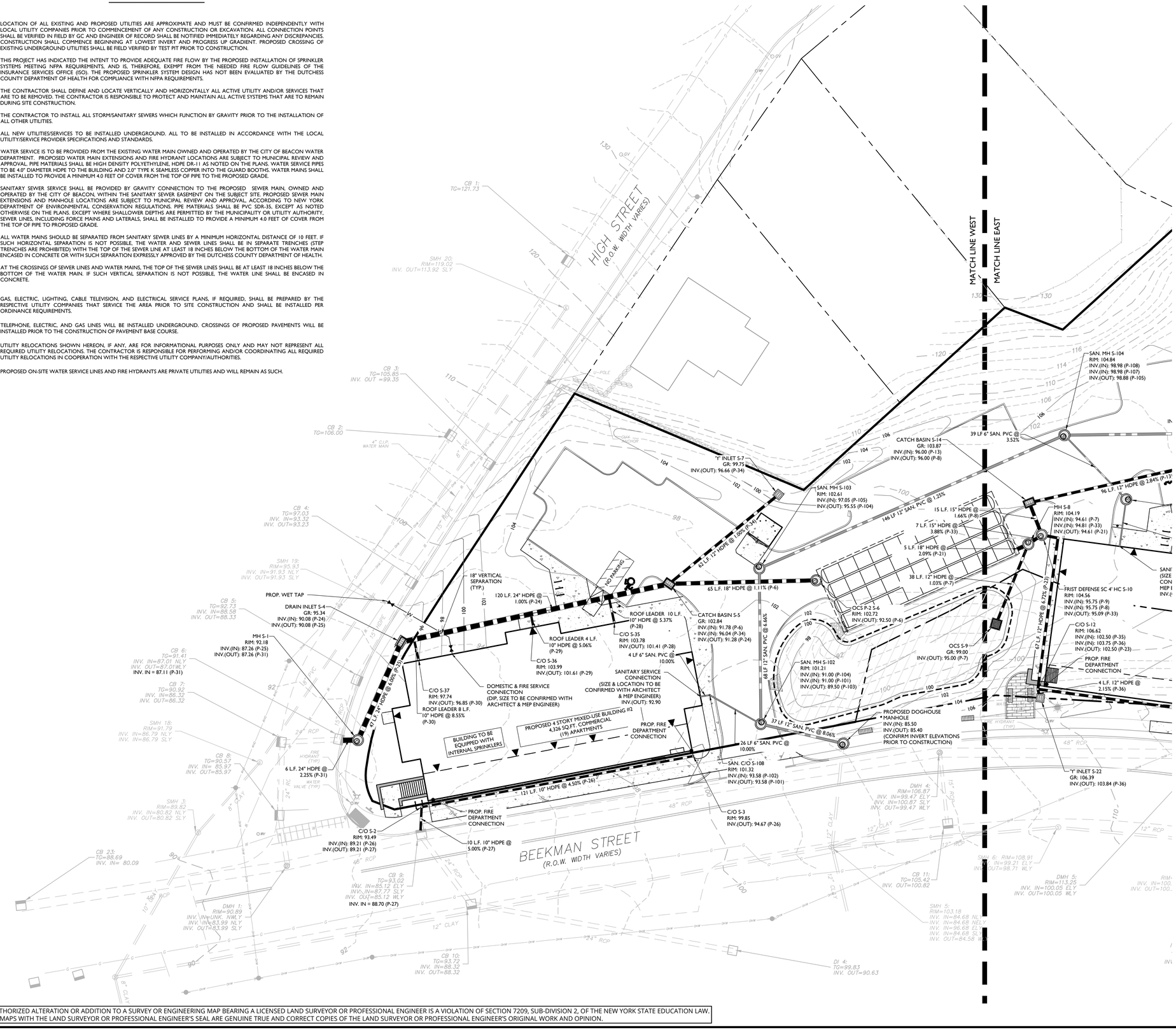
SHEET NUMBER: 07 of 19

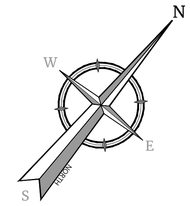
2023\23010468A\Engineering\Site Plans\C-GRAD.dwg|C-07-GRADING EAST
By: KYLE SHALLOW

513

# UTILITY NOTES

1. LOCATION OF ALL EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL CONNECTION POINTS SHALL BE VERIFIED IN FIELD BY GC AND ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY REGARDING ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT LOWEST INVERT AND PROGRESS UP GRADIENT. PROPOSED CROSSING OF EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO CONSTRUCTION.
2. THIS PROJECT HAS INDICATED THE INTENT TO PROVIDE ADEQUATE FIRE FLOW BY THE PROPOSED INSTALLATION OF SPRINKLER SYSTEMS MEETING NFPA REQUIREMENTS, AND IS, THEREFORE, EXEMPT FROM THE NEEDED FIRE FLOW GUIDELINES OF THE INSURANCE SERVICES OFFICE (ISO). THE PROPOSED SPRINKLER SYSTEM DESIGN HAS NOT BEEN EVALUATED BY THE DUTCHESS COUNTY DEPARTMENT OF HEALTH FOR COMPLIANCE WITH NFPA REQUIREMENTS.
3. THE CONTRACTOR SHALL DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICES THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE TO REMAIN DURING SITE CONSTRUCTION.
4. THE CONTRACTOR TO INSTALL ALL STORM/SANITARY SEWERS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
5. ALL NEW UTILITIES/SERVICES TO BE INSTALLED UNDERGROUND. ALL TO BE INSTALLED IN ACCORDANCE WITH THE LOCAL UTILITY/SERVICE PROVIDER SPECIFICATIONS AND STANDARDS.
6. WATER SERVICE IS TO BE PROVIDED FROM THE EXISTING WATER MAIN OWNED AND OPERATED BY THE CITY OF BEACON WATER DEPARTMENT. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL. PIPE MATERIALS SHALL BE HIGH DENSITY POLYETHYLENE, HDPE DR-11 AS NOTED ON THE PLANS. WATER SERVICE PIPES TO BE 4.0" DIAMETER HDPE TO THE BUILDING AND 2.0" TYPE K SEAMLESS COPPER INTO THE GUARD BOOTHS. WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM 4.0 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
7. SANITARY SEWER SERVICE SHALL BE PROVIDED BY GRAVITY CONNECTION TO THE PROPOSED SEWER MAIN, OWNED AND OPERATED BY THE CITY OF BEACON, WITHIN THE SANITARY SEWER EASEMENT ON THE SUBJECT SITE. PROPOSED SEWER MAIN EXTENSIONS AND MANHOLE LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL, ACCORDING TO NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION REGULATIONS, PIPE MATERIALS SHALL BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 4.0 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED GRADE.
8. ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY SEWER LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE DUTCHESS COUNTY DEPARTMENT OF HEALTH.
9. AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.
10. GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE REQUIREMENTS.
11. TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
12. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.
13. PROPOSED ON-SITE WATER SERVICE LINES AND FIRE HYDRANTS ARE PRIVATE UTILITIES AND WILL REMAIN AS SUCH.




## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE | |
| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | TREELINE | |
| | ROADWAY SIGNS | |
| | WETLAND LINE | |
| | MUNICIPAL BOUNDARY LINE | |
| | CATCH BASIN | |
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| (D) | STORM MANHOLE | (D) |
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| | HEADWALL | |
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| | POLE MOUNTED LIGHT | |
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20 0 20 40

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| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-UTIL

SHEET TITLE: UTILITIES PLAN (WEST)

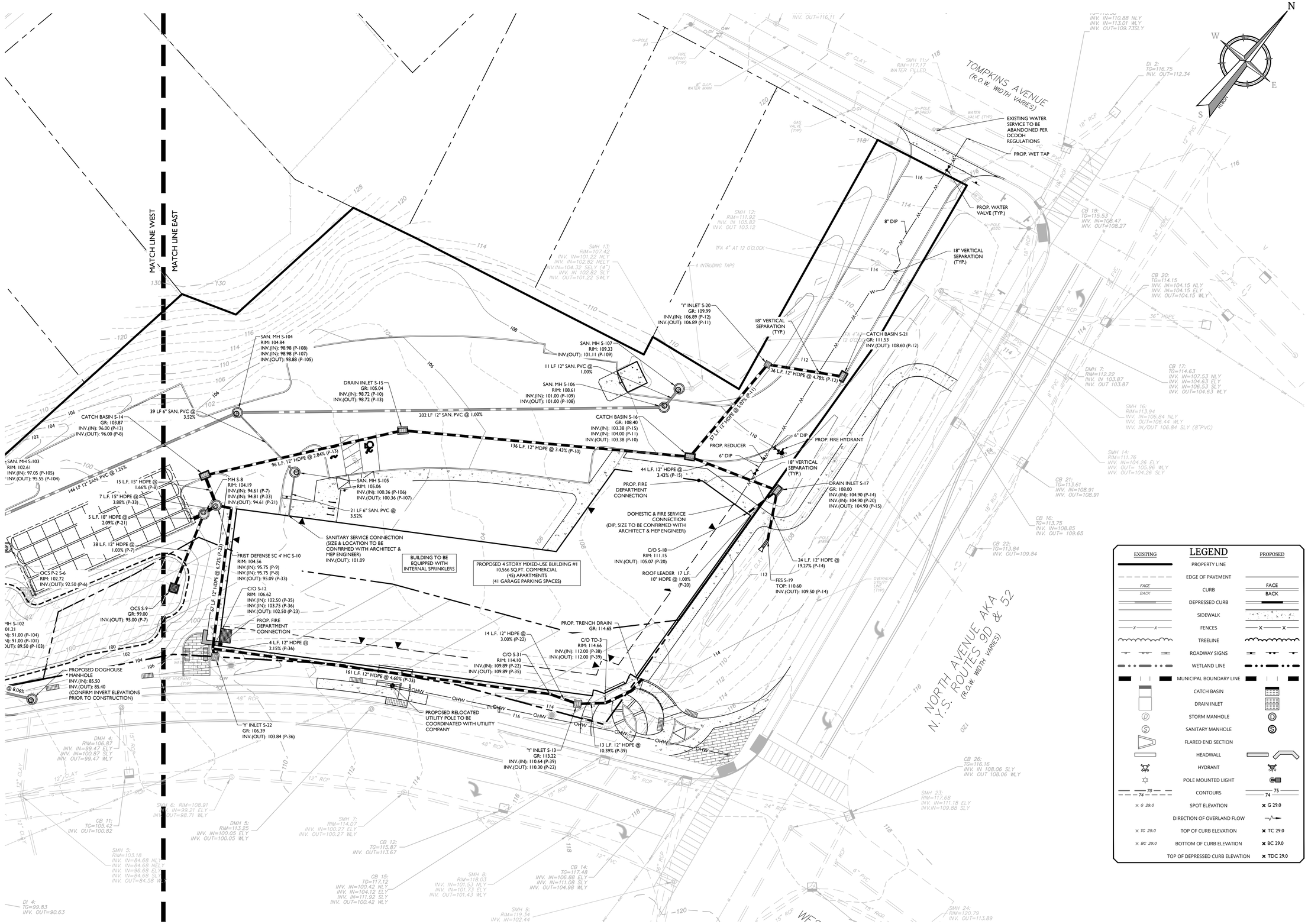
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2023\23010468A\Engineering\Site Plans\C-UTIL.dwg|C-08 UTILITY By: KYLE SHALLOW




## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE | |
| | EDGE OF PAVEMENT | |
| FACE / BACK | CURB | FACE / BACK |
| | DEPRESSED CURB | |
| | SIDEWALK | |
| X X | FENCES | X X |
| | TREELINE | |
| | ROADWAY SIGNS | |
| | WETLAND LINE | |
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| (P) | STORM MANHOLE | (D) |
| (S) | SANITARY MANHOLE | (S) |
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Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
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SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
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5954-26-689990
5954-26-781983

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| AS SHOWN | 01/30/2024 | KAS | CPM |
| PROJECT NUMBER: 23010468A | DRAWING NAME: C-UTIL | | |

SHEET TITLE:
UTILITIES PLAN (EAST)

SHEET NUMBER:
09 of 19

# GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FOURTEEN (14) DAYS FOR DISTURBANCES LESS THAN FIVE (5) ACRES AND SEVEN (7) DAYS FOR DISTURBANCES GREATER THAN FIVE (5) ACRES, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
3. PERMANENT VEGETATION TO BE SEEDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCHING IS REQUIRED ON ALL SEEDING. WHEN HYDROSEEDING, MULCH SHALL NOT BE INCLUDED IN THE TANK WITH THE SEED.
4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE 2016 NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL OR AS AMENDED.
5. A SUBBASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUBBASE SHALL BE INSTALLED WITHIN FIVE (5) DAYS OF THE PRELIMINARY GRADING.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION CONTINUES (I.E. SLOPES GREATER THAN 3:1).
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A STONE PAD, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
9. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE (12) INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF TWENTY-FOUR (24) INCHES OF SOIL HAVING A PH OF 5 OR MORE.
10. AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.
11. CONDUIT OUTLET PROTECTION MUST BE REVIEWED & SUPPLEMENTED AT ALL OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
12. UNFILTERED DEWATERING IS NOT PERMITTED. TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH STATE STANDARDS.
13. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.
14. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY WILL BE REMOVED IMMEDIATELY.
15. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION AND SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
16. STOCKPILE AND STAGING LOCATIONS DETERMINED IN THE FIELD, SHALL BE PLACED WITHIN THE LIMITS OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN.
17. CONCRETE WASHOUT, DUMPSTER, & STAGING AREA LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED AT THE PRE-CONSTRUCITON MEETING. THEY SHALL BE PLACED IN THE PROXIMITY OF THE CONSTRUCTION ENTRANCE AND STAGING AREAS AND SHALL BE USED PRIOR TO EXITING THE PROJECT SITE. THE LOCATION SHALL BE IN A PRACTICAL, CLEARLY DELINEATED, AREA AND BE MAINTAINED THROUGHOUT CONSTRUCTION.
18. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
19. ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED BY THE PROPERTY OWNER, AND SHALL BECOME THEIR RESPONSIBILITY.
20. PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES.
21. DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR CONTROL SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLAN SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE MUNICIPAL ENGINEER.
22. ALL TEMPORARY, STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES CAN BE REMOVED, WHEN ALL CONSTRUCTION ACTIVITY IDENTIFIED IN THE SWPPP HAS BEEN COMPLETED, ALL AREAS OF DISTURBANCE HAVE ACHIEVED FINAL STABILIZATION** AND ALL POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE SWPPP AND ARE OPERATIONAL.
23. BOTTOM AND BERM ELEVATIONS OF TEMPORARY SEDIMENT BASINS TO BE REVIEWED WITH THE CONTRACTOR BASED ON THEIR PROPOSED CONSTRUCTION SEQUENCE FOR THE PROJECT.

# CONSTRUCTION SEQUENCE

- INSTALL CONSTRUCTION ENTRANCES.
- STAKE LIMITS OF DISTURBANCE AND ORANGE CONSTRUCTION FENCE.
- INSTALL PERIMETER SILT FENCING ON DOWNHILL AREAS AS SHOWN ON PLAN.
- INSTALL SEDIMENT PONDS. INSTALL TEMPORARY SWALES TO DIRECT ALL OPEN SOIL AREA DISTURBANCE TO SEDIMENT PONDS, AS NECESSARY. LOCATIONS AND SIZE OF THE EROSIONS AND SEDIMENT CONTROL PRACTICES ARE NOTED ON THE PLAN. THESE MAY VARY DEPENDING ON THE CONTRACTOR'S SCHEDULE AND APPROACH BUT 3,600 CF OF STORAGE MUST BE PROVIDED AT A MINIMUM PER ACRE OF UPSTREAM DISTURBANCE. SEDIMENT TRAPS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND DETAILS. SEDIMENT TRAPS AND BASINS SHALL BE SIZED IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL MANUAL.
- SEDIMENT POND RESTORATION: WHEN TEMPORARY STRUCTURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, THE EMBANKMENT AND RESULTING SEDIMENT DEPOSITS ARE TO BE LEVELED OR OTHERWISE DISPOSED OF. SEDIMENT CAN BE DISPOSED OF BY EXPORTING IT OFF SITE FOR DISPOSAL OR BE USED AS FILL IN LAWN AREAS. SEDIMENT PONDS IN FUTURE OPEN SPACE OR LAWN AREAS MAY BE PUMPED DRY, GRADED, AND BACKFILLED. SEDIMENT PONDS IN PAVED OR STRUCTURAL AREAS MUST HAVE THE BASIN MATERIAL AND TRAPPED SEDIMENTS REMOVED, SAFELY DISPOSED OF, AND BACKFILLED WITH STRUCTURAL FILL. SEDIMENT PONDS IN LOCATIONS OF FUTURE STORMWATER PONDS MUST HAVE THE TRAPPED SEDIMENT REMOVED LEAVING THE BASIN AREA OPEN FOR THE DEVELOPMENT OF THE FINAL STORMWATER POND.
- ROUGH GRADE PROPOSED DRIVEWAY/ROAD.
- DISTURBED SOILS SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICAL. MATERIALS STORED IN STOCKPILES SHALL BE CORDONED OFF WITH SILT FENCE PER THE APPROPRIATE SPECIFICATIONS AND DETAILS. THE OPERATOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
- CONSTRUCT ROADS, DRIVES, BUILDINGS, PARKING AREAS AND INSTALL DRAINAGE SYSTEMS.
- TOPSOIL/HAYSEED LAWN AREAS.
- THE PROJECT SITE MUST MEET FINAL STABILIZATION CRITERIA PRIOR TO REMOVING ALL EROSION AND SEDIMENT CONTROL DEVICES AND CLOSING OUT THE PROJECT. LITTER AND CONSTRUCTION DEBRIS SHALL BE REMOVED AS PRACTICAL THROUGHOUT THE LIFE OF THE PROJECT.
- UPON FINAL STABILIZATION BEING MET, THE CONTRACTOR SHALL CLEAR DRAINAGE PIPES AND STRUCTURES OF ANY SEDIMENT WHICH MAY HAVE ACCUMULATED. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED, AS MAY BE NECESSARY, REQUIRED AND/OR REQUESTED BY AUTHORITIES, TO PREVENT THE INCIDENTAL DISCHARGE OF SILT LADEN RUNOFF FROM ENTERING A WATER COURSE OR A DRAINAGE SYSTEM. THE GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES STATES THAT IT IS UNLAWFUL FOR ANY PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS.
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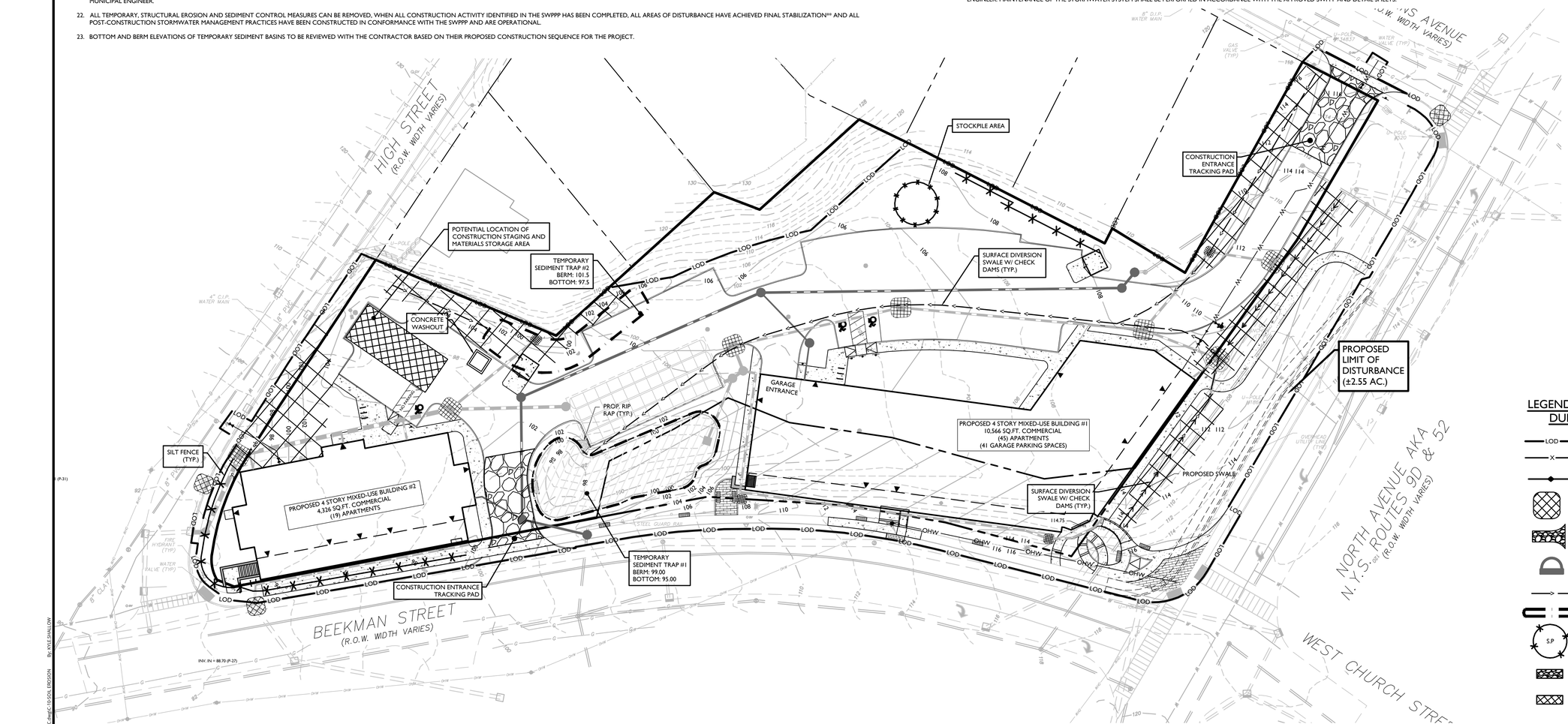
**FINAL STABILIZATION - MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES, SUCH AS PERMANENT LANDSCAPE MULCHES, ROCK RIP-RAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.

MAINTENANCE PLAN DURING CONSTRUCTION:

INSPECTION AND MAINTENANCE SHALL BE PERFORMED IN CONFORMANCE WITH GP-0-20-001 OR AS AMENDED. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED AND INSTALLED FOR THE PROJECT. THE SEDIMENT TRAPS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 25% OF ITS' CAPACITY. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES APPROXIMATELY 6" DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE LANDSCAPE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

MAINTENANCE AGREEMENT NOTE:

THE OWNER/APPLICANT SHALL ENTER INTO AN ENFORCEABLE MAINTENANCE AGREEMENT WITH THE MUNICIPALITY (IF AN MS4 COMMUNITY). RELATED TO MAINTENANCE OF STORMWATER FACILITIES. THE OWNER/APPLICANT IS RESPONSIBLE TO PERFORM ALL REQUIRED MAINTENANCE BOTH DURING CONSTRUCTION AND LONG-TERM. THE NATURE OF THE AGREEMENT IS TO ALLOW THE MUNICIPALITY TO PERFORM MAINTENANCE AT THEIR OPTION SHOULD THE OWNER/APPLICANT FAIL TO ADEQUATELY MAINTAIN THE SYSTEM AS DETERMINED BY THE MUNICIPAL ENGINEER. MAINTENANCE OF THE STORMWATER SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED SWPPP AND DETAIL SHEETS.




## LEGEND FOR EROSION CONTROL DURING CONSTRUCTION

- LOD — CONSTRUCTION LIMIT LINE
- X — SILT FENCE
- ORANGE CONSTRUCTION FENCE
- STORM INLET SEDIMENT TRAP
- STABILIZED CONSTRUCTION ENTRANCE
- SEDIMENT TRAP OUTLET
- TEMPORARY SWALE
- TEMPORARY SEDIMENT BASIN
- S.P — MATERIAL STOCKPILE
- CHECK DAM
- SLOPE MATTING

30 0 30 60

SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-SESC.dwg|C-1050L EROSION By: KYLE SHALLOW

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| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
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CITY OF BEACON
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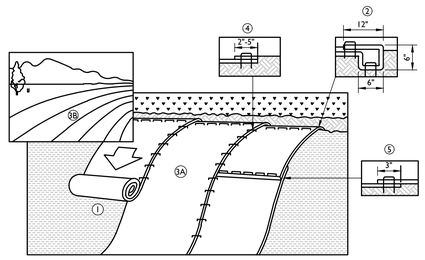
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| PROJECT NUMBER: 23010468A | DRAWING NAME: C-SESC | | |

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

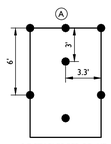
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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

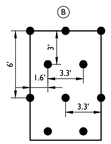



SLOPE INSTALLATION

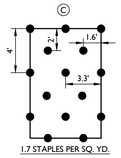
STAPLES PATTERN GUIDE
6.67' WIDE ROLLS




0.7 STAPLES PER SQ. YD.




1.15 STAPLES PER SQ. YD.



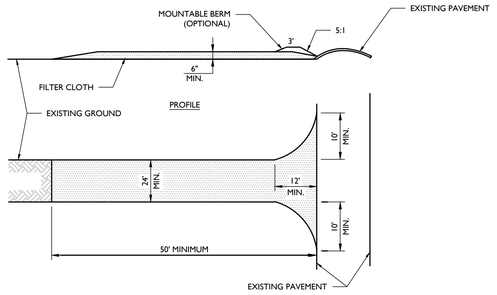

1.7 STAPLES PER SQ. YD.

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
   * WHEN USING MATTING WITH SEED, DO NOT SEED THE AREA. FOLLOW MANUFACTURER'S RECOMMENDATIONS.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP x 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECPS BACK OVER SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY STEP BY STEP ACROSS THE SLOPE TAMPERING IT DOWN ALONG THE WAY. RECP'S SHALL UNROLL WITH APPROPRIATE SIDE TIGHTLY AGAINST THE SOIL SURFACE. RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKESSHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAKED WITH APPROXIMATELY 2" TO 5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH.
6. MATTING SHALL BE 100% BIODEGRADABLE
   * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

## EROSION MATTING DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-2200 | 07/01/19



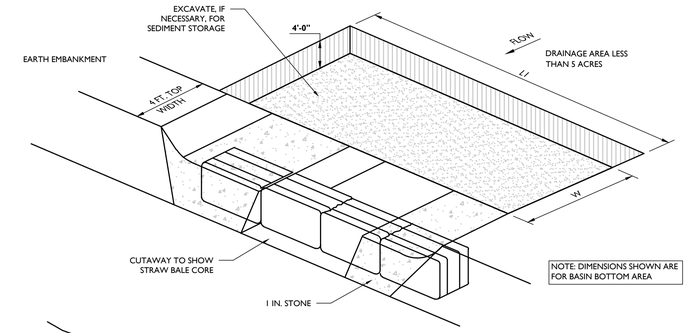

PLAN VIEW

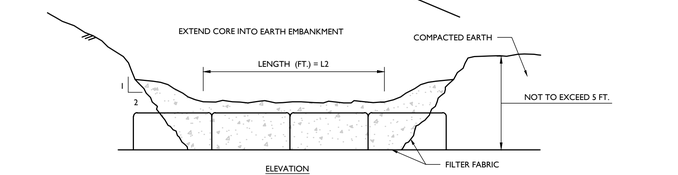
NOTES:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. LENGTH: NOT LESS THAN 50 FEET. THICKNESS: NOT LESS THAN (6) INCHES.
2. WIDTH - 24'
3. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
4. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTING BERM WITH 5:1 SLOPES WILL BE PERMITTED.
5. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
6. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.

## STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-1000 | 07/01/19




ELEVATION

TO BE INSTALLED PRIOR TO GRADING OR FILLING IN THE DRAINAGE AREA THEY ARE TO PROTECT. TRAPS THAT ARE TO FUNCTION DURING BUILDING CONSTRUCTION MUST NOT BE LOCATED WITHIN 20 FEET OF A PROPOSED BUILDING FOUNDATION. WHILE TRAPS SHOULD BE SITED TO MAXIMIZE STORAGE BENEFIT, THEY SHOULD NOT BE LOCATED IN WETLANDS OR WETLAND BUFFER AREAS, OR IN EXISTING WATERCOURSES.

SEE EROSION AND SEDIMENT CONTROL PLAN FOR LOCATIONS.

INSTALLATION NOTES:

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED AS WELL.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER SIZED STONES, ROCKS, ORGANIC MATERIAL AND OTHER QUESTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
6. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
7. ALL CUT AND FILL SLOPES SHALL BE 1 : 2 OR FLATTER.
8. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.

SIZING CALCULATIONS

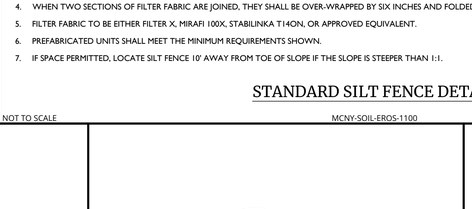
NOTE:

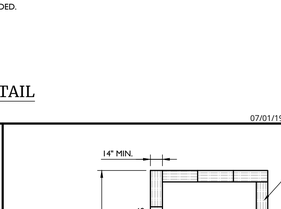
1. 3,600 CUBIC FEET OF STORAGE REQUIRED PER ACRE OF DISTURBANCE.

*THIS IS THE MINIMUM AMOUNT OF SEDIMENT TRAPS, ADDITIONAL MAY BE REQUIRED BASED UPON OTHER ON-SITE CONDITIONS AND CONTRACTOR SCHEDULE AND PHASING ACTIVITIES.

## STONE OUTLET SEDIMENT TRAP DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-1601 | 07/01/19



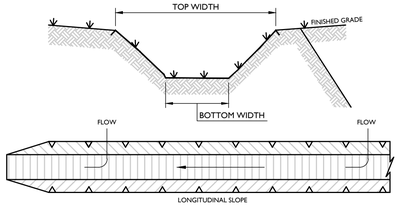




NOTES:

1. GEOTEXTILE TO BE FASTENED SECURELY TO FENCE POST BY USING WIRE TIES OR HOG RINGS. USE 3 FASTENERS PER POST.
2. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
3. ALL SILT FENCE TO BE INSPECTED AND REMEDIAL MAINTENANCE PERFORMED BY THE CONTRACTOR AS REQUIRED. MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
4. WHEN TWO SECTIONS OF FILTER FABRIC ARE JOINED, THEY SHALL BE OVER-WRAPPED BY SIX INCHES AND FOLDED.
5. FILTER FABRIC TO BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
6. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
7. IF SPACE PERMITTED, LOCATE SILT FENCE 10' AWAY FROM TOE OF SLOPE IF THE SLOPE IS STEEPER THAN 1:1.

## STANDARD SILT FENCE DETAIL

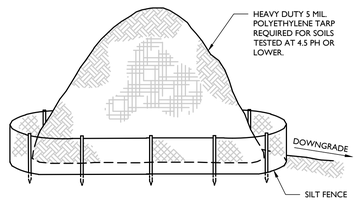
NOT TO SCALE | MCNY-SOIL-EROS-1100 | 07/01/19




PLAN

| VEGETATED SWALE | | | | | |
|---|---|---|---|---|---|
| SWALE | BOTTOM WIDTH | SIDE SLOPE | LONGITUDINAL SLOPE | DEPTH | LENGTH |
| 1R | 2.0 FT | 50% | 2.00% | | 506' |

## VEGETATIVE SWALE DETAIL

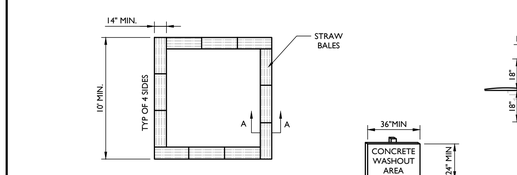



NOTES:

1. ALL STOCKPILES SHALL NOT TO BE LOCATED WITHIN 50 FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY.

## TOPSOIL STOCKPILE DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-2500 | 07/01/19




DETAIL NOTES:

1. FACE SIGN TOWARDS NEAREST STREET OR ACCESS POINT.
2. CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 50 FT. MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.

NOTES:

1. CONCRETE WASHOUTS ARE REQUIRED ON ALL CONSTRUCTION SITES INVOLVING CONCRETE AND STUCCO USE.
2. THE CONTRACTOR SHALL REQUIRE ALL CONCRETE DRIVERS TO UTILIZE THE CONCRETE WASHOUTS ONSITE.
3. WASHOUT FACILITIES SHALL BE LOCATED AT LEAST 50 FEET AWAY FROM STORM SEWER DRAIN INLETS, GUTTERS, OPEN DITCHES, AND WATER COURSES.
4. APPROPRIATE STONE SHOULD COVER PATHS TO CONCRETE WASHOUT.
5. THE NUMBER OF CONCRETE WASHOUTS DEPENDS ON THE EXPECTED DEMAND FOR STORAGE CAPACITY. LARGE SITES WITH EXTENSIVE CONCRETE WORK SHALL BE PLACED AT MULTIPLE LOCATIONS FOR USE BY CONCRETE TRUCK DRIVERS.
6. CONCRETE WASHOUT AREAS SHALL BE IDENTIFIED BY POSTING SIGNS ONSITE.
7. CONCRETE WASHOUTS ARE TO BE INSPECTED DAILY BY THE CONTRACTOR FOR LEAKS OR TEARS IN PLASTIC LINER.
8. REMOVE AND DISPOSE OF ALL MATERIAL WHEN THE WASHOUT HAS BEEN FILLED TO 75% CAPACITY.
9. PRIOR TO ANY RAINFALL, ALL CONCRETE WASHOUTS ARE TO BE CLEANED OUT OR COVERED.
10. ONCE THE MATERIAL HAS BEEN CLEANED OUT OF THE CONCRETE WASHOUT FACILITY, THE FACILITY MUST BE INSPECTED FOR REPAIR, RECONSTRUCTION OR REPLACEMENT. ALL PLASTIC LINING SHALL BE REMOVED AND REPLACED.
11. PRE-FABRICATED OR ONSITE FABRICATED CONCRETE WASHOUTS MAY BE USED.
12. OPTIONS FOR ONSITE CONCRETE WASHOUTS:
    A. DIG A PIT AND LINE WITH 10 MIL PLASTIC SHEETING.
    B. CREATE AN ABOVE-GROUND STRUCTURE FROM STRAW BALES OR SANDBAGS WITH 10 MIL PLASTIC LINING.

## CONCRETE WASHOUT DETAIL

NOT TO SCALE | MCNY-SOIL-EROS-1700 | 07/01/19

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2023\23010468A\Engineering\Site Plans\C-SESC.dwg|C-11-SOIL EROSION DETAILS By:KYLE SHALLOW

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Justin Eric Dates
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SITE PLAN
FOR
BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

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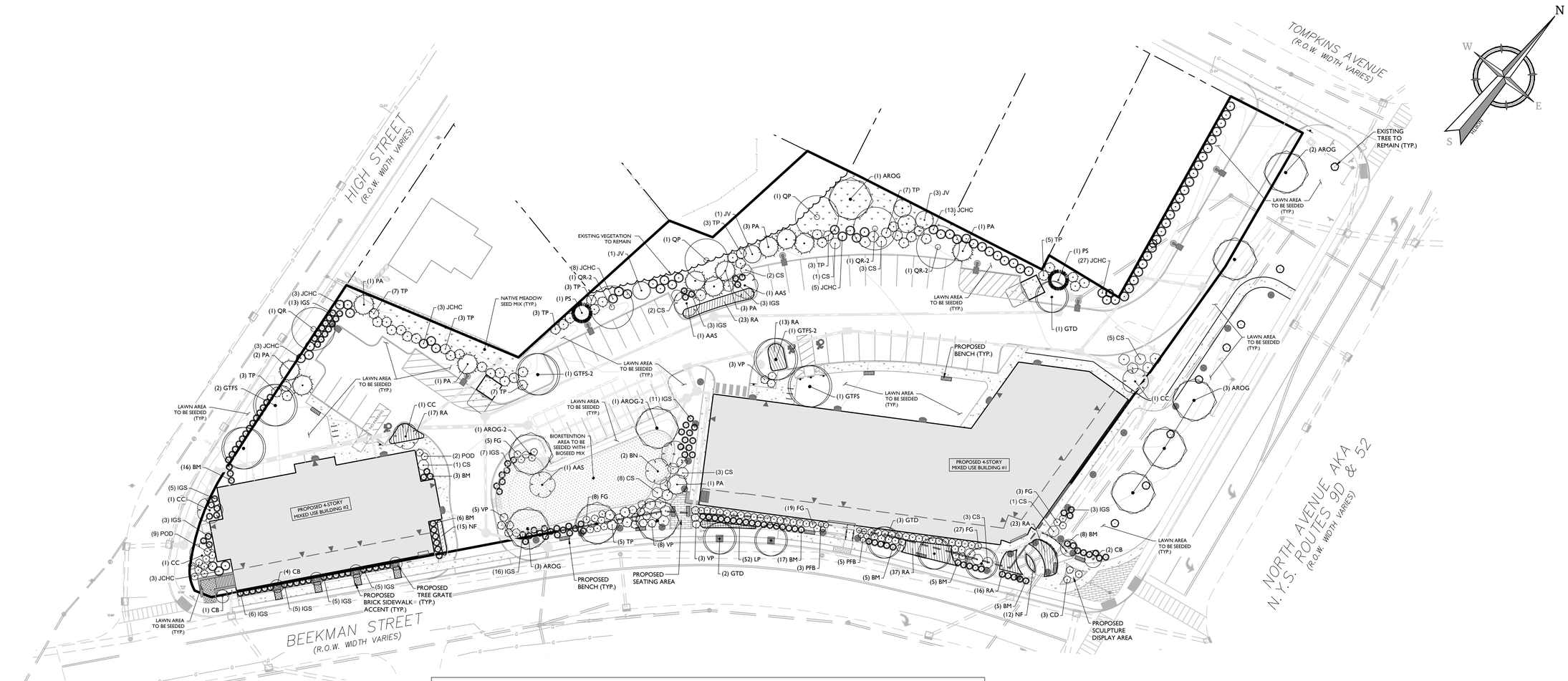
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PROJECT NUMBER: 23010468A
DRAWING NAME: C-SESC

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL DETAILS

SHEET NUMBER:
11 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION




## SITE PLANTING SCHEDULE

| DECIDUOUS TREES | QTY | BOTANICAL NAME | COMMON NAME | ROOT | SIZE | REMARKS |
|---|---|---|---|---|---|---|
| AROG | 9 | Acer rubrum 'October Glory' | October Glory Red Maple | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| AROG-2 | 2 | Acer rubrum 'October Glory' | October Glory Red Maple | B & B | 3"-3-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| GTD | 6 | Gleditsia triacanthos 'Draves' | Street Keeper Honeylocust | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| GTFS | 3 | Gleditsia triacanthos 'Skyline' | Skyline Honey Honeylocust | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| GTFS-2 | 2 | Gleditsia triacanthos 'Skyline' | Skyline Honey Honeylocust | B & B | 3"-3-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| QP | 2 | Quercus palustris | Pin Oak | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| QR | 1 | Quercus rubra | Red Oak | B & B | 2"-2-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| QR-2 | 3 | Quercus rubra | Red Oak | B & B | 3"-3-1/2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| **EVERGREEN TREES** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **ROOT** | **SIZE** | **REMARKS** |
| JV | 5 | Juniperus virginiana | Eastern Red Cedar | B & B | 6-8` Ht. | DENSE / TYP. SPECIES HABIT |
| PA | 12 | Picea abies | Norway Spruce | B & B | 6-8` Ht. | DENSE / TYP. SPECIES HABIT |
| PS | 2 | Pinus strobus | Eastern White Pine | B & B | 6-8` Ht. | DENSE / TYP. SPECIES HABIT |
| **ORNAMENTAL TREES** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **ROOT** | **SIZE** | **REMARKS** |
| AAS | 3 | Amelanchier alnifolia | Serviceberry | B & B | 6-7` Ht. | MULTISTEM / TYP. SPECIES HABIT |
| BN | 2 | Betula nigra | River Birch | B & B | 6-7' Ht. | MULTISTEM / TYP. SPECIES HABIT |
| CB | 7 | Carpinus betulus 'Frans Fontaine' | Frans Fontaine Hornbeam | B & B | 1-3/4"-2" Cal. | STRAIGHT LEADER/SYM. BRANCHING |
| CC | 4 | Cercis canadens | Eastern Redbud | B & B | 6-7` Ht. | STRAIGHT LEADER/SYM. BRANCHING |
| **SHRUBS** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **ROOT** | **SIZE** | **REMARKS** |
| CD | 3 | Cotoneaster dammeri 'Coral Beauty' | Coral Beauty Cotoneaster | CONT | 18" - 24" SPREAD | TYPICAL SPECIES HABIT |
| CS | 29 | Cornus sericea | Red Twig Dogwood | CONT | 24" - 30" | TYPICAL SPECIES HABIT |
| BM | 53 | Buxus microphylla var. japonica 'Winter Gem' | Winter Gem Boxwood | CONT | 18" - 24" | TYPICAL SPECIES HABIT |
| FG | 62 | Fothergilla gardenii | Dwarf Fothergilla | CONT | 18" - 24" | TYPICAL SPECIES HABIT |
| IGS | 85 | Ilex glabra `Shamrock` | Inkberry | CONT | 18" - 24" | TYPICAL SPECIES HABIT |
| JCHC | 60 | Juniperus chinensis 'Hetzii Columnaris' | Hetzi Column Juniper | CONT | 6-8` Ht. | TYPICAL SPECIES HABIT |
| PFB | 11 | Potentilla fruticosa | Bush Cinquefoil | CONT | 18" - 24" | TYPICAL SPECIES HABIT |
| POD | 11 | Physocarpus opulifolius 'Diabolo' | Diabolo Ninebark | CONT | 24" - 30" | TYPICAL SPECIES HABIT |
| RA | 129 | Rhus aromatica 'Gro-Low' | Gro-Low Fragrant Sumac | CONT | 12" - 18" SPREAD | TYPICAL SPECIES HABIT, 3.5' O.C. |
| TP | 49 | Thuja x plicata 'Green Giant' | Green Giant Arborvitae | CONT | 5-6' Ht. | TYPICAL SPECIES HABIT |
| VP | 19 | Viburnum prunifolium | Blackhaw Viburnum | CONT | 24" - 30" | TYPICAL SPECIES HABIT |
| **GROUND COVERS** | **QTY** | **BOTANICAL NAME** | **COMMON NAME** | **CONT** | **SPACING** | |
| LP | 52 | Liriope platyphylla | Liriope Grass | SPS | 18" o.c. | |
| NF | 27 | Nepeta x faassenii | Catmint | 1 gal. | 24" o.c. | |

## PLAN NOTE

1. THIS PLAN IS TO BE USED FOR LANDSCAPE PURPOSES ONLY. REFER TO DETAIL SHEETS FOR GENERAL NOTES AND LANDSCAPE DETAILS.

## PARKING AREA TREES

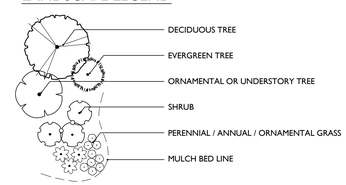
REQUIRED: ONE (1) TREE (MIN. 3" CALIPER) PER EIGHT (8) PARKING SPACES
47 PARKING SPACES / 8 = 6 TREES

PROVIDED: 7 TREES (COMPLIES)

## LANDSCAPE NOTES

1. LOCATIONS OF ALL PLANT MATERIAL AND PLANTING BED OUTLINES IS APPROXIMATE AND MAY VARY DUE TO THE LOCATIONS OF SITE IMPROVEMENTS AND/OR BUILDING.
2. FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED OUTLINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT.
3. ALL AREAS WITHIN THE PLANTING BED LIMITS SHALL BE MULCHED WITH 3" OF SHREDDED HARDWOOD BARK MULCH.
4. PROPOSED LAWN AREAS AROUND BUILDINGS SHALL BE STABILIZED WITH SEED. SEED MIXTURE #1 TO BE USED ON NORTHERN & WESTERN LAWN AREAS AND SEED MIXTURE #2 TO BE USED ON SOUTHERN & EASTERN LAWN AREAS.
5. ANY PROPOSED IRRIGATION DESIGN AND/OR SYSTEM WILL BE DETERMINED IN THE FIELD BY THE IRRIGATION CONTRACTOR.
6. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK.
7. NO SUBSTITUTIONS OF PLANT MATERIALS ARE TO BE MADE WITHOUT THE WRITTEN CONSENT OF THE OWNER AND PROJECT LANDSCAPE ARCHITECT.
8. ALL VEGETATION SHOWN ON THIS PLAN WILL BE MAINTAINED IN A HEALTHY AND VIGOROUS GROWING CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE.

## LANDSCAPE LEGEND




NOTE:
1. LANDSCAPE SYMBOLS ON THE PLAN VARY AND MAY DEVIATE FROM THE LANDSCAPE LEGEND SYMBOLS SHOWN ABOVE.

LAWN SEED MIX

NATIVE MEADOW MIX

BIORETENTION SEED MIX

30 0 30 60

SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

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SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

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SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
12 of 19

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## LUMINAIRE SCHEDULE

| KEY | QTY. | DESCRIPTION | ARRANGEMENT | MTG. HT. | LUMENS/LAMP | COLOR TEMPERATURE | CRI | LLF | CATALOG # |
|---|---|---|---|---|---|---|---|---|---|
| A | 5 | LITHONIA LIGHTING D-SERIES SIZE 0 LED AREA LUMINAIRE | SINGLE | 20' | 4,044 | 3000K | 80 | 0.9 | DSX0 LED-P2-30K-80CRI-BLC4-MVOLT-SPA-DBLXD-PER5 |
| B | 2 | LITHONIA LIGHTING D-SERIES SIZE 0 LED AREA LUMINAIRE | SINGLE | 20' | 3,951 | 3000K | 80 | 0.9 | DSX0 LED-P2-30K-80CRI-LCCO-MVOLT-SPA-DBLXD-PER5 |
| C | 1 | LITHONIA LIGHTING D-SERIES SIZE 0 LED AREA LUMINAIRE | SINGLE | 20' | 3,951 | 3000K | 80 | 0.9 | DSX0 LED-P2-30K-80CRI-RCCO-MVOLT-SPA-DBLXD-PER5 |
| D | 8 | LITHONIA LIGHTING D-SERIES SIZE 1 LED WALL LUMINAIRE | SINGLE (WALL PACK) | 12',15' | 1,357 | 3000K | 80 | 0.9 | DSXW1 LED-10C-350-30K-T4M-MVOLT-PE-DBLXD |
| E | 24 | LITHONIA LIGHTING RADEAN BOLLARD LED SITE LUMINAIRE | SINGLE (BOLLARD) | 3.5' | 532 | 3000K | 80 | 0.9 | RADB LED-P2-30K-ASY-MVOLT-BTT-BCF-DBLXD |

## CALCULATION SUMMARY

| DESCRIPTION | CALC. TYPE | UNITS | AVG. | MAX. | MIN. | AVG. / MIN. |
|---|---|---|---|---|---|---|
| PARKING, DRIVE & SIDEWALK | ILLUMINANCE | FC | 0.9 | 2.8 | 0.3 | 3.0:1 |

## LIGHTING NOTES:

1. THIS PLAN IS TO BE USED FOR LIGHTING PURPOSES ONLY.
2. POLES AND FIXTURES AS SUPPLIED BY:
   FIXTURES - LITHONIA LIGHTING
   POLE - HOLOPHANE
   BOLLARD FIXTURES - HYDREL
3. LAMPS ARE TO BE LED's. A LIGHT LOSS FACTOR (LLF) WAS USED AS SHOWN IN THE LUMINARIES SCHEDULE.
4. FIXTURES AND POLES ARE TO BE BLACK.
5. POLE MOUNTED FIXTURES SHALL BE PLACED A MINIMUM OF TWO (2) FEET BEHIND CURBS, EDGE OF PAVEMENT OR RETAINING WALLS IN CAR PARKING AREAS.
6. PROPOSED LIGHT FIXTURE LOCATIONS ARE CRITICAL TO PROVIDE THE LIGHTING LEVELS DEPICTED ON THIS PLAN. THE LIGHTING CONTRACTOR SHALL FIELD VERIFY FIXTURE LOCATIONS PRIOR TO INSTALLATION. IF ADJUSTMENT TO ANY LIGHT FIXTURE LOCATION IS REQUIRED DUE TO FINAL CONSTRUCTION OF UTILITIES AND SITE IMPROVEMENTS, THE LIGHTING CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO INSTALLATION.
7. LIGHTING SHOWN ON PLAN DEPICTS AVERAGE MAINTAINED FOOTCANDLE LEVELS AT GRADE.
8. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
9. ELECTRICAL PLANS FOR WIRING LAYOUT BY OTHERS.
10. POLE BASE INSTALLATION SHALL INCLUDE A SUPPLEMENTARY GROUND ROD AND WIRE LEAD TO BASE FOR POWER CONNECTION. DETAILS PER PROJECT ELECTRICAL ENGINEER.
11. ALL LIGHTING FIXTURES WILL BE DARK SKY COMPLIANT.

## LIGHTING LEGEND:

- SINGLE FIXTURE POLE LIGHT
- WALLPACK
- BOLLARD LIGHT
- *0.0 LIGHT LEVEL AT GRADE (IN FOOTCANDLES)

30 0 30 60

SCALE : 1" = 30'
SELECT LINEAR UNIT OF MEASURE

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| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:42-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

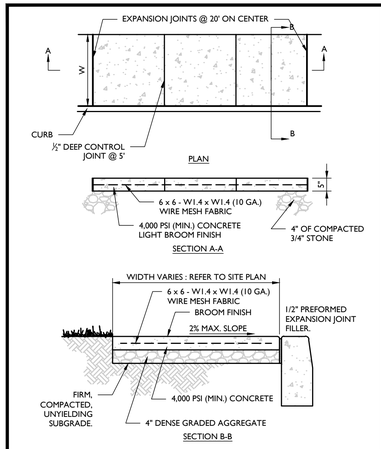
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| AS SHOWN | 01/30/2024 | XXXXXX | XXXXXX |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-LGHT

SHEET TITLE: LIGHTING PLAN

SHEET NUMBER: 13 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

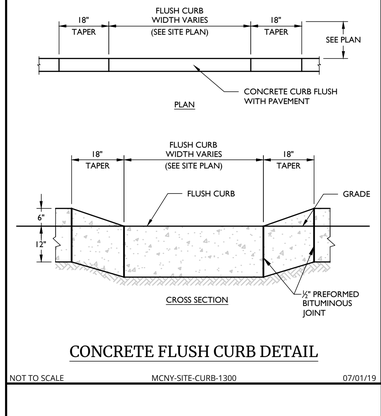



NOTES:

1. A PREFORMED, BITUMINOUS EXPANSION JOINT 1/2" THICK, 4" WIDE AND EXTENDING THE FULL WIDTH OF THE SIDEWALK (UNBROKEN) SHALL BE INSTALLED.
2. ½" DEEP CONTROL JOINTS INSTALLED AT AN INTERVAL OF EVERY 5'.
3. JOINT FILLER SHALL CONFORM TO AASHTO M-33. SURFACE OF CONCRETE SHALL BE BROOM FINISH. ROUND EDGES USING AN EDGING TOOL WITH A 1/4" RADIUS.
4. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PER THE LATEST ADA REQUIREMENTS.

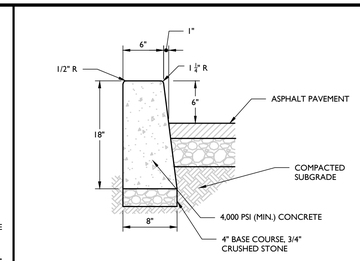
## REINFORCED CONCRETE SIDEWALK (NEXT TO CURB) DETAIL

NOT TO SCALE | MCNY-SITE-PVMT-1800 | 07/01/19




## CONCRETE FLUSH CURB DETAIL

NOT TO SCALE | MCNY-SITE-CURB-1300 | 07/01/19

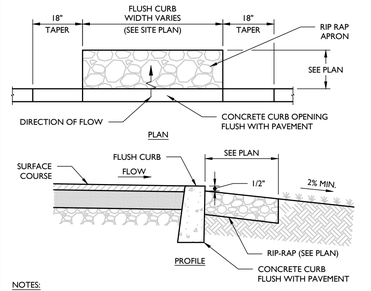



NOTES:

1. PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 20' MAX. INTERVALS ALONG THE CURB. PROVIDE CONTROL JOINTS @ 10 FEET MAX. BETWEEN EXPANSION JOINTS.

## CONCRETE CURB (ASPHALT PAVEMENT) DETAIL

NOT TO SCALE | MCNY-SITE-CURB-1000 | 07/01/19

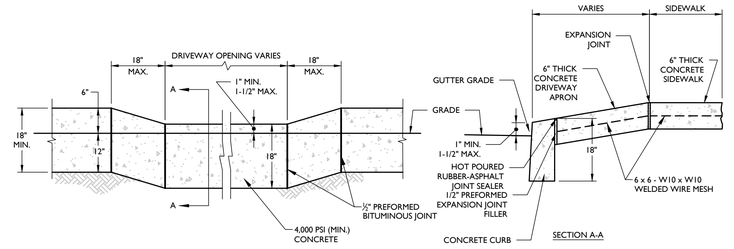



NOTES:

1. FLUSH CURB FOR OVERLAND FLOW TO BE USED AT DESIGNATED LOCATIONS ONLY AS SHOWN ON SITE PLANS.
2. CONTRACTOR SHALL ENSURE THAT THERE IS POSITIVE DRAINAGE FROM THE PAVEMENT TO THE GRASSED AREA.

## FLUSH CURB FOR DRAINAGE DETAIL

NOT TO SCALE | MCNY-SITE-CURB-1400 | 07/01/19

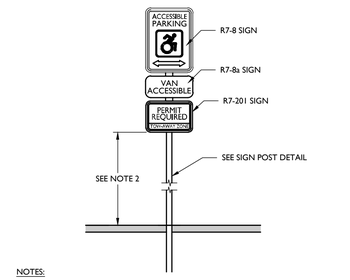



NOTES:

1. DEPRESSED VERTICAL CURB AT DRIVEWAY AND RAMP AREAS SHALL BE FULL DEPTH OF 18".

## DEPRESSED CONCRETE CURB AT DRIVEWAY DETAIL

NOT TO SCALE | MCNY-SITE-CURB-1700 | 07/01/19

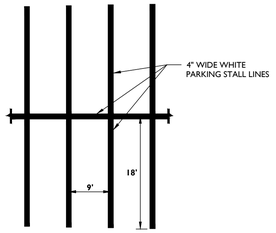



NOTES:

1. INSTALL SIGN WHERE NOTED ON PLAN.
2. THE BOTTOM OF THE LOWEST SIGN SHALL BE MOUNTED 60" ABOVE THE PARKING LOT OR SIDEWALK SURFACE WHEN THE SIGN IS PARALLEL TO THE SIDEWALK AND 72" ABOVE THE PARKING LOT OR SIDEWALK WHEN THE SIGN IS PERPENDICULAR TO THE SIDEWALK.

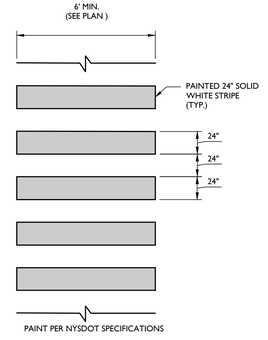
## ACCESSIBLE PARKING SIGN DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-2200 | 07/01/19



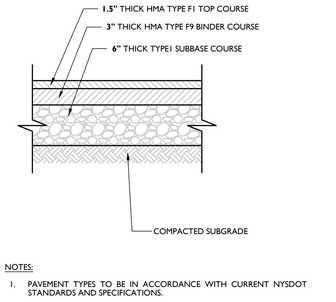

## TYPICAL PARKING STALL STRIPING DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-1000 | 07/01/19




## PEDESTRIAN CROSSWALK DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-1401 | 07/01/19

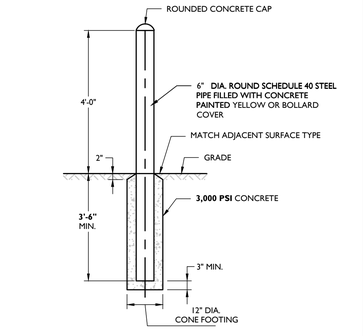



NOTES:

1. PAVEMENT TYPES TO BE IN ACCORDANCE WITH CURRENT NYSDOT STANDARDS AND SPECIFICATIONS.

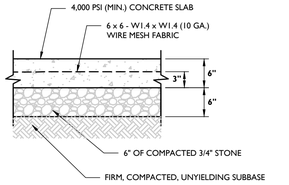
## ON-SITE STANDARD ASPHALT PAVEMENT DETAIL

NOT TO SCALE | MCNY-SITE-PVMT-1000 | 07/01/19



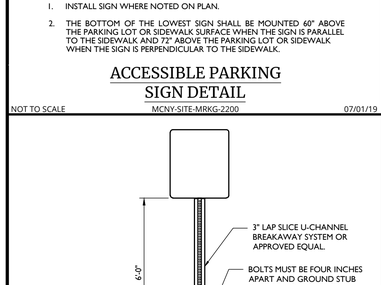

## BOLLARD DETAIL

NOT TO SCALE | MCCM-SITE-FNCE-2300 | 07/01/19




## TRASH ENCLOSURE CONCRETE PAD DETAIL

NOT TO SCALE | MCNY-SITE-PVMT-2100 | 07/01/19

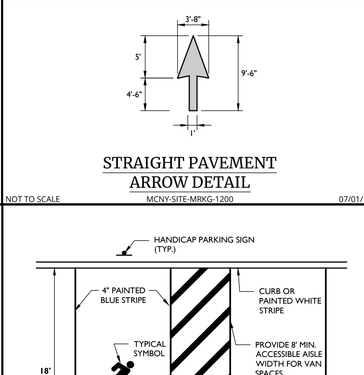



NOTE:

1. ALL SIGNS SHALL CONFORM TO THE CURRENT MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS AND CURRENT MUNICIPAL SPECIFICATIONS FOR COLOR, DESIGN AND EXACT WORDING.

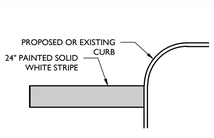
## BREAKAWAY SIGN POST DETAIL

NOT TO SCALE | MCCM-SITE-SIGN-6102 | 07/01/19



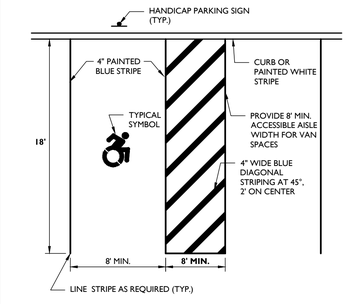

## STRAIGHT PAVEMENT ARROW DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-1200 | 07/01/19



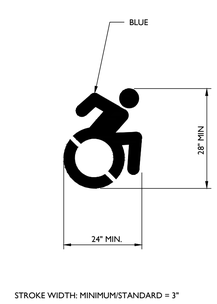

## TYPICAL STOP BAR DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-1100 | 07/01/19




## ACCESSIBLE PARKING LINE STRIPE STALL DETAIL

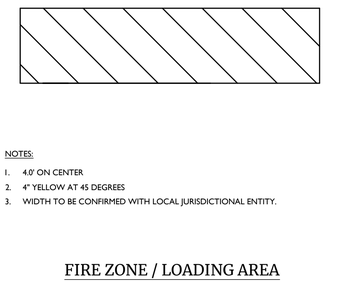
NOT TO SCALE | MCNY-SITE-MRKG-1801 | 07/01/19




STROKE WIDTH: MINIMUM/STANDARD = 3"

## ACCESSIBLE SYMBOL DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-2000 | 07/01/19

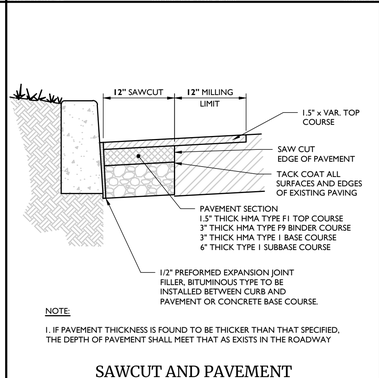


NOTES:

1. 4.0' ON CENTER
2. 4" YELLOW AT 45 DEGREES
3. WIDTH TO BE CONFIRMED WITH LOCAL JURISDICTIONAL ENTITY.

## FIRE ZONE / LOADING AREA STRIPING DETAIL

NOT TO SCALE | MCNY-SITE-MRKG-2100 | 07/01/19

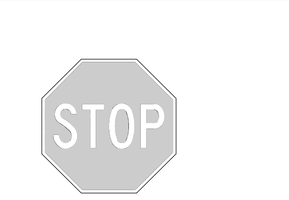



NOTE:

1. IF PAVEMENT THICKNESS IS FOUND TO BE THICKER THAN THAT SPECIFIED, THE DEPTH OF PAVEMENT SHALL MEET THAT AS EXISTS IN THE ROADWAY

## SAWCUT AND PAVEMENT RESTORATION DETAIL

NOT TO SCALE | MCNY-SITE-PVMT-2800 | 07/01/19




30" x 30"

COLORS:
LEGEND = WHITE (RETROREFLECTIVE)
BACKGROUND = RED (RETROREFLECTIVE)

## R1-1 SIGN DETAIL

NOT TO SCALE | MCCM-SIGN-REGU-R1-1 | 12/01/20




24" x 30"

COLORS:
LEGEND = RED (RETROREFLECTIVE)
BACKGROUND = WHITE (RETROREFLECTIVE)

## R8-3a SIGN DETAIL

NOT TO SCALE | MCCM-SIGN-REGU-R8-3A | 01/01/23

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |


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Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
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SITE PLAN
FOR
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|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

| PROJECT NUMBER: | DRAWING NAME: |
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| 23010468A | C-DTLS |

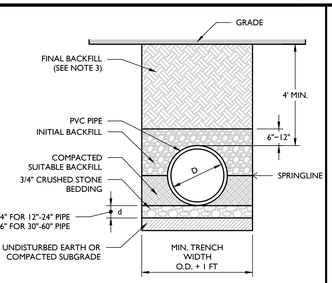
SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: 14 of 19


UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.



2023\23010468A\Engineering\Site Plans\C-DTLS.dwg|C-14-DETAILS By: KYLE SHALLOW

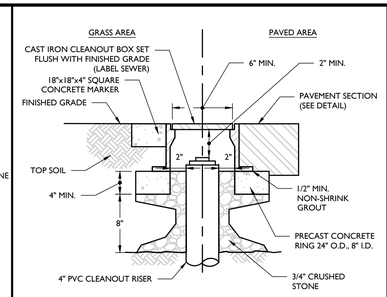



NOTES:

1. ALL PVC GRAVITY PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.
2. GRAVITY SANITARY PIPE SHALL BE PVC SDR 35 PER ASTM D3034 OR AS REQUIRED BY THE GOVERNING AUTHORITY.
3. INITIAL & FINAL BACKFILL MATERIAL SHALL BE SITE SOILS FREE OF LARGE STONES. CLEAN FILL, OR ITEM 4.

## PVC SANITARY PIPE BEDDING (GRAVITY) DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-2803 | 07/01/19

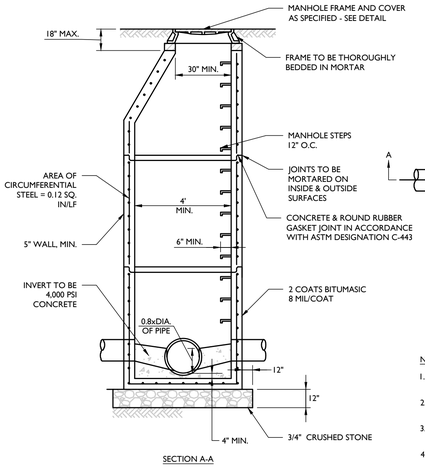



NOTES

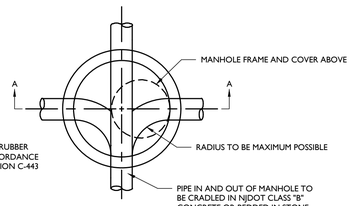
1. ALL PVC CLEANOUTS TO HAVE CAST IRON FRAME AND COVER PROTECTION BOX. DESIGN FOR H20 LOADING.

## CLEANOUT PROTECTION BOX DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-1600 | 07/01/19




SECTION A-A



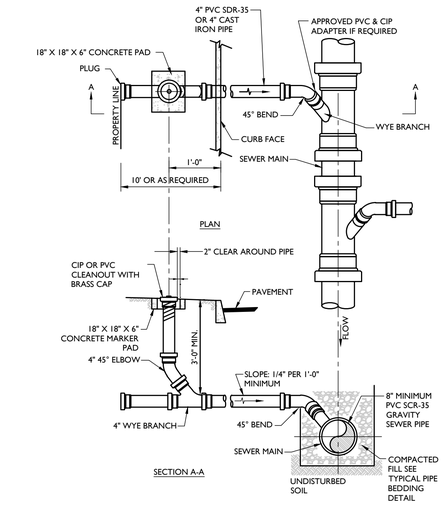

PLAN

NOTES:

1. PRECAST MANHOLE SECTIONS TO BE IN ACCORDANCE WITH ASTM C-478, 4,000 PSI CONCRETE.
2. FLEXIBLE RUBBER BOOT SHALL BE USED FOR CONNECTION OF PVC PIPE TO MANHOLE. LINK SEAL OR APPROVED EQUAL.
3. PRECAST CHANNELS SHALL NOT BE USED FOR BENDS GREATER THAN 45°. POURED CONCRETE LONG RADIUS CHANNELS SHALL BE CONSTRUCTED.
4. MANHOLE TO BE CAPABLE OF H20 LOADING.

## SANITARY PRECAST MANHOLE DETAIL

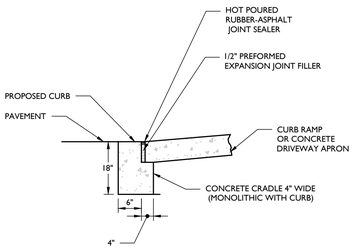
NOT TO SCALE | MCNY-UTIL-SSWR-1000 | 07/01/19




SECTION A-A

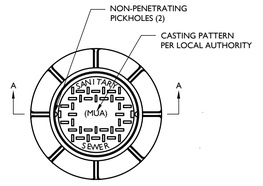
## SANITARY SEWER LATERAL & CLEANOUT DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-1601 | 07/01/19

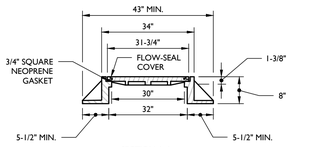



## ADA FLUSH CURB AND CRADLE DETAIL

NOT TO SCALE | MCNY-SITE-HADA-2300 | 07/01/19




PLAN



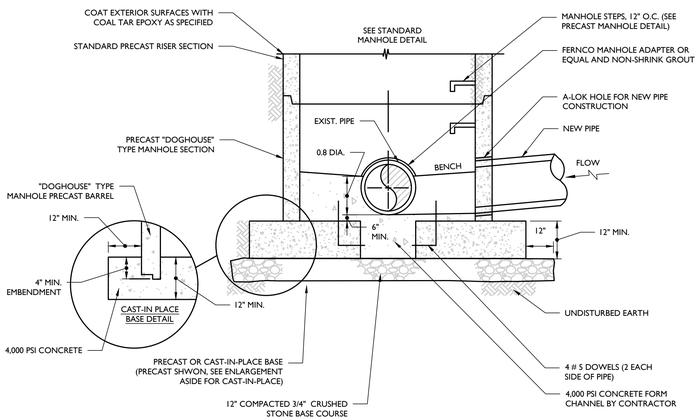

SECTION A-A

NOTES:

1. MANHOLE FRAME AND COVER SHALL BE CAMPBELL FOUNDRY PATTERN # **1012B** WITH FLOW-SEAL COVER OR APPROVED EQUAL OR AS OTHERWISE REQUIRED BY JURISDICTIONAL AUTHORITY.
2. MANHOLE FRAME AND COVER TO BE HEAVY DUTY, CONFORMING TO ASTM SPECIFICATION A-48 CLASS 30-B WITH SHOP COAT OF ASPHALTIC PITCH.
3. IN EASEMENTS AND REMOTE AREAS, COVER LOCKING DEVICES OF BRONZE AND KEY SHALL BE PROVIDED.
4. WATERTIGHT MANHOLE FRAME AND COVER SHALL BE PATTERN # **6548** AS MANUFACTURED BY CAMPBELL FOUNDRY COMPANY OR APPROVED EQUAL.

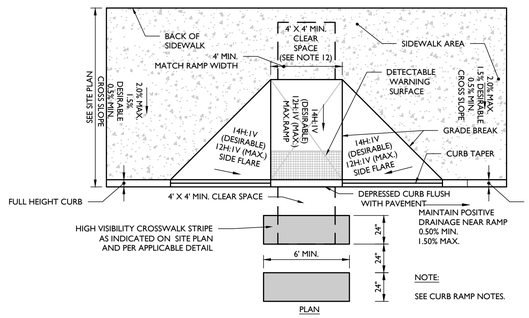
## SANITARY MANHOLE FRAME AND COVER DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-1001 | 07/01/19




## DOGHOUSE MANHOLE DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-1100 | 07/01/19




PLAN

NOTE:

SEE CURB RAMP NOTES.

## CURB RAMP TYPE 1 DETAIL

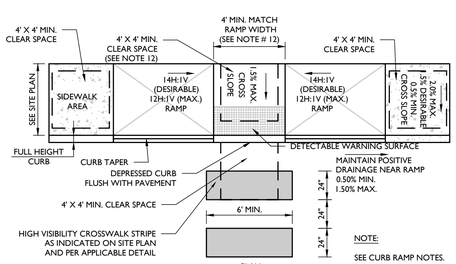
NOT TO SCALE | MCNY-SITE-HADA-1000 | 07/01/19

NOTES:

1. CONTRACTOR SHALL PREPARE SHOP DRAWINGS OF EACH CURB RAMP FOR SUBMISSION AND APPROVAL OF THE UNDERSIGNED PROFESSIONAL AND THE MUNICIPAL, COUNTY, STATE OR OTHER AGENCY'S ENGINEER HAVING JURISDICTION.
2. LANDING AREA, APPROACH SIDEWALK TRANSITIONS AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
3. CURB AT RAMP OPENING (FLUSH CURB) TO BE FLUSH WITH ROADWAY PAVEMENT.
4. CROSSWALKS AND PAVEMENT MARKINGS TO BE INSTALLED AS DENOTED ON SITE PLAN.
5. MAXIMUM RAMP SLOPE MAY BE 12H:1V UPON APPROVAL OF ENGINEER. RAMP SLOPES SHOWN ARE THE PREFERRED SLOPE. SIDE FLARE SLOPES MAY BE 10H:1V UPON APPROVAL OF THE ENGINEER.
6. MINIMUM RAMP CROSS-SLOPE SHALL BE 0.50%. THE MAXIMUM RAMP CROSS-SLOPE MAY BE 2.00% UPON APPROVAL OF THE ENGINEER. CROSS-SLOPES SHOWN IN THE DETAILS ARE THE PREFERRED SLOPES TO MAINTAIN A LEVEL OF CONSTRUCTION TOLERANCE.
7. ACCESSIBLE RAMPS SHALL BE INSTALLED PURSUANT WITH THE CURRENT UNITED STATES ACCESS BOARD ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES AND THE ADA STANDARDS FOR ACCESSIBLE DESIGN AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE AND OTHER APPLICABLE LOCAL AND STATE STANDARDS IN EFFECT AT THE DATE OF CONSTRUCTION.
8. DEVIATIONS FROM THE CURB RAMP DETAILS REQUIRE WRITTEN APPROVAL OF THE UNDERSIGNED PROFESSIONAL AND THE MUNICIPAL, COUNTY, STATE OR OTHER AGENCY'S ENGINEER HAVING JURISDICTION.
9. THE RAMP SURFACE SHALL HAVE A NON-SLIP, HAND BROOMED FINISH.
10. CONCRETE EXPANSION JOINTS SHALL HAVE A FIRM SURFACE WITH 1/4" BEVELED CONCRETE EDGES. THE JOINT SURFACE SHALL NOT BE MORE THAN 1/4" BELOW THE ADJOINING CONCRETE SURFACE.
11. CURB RAMP MUST BE WHOLLY CONTAINED WITHIN THE CROSSWALK CROSSING.
12. THE CLEAR SPACE SHALL BE INCREASED TO 5 FEET WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK.
13. THE MAXIMUM SEPARATION BETWEEN THE BACK OF CURB AND DETECTABLE WARNING SURFACE SHALL NOT EXCEED 5 FEET. THE MAXIMUM SEPARATION AREA MAY BE WITHIN THE 4' X 4' CLEAR SPACE.
14. SEE SEPARATE DETAILS FOR "DETECTABLE WARNING SURFACE" AND "CURB RAMP SECTIONS".
15. WHERE SIDE FLARES ARE NOT REQUIRED, PROVIDE AN 18" CURB TAPER TO THE FLUSH CURB.
16. ALL CURB RAMP FLUSH CURB SHALL BE MADE WITH CONCRETE CURB CRADLE, REGARDLESS OF THE CURB MATERIAL USED THROUGHOUT THE SITE.

## CURB RAMP NOTES

MCNY-SITE-HADA-2500 | 07/01/19



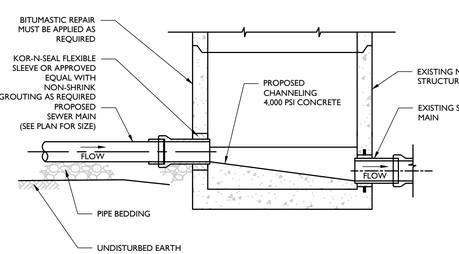

PLAN

NOTE:

SEE CURB RAMP NOTES.

## CURB RAMP TYPE 7 DETAIL

NOT TO SCALE | MCNY-SITE-HADA-1600 | 07/01/19




NOTES:

1. CONSTRUCTION OF THE NEW SEWER MAIN SHALL NOT IMPEDE THE OPERATION OF THE EXISTING SEWER.
2. WHERE NEW PIPE IS TO BE CONNECTED INTO AN EXISTING MANHOLE, THE CONTRACTOR SHALL CORE DRILL ALL HOLES INTO MANHOLE AND SHALL PERFORM ALL CUTTING AND PATCHING NECESSARY FOR CHANNEL AND BENCH RECONSTRUCTION TO CHANNEL FLOW INTO EXISTING SEWER.
3. PIPE SHALL BE SEALED USING KOR-N-SEAL MANHOLE ADAPTERS OR APPROVED EQUAL, AND NON-SHRINK GROUT.
4. EXISTING BENCH SHALL BE CHIPPED AND CUT AWAY TO ALLOW FOR NEW CHANNEL TO BE CONSTRUCTED AND TO PROVIDE GOOD, SOUND SURFACE FOR BONDING WITH NEW CONCRETE CHANNEL AND BENCH. REMOVE ALL LOOSE MATERIALS AND CLEAN INSIDE OF THE STRUCTURE.
5. THE CONCRETE USED TO CONSTRUCT BENCHES AND CHANNELS SHALL BE 4,000 PSI CONCRETE APPLY EPOXY BONDING AGENT PRIOR TO POURING CONCRETE.
6. ANY DAMAGE TO THE EXISTING MANHOLE CAUSED BY THE CONSTRUCTION OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR.

## CONNECTION TO EXISTING MANHOLE DETAIL

NOT TO SCALE | MCNY-UTIL-SSWR-2000 | 07/01/19

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

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Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 23010468A | C-DTLS |

SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER:

15 of 19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION



20232301A68A\Engineering\Site Plans\C-DTLS.dwg|C-15 DETAILS By: KYLE SHALLOW

# WATER NOTES:

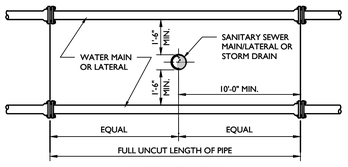
1. ALL METHODS, MATERIALS, FITTINGS, DEVICES, DIMENSIONAL REQUIREMENTS AND PROCEDURES NECESSARY TO COMPLETE THE WORK SHOWN HEREON SHALL MEET THE APPROPRIATE CURRENT AWWA SPECIFICATIONS IN EFFECT AS WELL AS ALL REQUIREMENTS DEEMED APPLICABLE BY THE MUNICIPALITY OR ANY OTHER GOVERNMENTAL BODY HAVING JURISDICTION OVER SAID WORK.
2. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON (DIP).
3. ALL PIPE FITTINGS SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE AWWA SPECIFICATION C153/A21.53-00.
4. ALL GATE VALVES SHALL BE "MUELLER", RESILIANT-SEATED GATE VALVES WITH MECHANICAL JOINT CONNECTIONS. OPENING SHALL BE LEFT (CCW) AND OPERATION SHALL BE BY 2" SQUARE WRENCH NUT. MINIMUM WORKING PRESSURE SHALL BE 250 PSI. GATE VALVES ARE TO BE IN ACCORDANCE WITH LATEST REVISION OF AWWA SPECIFICATION C509.
5. ALL VALVE BOXES SHALL BE EXTENSION TYPE BY MUELLER SET ON BRICKS AND POSITIONED PERPENDICULAR TO THE PIPE AND ON COMPACTED BACKFILL.
6. ALL CHANGES IN PIPE LINE DIRECTION, BOTH HORIZONTAL AND VERTICAL SHALL BE TIE-RODDED AND THRUST BLOCKED WITH CONCRETE AGAINST UNDISTURBED EARTH AS DIRECTED BY THE ENGINEER.
7. FLUSH OUT ALL WATER MAINS AND APPURTENANCES AS DIRECTED BY THE MUNICIPALITY UNTIL THE WATER RUNS CLEAN AND FREE OF RUST AND DIRT. PRESSURIZE ALL LINES AND APPURTENANCES FOR FORTY-EIGHT (48) HOURS, OR AS DIRECTED BY THE MUNICIPALITY, TO REVEAL ANY LEAKS OR BROKEN PIPE. THIS SHALL ALL BE DONE EITHER AS A TOTAL PROJECT OR BETWEEN VALVED SECTIONS AS DIRECTED BY THE TOWN. IF PRESSURE TESTING REVEALS ANY LEAKS OR DIFFICULTIES THE CONTRACTOR SHALL PROMPTLY UNCOVER THE LEAK OR BROKEN PIPE AND IMMEDIATELY REPAIR AND RETEST SAME. THIS SHALL BE REPEATED AS MANY TIMES AS MAY BE REQUIRED TO DEMONSTRATE A TIGHT LINE TO THE SATISFACTION OF THE TOWN. THE NEW WATER MAIN AND APPURTENANANCES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C-600. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY.
8. THE MUNICIPAL ENGINEER MUST BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO PRESSURE TESTING.
9. ALL WATER LINES AND APPURTENANCES SHALL BE DISINFECTED TO THE SATISFACTION OF THE MUNICIPALITY, AND IN ACCORDANCE WITH THE STANDARDS OF THE OCDOH. THIS SHALL ALSO BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C651. A MINIMUM OF TWO (2) BACTERIAL TESTS TAKEN TWENTY-FOUR (24) HOURS APART ARE REQUIRED. RESULTS OF TESTS ARE TO BE SUBMITTED AND ACCEPTED BY THE MUNICIPALITY.
   AS PER AWWA C651, LATEST REVISION, WATER MAIN DISINFECTION PROCEDURE SHALL, GENERALLY, BE AS FOLLOWS, EXCLUDING THE TABLET METHOD:
   A. INSPECTING MATERIALS TO BE USED TO ENSURE THEIR INTEGRITY.
   B. PREVENTING CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE, CONSTRUCTION, OR REPAIR AND NOTING POTENTIAL CONTAMINATION AT THE CONSTRUCTION SITE.
   C. REMOVING, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAIN.
   D. CHLORINATING ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSHING THE CHLORINATED WATER FROM THE MAIN.
   E. PROTECTING THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW CAUSED BY HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.
   F. DOCUMENTING THAT AN ADEQUATE LEVEL OF CHLORINE CONTACTED EACH PIPE TO PROVIDE DISINFECTION.
   G. DETERMINING THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.
   H. FINAL CONNECTION OF THE APPROVED NEW WATER SERVICE TO THE ACTIVE DISTRIBUTION SYSTEM.

THE CONTINUOUS-FEED METHOD SHALL BE IMPLEMENTED FOR CHLORINATION, AS DESCRIBED IN AWWA C651, LATEST REVISION. AFTER CHLORINATION, THE CONTRACTOR SHALL FLUSH THE MAINS AS PER FINAL FLUSHING REQUIREMENTS OF AWWA C651, LATEST REVISION. WHEN CUTTING INTO OR REPAIRING AN EXISTING MAIN, DISINFECTION PROCEDURES SHALL BE OBSERVED AS DETAILED IN DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS OF AWWA C651, LATEST REVISION.

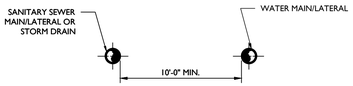
VERIFICATION SHALL BE ACCOMPLISHED VIA BACTERIOLOGICAL TESTS. AFTER FINAL FLUSHING AND BEFORE THE NEW WATER MAIN IS CONNECTED TO THE DISTRIBUTION SYSTEM, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES, TAKEN AT LEAST 24 HR APART, SHALL BE COLLECTED FROM THE NEW MAIN. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FT OF THE NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. SAMPLES SHALL BE TESTED FOR BACTERIOLOGICAL (CHEMICAL AND PHYSICAL) QUALITY IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, AND SHALL SHOW THE ABSENCE OF COLIFORM ORGANISMS AND THE PRESENCE OF A CHLORINE RESIDUAL. SAMPLES FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED IN STERILE BOTTLES TREATED WITH SODIUM THIOSULFATE, AS REQUIRED BY STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER. NO HOSE OR FIRE HYDRANT SHALL BE USED IN THE COLLECTION OF SAMPLES. THERE SHOULD BE NO WATER IN THE TRENCH UP TO THE CONNECTION FOR SAMPLING. THE SAMPLING PIPE MUST BE DEDICATED AND CLEAN AND DISINFECTED AND FLUSHED PRIOR TO SAMPLING. A CORPORATION COCK MAY BE INSTALLED IN THE MAIN WITH A COPPER-TUBE GOOSENECK ASSEMBLY. AFTER SAMPLES HAVE BEEN COLLECTED, THE GOOSENECK ASSEMBLY MAY BE REMOVED AND RETAINED FOR FUTURE USE. IF SAMPLES RESULTS FROM THE LAB INDICATE A MEASURED HPC GREATER THAN 500 COLONY-FORMING UNITS (CFU) PER ML, FLUSHING SHOULD BE RESUMED AND ANOTHER COLIFORM AND HPC SET OF SAMPLES SHOULD BE TAKEN UNTIL NO COLIFORMS ARE PRESENT AND THE HPC IS LESS THAN 500 CFU/ML. THE RECORD OF COMPLIANCE SHALL BE THE BACTERIOLOGICAL TEST RESULTS CERTIFYING THAT THE WATER SAMPLED FROM THE NEW WATER MAIN IS FREE OF COLIFORM BACTERIA CONTAMINATION AND IS EQUAL TO OR BETTER THAN THE BACTERIOLOGIC WATER QUALITY IN THE DISTRIBUTION SYSTEM.

ALL OTHER REQUIREMENTS OF AWWA C651, LATEST REVISION, SHALL BE OBSERVED.

10. WATER SERVICE SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER MAIN OR SERVICE.
11. ALL WATER MAINS SHOULD BE SEPARATED FROM SANITARY SEWER LINES BY A MINIMUM HORIZONTAL DISTANCE OF 10 FEET. IF SUCH HORIZONTAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN ENCASED IN CONCRETE OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH.
12. AT THE CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE WATER LINE SHALL BE ENCASED IN CONCRETE.
13. WATER TIGHT PLUGS ARE TO BE INSTALLED IN THE ENDS OF PIPES WHEN WORK IS NOT IN PROGRESS.
14. LEAKAGE AND HYDROSTATIC PRESSURE TESTING SHALL BE PERFORMED AT 1.5 TIMES THE WORKING PRESSURE.
15. THE MAXIMUM DEFLECTION ALLOWED ALLOWED AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THAT ALLOWED BY AWWA OR IN ACCORDANCE WITH THE MUNICIPALITY. FOR AWWA ALLOWABLE JOINT DEFLECTIONS SEE LATEST REVISION OF AWWA SPECIFICATION C600.
16. CONSTRUCTION MUST CONFORM TO ALL ORDINANCES.
17. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING WATER AND OTHER UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
18. CONTRACTOR TO CALL UNDERGROUND MARK-OUT PRIOR TO COMMENCEMENT OF CONSTRUCTION AT 1-800-962-7962 FOR COMPLETE UTILITIES MARK-OUT.
19. CONTRACTOR TO CONTACT MUNICIPAL WATER DEPARTMENT AT LEAST 2 DAYS PRIOR TO CONSTRUCTION.
20. ALL IMPROVEMENTS SHALL BE INSPECTED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK AND CERTIFICATION SHALL BE PROVIDED TO THE MUNICIPALITY THAT THE SUBJECT IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS.
21. CONTRACTOR TO NOTIFY ENGINEER OF ANY DEVIATION FROM THE HORIZONTAL OR VERTICAL ALIGNMENTS WITH REGARDS TO EXISTING UTILITIES.
22. ANY BACKFLOW PREVENTION DEVICE(S) DETERMINED TO BE REQUIRED BY THE WATER SUPPLIER WILL BE DESIGNED BY OTHERS IN ACCORDANCE WITH OCDOH REQUIREMENTS AND THAT APPLICATION FOR ANY SUCH BACKFLOW PREVENTION DEVICE SHALL BE SUBMITTED TO THE OCDOH FOR REVIEW AND APPROVAL UNDER SEPARATE COVER.
23. A CERTIFIED AS-BUILT MAP OF THE WATER SYSTEM IMPROVEMENTS SHALL BE PROVIDED TO THE MUNICIPALITY'S WATER DEPARTMENT BY A LICENSED DESIGN PROFESSIONAL.




VERTICAL SEPARATION

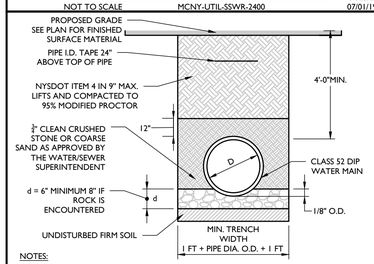



HORIZONTAL SEPARATION

NOTE :
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE ENGINEER.

## SANITARY/STORM SEWER-WATER MAIN SEPARATION DETAIL

MOD: 04/23/21
NOT TO SCALE MCNY-UTIL-SSWR-2400 07/01/19




NOTES:
1. ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600.
2. WATER MAIN PIPE SHALL BE CEMENT LINED DUCTILE IRON PIPE (DIP) PRESSURE CLASS 150, THICKNESS CLASS 52 WITH ASPHALTIC EPOXY TYPE COATING & TYTON JOINTS.
3. MAXIMUM ALLOWABLE DEFLECTION AT PIPE JOINTS SHALL BE LIMITED TO 80% OF THE VALUES PUBLISHED IN AWWA C600, LATEST REVISION.
4. IF ROCK IS ENCOUNTERED, THE EXCAVATION SHALL BE CARRIED 8" BELOW THE BOTTOM OF THE PIPE.

## DIP WATER PIPE BEDDING DETAIL

MOD: 07/28/21
NOT TO SCALE MCNY-UTIL-WATR-1900 07/01/19

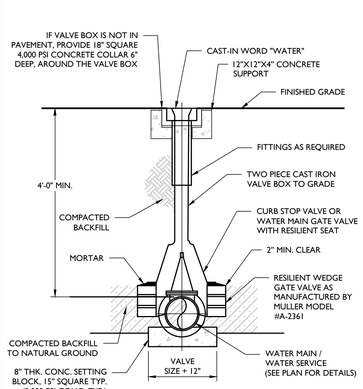
| PIPE SIZE IN INCHES | NUMBER AND SIZE OF RODS REQUIRED AND PIPE LENGTH IN FEET TO BE RESTRAINED | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 90° TEE OR DEAD END PLUG | | | 45° BEND | | | 22½° BEND | | |
| | No. | SIZE | L* | No. | SIZE | L* | No. | SIZE | L* |
| 4 | 2 | ¾" | 28' | 2 | ¾" | 6' | 2 | ¾" | 3' |
| 6 | 2 | ¾" | 40' | 2 | ¾" | 8' | 2 | ¾" | 4' |
| 8 | 4 or 2 | ¾" or ⅞" | 52' | 2 | ¾" | 10' | 2 | ¾" | 5' |
| 10 | 4 | ¾" | 63' | 2 | ¾" | 12' | 2 | ¾" | 6' |
| 12 | 4 | ⅞" | 74' | 2 | ¾" | 14' | 2 | ¾" | 7' |
| 14 | 4 | 1" | 86' | 2 | ¾" | 16' | 2 | ¾" | 8' |
| 16 | 4 | 1" | 96' | 2 | ¾" | 18' | 2 | ¾" | 9' |

L* = LENGTH OF PIPE TO BE RESTRAINED IS FOR EACH SIDE OF BEND

NOTES:
1. USE OF MECHANICAL JOINT RETAINER GLANDS SHALL PROVIDE A THRUST RESTRAINT SYSTEM EQUIVALENT TO THAT LISTED IN THE TABLE FOR CLAMPS AND RODS.
2. LENGTHS ARE BASED ON THE FOLLOWING CRITERIA: 150 PSI MAXIMUM PRESSURE AND 4'-6" OF COVER. TABLE IS FOR USE WITH HDPE OR PVC PIPE ONLY. IF TEST CONDITIONS ARE MORE SEVERE OR LARGER PIPES ARE PROPOSED, THEN SPECIAL COMPUTATIONS MUST BE PROVIDED BY LICENSED PROFESSIONAL ENGINEER.

## JOINT RESTRAINT SCHEDULE DETAIL

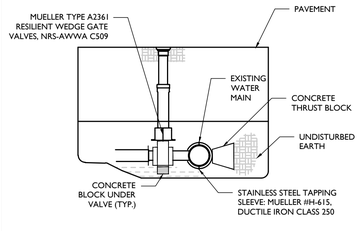
NOT TO SCALE HDPE PVP JOINT RESTRAINT 03/23/23




NOTES:
1. ALL VALVES TO INCLUDE MEGA-LUG RETAINER GLANDS AND BE RODDED BACK TO THE ADJACENT TEE IN THE WATER MAIN. INLINE VALVES NEED NOT BE RODDED. CONTRACTOR TO UTILIZE ¾" ON CENTER GALVANIZED STEEL RODS WITH MALLEABLE IRON NUTS AT 108" SPACING.
2. WATER MAIN VALVES FOR FOUR INCH THROUGH FOURT-EIGHT INCH SHALL BE RESILIENT WEDGE GATE VALVES AS MANUFACTURED BY MULLER, MODEL #A-2361. VALVES SHALL BE PROVIDED WITH AN EXTENSION SERVICE BOX TO GRADE.
3. MAIN LINE VALVES TO BE SPACED NO FURTHER THAN 500' APART IN COMMERCIAL DISTRICTS AND 800' IN OTHER DISTRICTS.

## WATER VALVE BOX DETAIL

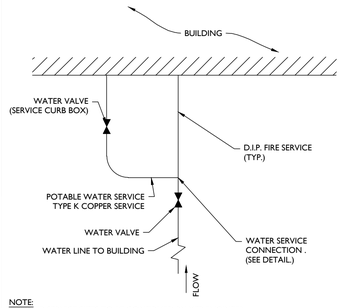
NOT TO SCALE MCNY-UTIL-WATR-1600 MOD: 09/09/22 07/01/19




NOTES:
1. MEGA LUGS TO BE USED ON ALL MECHANICAL JOINT FITTINGS.
2. MULLER STAINLESS STEEL, MECHANICAL JOINT TAPPING SLEEVE MODEL #H-615 AND VALVE, MODEL A2361 IS TO BE USED IN ALL CASES, ALL HARDWARE INCLUDING, BUT NOT LIMITED TO NUTS, BOLTS, ECT SHALL BE STAINLESS STEEL.
3. CONCRETE BLOCK SHALL BE UNDER VALVE.

## WET TAP DETAIL

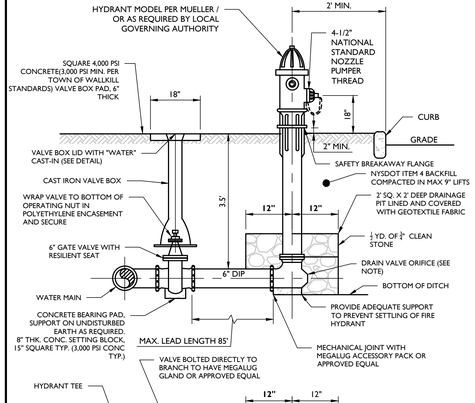
NOT TO SCALE WET TAP 07/01/19




NOTE:
1. WATER SERVICE SIZES TO BE CONFIRMED BY MEP ENGINEER.
2. VALVING MUST BE ARRANGED SO THAT POTABLE WATER IS TERMINATED IF FIRE PROTECTION LINE IS TURNED OFF.

## FIRE PROTECTION & SERVICE CONNECTION TO BUILDING DETAIL

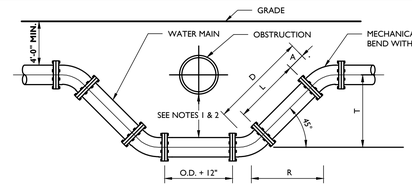
NOT TO SCALE




NOTES:
1. HYDRANT SHALL BE MUELLER SUPER CENTURION MODEL A-423 INCLUDING INTEGRAL MULLER "STORZ" CONNECTION ON THE NOZZLE. DESIGN WITH THE FOLLOWING SPECIFICATIONS.
   A. SAFETY COUPLED STANDPIPE.
   B. 6" MECHANICAL JOINT INLET CONNECTION
   C. TWO 2-1/2" NATIONAL STANDARD THREAD HOSE NOZZLES.
   ONE 4-1/2" NATIONAL STANDARD THREAD STEAMER NOZZLE, FACING THE ROAD.
   D. HYDRANT OPERATORS AND HYDRANT NOZZLE CAP NUTS SHALL BE IN ACCORDANCE WITH AWWA AND STANDARD C502.
   E. HYDRANT HOSE CAPS SHALL BE ATTACHED BY MEANS OF CHAINS.
   F. HYDRANT BARRELS SHALL BE PAINTED - RED, BONNETS - YELLOW, AND NOZZLE CAPS - BLACK TO INDICATE THE AVAILABLE FIRE FLOW OR AS IN ACCORDANCE WITH THE LOCAL REQUIREMENTS.
   G. HYDRANTS SHALL OPEN COUNTER CLOCKWISE.
2. STANDPIPE (BREAK-AWAY) COUPLING SHALL NOT EXCEED A MAXIMUM OF 2 INCHES FROM THE TOP OF THE CURB TO THE BOTTOM OF COUPLING.
3. THE DRAIN VALVE SHALL BE CLEAR OF ANY OBSTRUCTIONS, AND 3/4" CLEAN GRAVEL BE PLACED FROM THE BOTTOM OF THE HYDRANT TO A POINT 6" ABOVE THE HYDRANT LATERAL PIPE.
4. THRUST BLOCKS SHALL BE MADE OF 4,000 PSI CONCRETE, PROVIDED BEHIND THE HYDRANT SHOE.
5. BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE LOCAL JURISDICTION.
6. GATE VALVE SHALL BE T.W.W. 6" U.S. PIPE METROSEAL 250 R/S (RESILIENT SEALED) MECHANICAL JOINT END (RIGHT HAND).
7. WATER LATERAL SHALL BE 6" DUCTILE IRON CEMENT LINED CLASS 52 PIPE.
8. TIE ROD SHALL BE 3/4" DIAMETER TIE ROD WITH EYE BOLTS - TWO REQUIRED ( SIDE VIEW SHOWN). RESTRAIN ALL JOINTS ON HYDRANT TEE, VALVE, AND HYDRANT LEAD.
9. HYDRANT TEE SHALL BE U.S. PIPE CATALOG #LU592 TRIM.TYTE DUCTILE IRON, MECHANICAL JOINT OR AN T.W.W. APPROVED SUBSTITUTE.
10. HYDRANT SPACING MAY RANGE FROM 350' TO A MAX OF 600'
11. HYDRANTS SHALL BE DRY-BARREL HYDRANTS, TYPE MULLER SUPER CENTURION IN ACCORDANCE WITH AWWA C502. HYDRANTS SHALL HAVE A MAIN VALVE SIZE OPENING OF 5" NOMINAL, ONE FOUR-AND-ONE-HALF INCH NST PUMPER NOZZLE TWO TWO-AND-ONE-HALF-INCH NST HOSE NOZZLES. A ONE-AND-ONE-HALF-INCH PENTAGON OPERATING NUT AND A SIX-INCH MECHANICAL JOINT INLET SHOW CONNECTION WITH ACCESSORIES.
12. ALL TEES, VALVES AND FITTINGS TO INCLUDE RESTRAINT IN THE FORM OF MEGA-LUG RETAINER GLANDS AND RODS.
13. WHEN HIGH GROUND WATER IS ENCOUNTERED WITHIN 2 FEET OF THE HYDRANT BOWL, THE WEEP HOLE IS TO REMAIN PLUGGED AND APPROPRIATELY WORDED SIGNAGE SHALL BE PERMANENTLY SECURED TO THE HYDRANT SPECIFYING THAT THE HYDRANT IS TO BE PUMPED DRY AFTER USE TO PREVENT DAMAGE DUE TO FREEZING TEMPERATURES.

## FIRE HYDRANT (VALVE IN GRASS) DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1000 MOD: 01/09/23 07/01/19



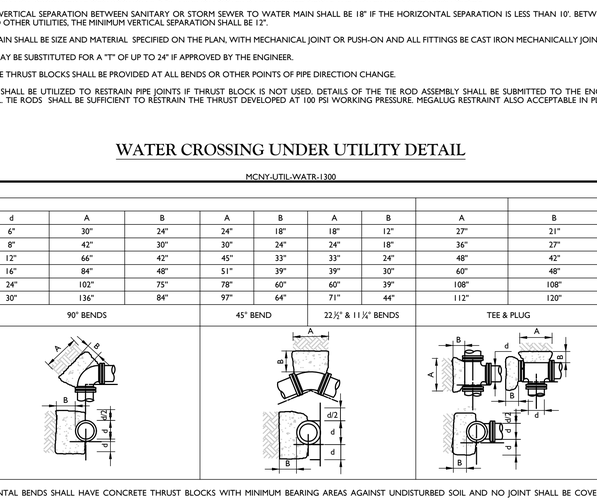

| MECHANICAL JOINTS | | | |
|---|---|---|---|
| ANGLE | D = | R = | L = |
| 45° | T x 1.414 | T x 1.000 | D-2A |
| 22.5° | T x 2.613 | T x 2.414 | D-2A |
| 11.25° | T x 5.126 | T x 5.027 | D-2A |

NOTES:
1. WATER MAIN MAY CROSS ABOVE OBSTRUCTION IF **4'-0"** MINIMUM COVER IS MAINTAINED ABOVE THE WATER MAIN AND FINISH GRADE.
2. MINIMUM VERTICAL SEPARATION BETWEEN SANITARY OR STORM SEWER TO WATER MAIN SHALL BE 18" IF THE HORIZONTAL SEPARATION IS LESS THAN 10'. BETWEEN WATER MAIN AND OTHER UTILITIES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12".
3. WATER MAIN SHALL BE SIZE AND MATERIAL SPECIFIED ON THE PLAN, WITH MECHANICAL JOINT OR PUSH-ON AND ALL FITTINGS BE CAST IRON MECHANICALLY JOINT.
4. OFFSETS MAY BE SUBSTITUTED FOR A "T" OF UP TO 24" IF APPROVED BY THE ENGINEER.
5. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS OR OTHER POINTS OF PIPE DIRECTION CHANGE.
6. TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS IF THRUST BLOCK IS NOT USED. DETAILS OF THE TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICIENT TO RESTRAIN THE THRUST DEVELOPED AT 100 PSI WORKING PRESSURE. MEGALUG RESTRAINT ALSO ACCEPTABLE IN PLACE OF TIE RODS.

## WATER CROSSING UNDER UTILITY DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1300 07/01/19

| d | A | B | A | B | A | B | A | B |
|---|---|---|---|---|---|---|---|---|
| 6" | 30" | 24" | 24" | 18" | 18" | 12" | 27" | 21" |
| 8" | 42" | 30" | 30" | 24" | 24" | 18" | 36" | 27" |
| 12" | 66" | 42" | 45" | 33" | 33" | 24" | 48" | 42" |
| 16" | 84" | 48" | 51" | 39" | 39" | 30" | 60" | 48" |
| 24" | 102" | 75" | 78" | 60" | 60" | 39" | 108" | 108" |
| 30" | 136" | 84" | 97" | 64" | 71" | 44" | 112" | 120" |
| 90° BENDS | | | 45° BEND | | 22½° & 11¼° BENDS | | TEE & PLUG | |




NOTES:
1. ALL HORIZONTAL BENDS SHALL HAVE CONCRETE THRUST BLOCKS WITH MINIMUM BEARING AREAS AGAINST UNDISTURBED SOIL AND NO JOINT SHALL BE COVERED WITH CONCRETE.
2. TWO FORMS OF RESTRAINTS ARE REQUIRED ON ALL BENDS, OFFSETS, DEAD ENDS AND/ OR TEMPORARY DEAD ENDS FOR FUTURE EXPANSION. HYDRANTS WILL REQUIRE HYDRANTS WILL REQUIRE ADDITIONAL RESTRAINTS IN ACCORDANCE WITH "TYPICAL FIRE HYDRANT ASSEMBLY" DETAIL.
3. RESTRAINTS APPROVED FOR USE ARE THRUST BLOCKS, MEGA LUG RETAINER, GLANDS, TIE RODS AND FIELD LOCK GASKETS.
4. BEARING AREAS ARE BASED UPON UNDISTURBED SOIL WITH A MINIMUM BEARING CAPACITY OF 0.5 TONS PER SQUARE FOOT. FOR A LESSER SOIL BEARING CAPACITY THESE AREAS SHALL BE INCREASED ACCORDINGLY.
5. THRUST BLOCKS SHALL BE POURED DIRECTLY AGAINST TRENCH WALLS AND SHALL BE 4,000 PSI CONCRETE (3,000 PSI MIN.).
6. DETAILS FOR SUPPORTS AND BRACING FOR VERTICAL BENDS FOR 12" DIAMETER OR LARGER SHALL BE APPROVED BY THE AUTHORITY PRIOR TO CONSTRUCTION.

## THRUST BLOCKS DETAIL

NOT TO SCALE MCNY-UTIL-WATR-1400 07/01/19

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

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Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:42-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |
| PROJECT NUMBER: | DRAWING NAME: | | |
| 23010468A | C-DTLS | | |

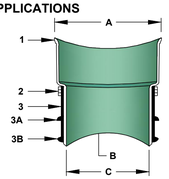
SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NUMBER:
16 of 19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-DTLS.dwg C-16-DETAILS By: KYLE SHALLOW

## CORRUGATED HDPE/PP BELL GRAVITY APPLICATIONS




**A.** BELL END ACCEPTS CORRUGATED HDPE/PP DUAL WALL PIPE--ADS/HANCOR INC. SPECIFICATIONS IN 4", 6", 8", 10", 12", 15", 18", 21", 24", AND 30" SIZES.

**B.** CURVATURE VARIES WITH MAINLINE DIAMETERS.

**C.** SPIGOT END PVC SDR 35, ASTM D3034 DIAMETERS: 4", 6", 8", 10", 12", 15", 18", 21", 24" AND 30"

| PART | PART NAME |
|---|---|
| 1 | HUB ADAPTOR |
| 2 | SECURING CLAMP* |
| 3 | RUBBER SLEEVE (AVAILABLE IN NITRILE AND EPDM BY SPECIAL ORDER) |
| 3A | UPPER SEGMENT** |
| 3B | LOWER SEGMENT*** |
| 4 | (NOT SHOWN) ADS/HANCOR INC. SUPPLIES VALLEY GASKET |

**MATERIALS**
PVC SDR 26 ASTM D3034
BAND SS #301
SCREW SS #305
HOUSING SS #301
ASTM F477

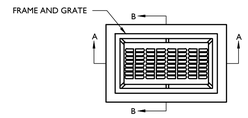
* OPTIONAL: #316 STAINLESS STEEL BAND, SCREW AND HOUSING
** DISTANCE BETWEEN 4A AND 4B WILL VARY BY PRODUCT TYPE
*** WILL NOT APPEAR ON RUBBER SLEEVES FOR CONCRETE OR CLAY PIPE

| INSERTA TEE SIZE | | HOLE DIAMETER | |
|---|---|---|---|
| 4" | (100 mm) | 4 ½" | (114 mm) |
| 6" | (150 mm) | 6 ½" | (165 mm) |
| 8" | (200 mm) | 8 ¾" | (222 mm) |
| 10" | (250 mm) | 10 7/8" | (276 mm) |
| 12" | (300 mm) | 12 7/8" | (327 mm) |
| 15" | (375 mm) | 15 13/16" | (402 mm) |
| 18" | (450 mm) | 19 3/16" | (503 mm) |
| 21" | (525 mm) | 22 5/16" | (573 mm) |
| 24" | (600 mm) | 25 5/16" | (643 mm) |
| 30" | (750 mm) | 32 1/32" | (826 mm) |

NOTE: RECOMMENDED METHOD OF CUTTING HOLE IS WITH HOLE SAW FOR PVC AND OTHER PLASTICS, AND DIAMOND BIT FOR CONCRETES, CLAY, FRP AND D.I. (SEE INSTALLATION INSTRUCTIONS. HOLE SAWS ARE AVAILABLE FOR PURCHASE OR RENT.)

## INSERTA TEE DETAIL

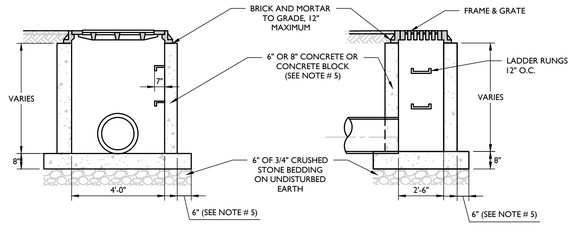
NOT TO SCALE — GNRL-DTLS-STND-GRID — MOD: 09/11/19, 7/01/19




PLAN

NOTES:

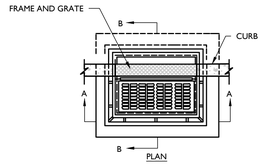
1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. MINIMUM DIFFERENCE IN INVERTS TO BE 0.1 FEET
2. THIS INLET SHALL BE CONSTRUCTED OF PRECAST CONCRETE OR SOLID CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF 1:2 CEMENT SAND MORTAR, THE INSIDE WALLS JOINTS SHALL BE STRUCK AND POINTED.
3. PROVIDE 7/8" DIA. X 7" X 12", 12" O.C. COPOLYMER POLYPROPYLENE PLASTIC STEPS WITH 1/2" DIA. GRADE 60 STEEL REINFORCEMENT BY M.A. INDUSTRIES, PS2-PF OR PS2-B WITH PRECAST PRESS FIT INSERTS, 12" O.C.
4. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY **# 3408** OR APPROVED EQUAL.
5. WHEN DEPTH IS GREATER THEN 12' THE WALLS SHOULD BE EITHER 8" THICK CONCRETE OR 8" SOLID CONCRETE BLOCK AND THE FOOTING SHALL BE EXTENDED TO 12" BEYOND THE OUTSIDE WALLS.
6. ALL CONCRETE TO BE 4,000 PSI.
7. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
8. INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH H-20 LOADING REQUIREMENTS.




SECTION A-A — SECTION B-B

## SINGLE DRAIN INLET DETAIL

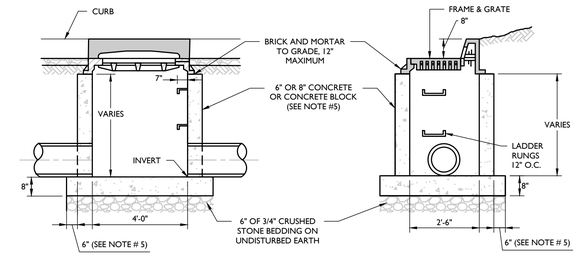
NOT TO SCALE — MCNY-UTIL-STRM-1000 — 07/01/19




PLAN

NOTES:

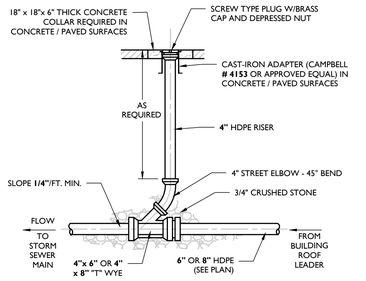
1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. MINIMUM DIFFERENCE IN INVERTS TO BE 0.1 FEET.
2. THIS INLET SHALL BE CONSTRUCTED OF PRECAST CONCRETE OR SOLID CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF 1:2 CEMENT SAND MORTAR. THE INSIDE WALL JOINTS SHALL BE STRUCK AND POINTED.
3. PROVIDE 7/8" DIA. X 7" X 12", 12" O.C. COPOLYMER POLYPROPYLENE PLASTIC STEPS WITH 1/2" DIA. GRADE 60 STEEL REINFORCEMENT BY M.A. INDUSTRIES, PS2-PF OR PS2-B WITH PRECAST PRESS FIT INSERTS, 12" O.C. OR APPROVED EQUIVALENT.
4. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY **# 2617**, OR APPROVED EQUAL.
5. WHEN DEPTH IS GREATER THAN 12' THE WALLS SHOULD BE 8" THICK CONCRETE OR SOLID CONCRETE BLOCK AND THE FOOTING SHALL BE EXTENDED TO 12" BEYOND THE OUTSIDE WALLS.
6. ALL CONCRETE TO BE 4,000 PSI.
7. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
8. INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH H-20 LOADING REQUIREMENTS.




SECTION A-A — SECTION B-B

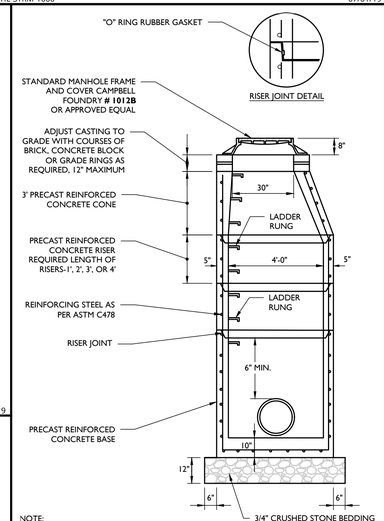
## SINGLE CATCH BASIN DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1100 — 07/01/19




## ROOF LEADER CLEANOUT DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1900 — 07/01/19

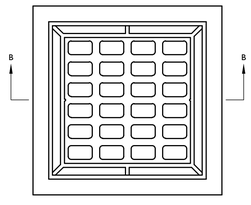


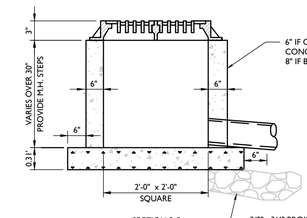

NOTE:

1. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
2. ALL CONCRETE TO BE 4,000 PSI.

## PRECAST CONCRETE STORM MANHOLE 4' DIA. DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1600 — 07/01/19




SECTION B-B

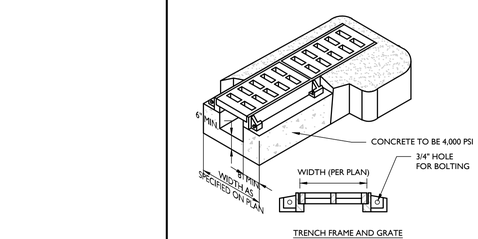
3/8" - 3/4" BROKEN STONE BASE IF DIRECTED BY THE ENGINEER

GENERAL CONSTRUCTION NOTES:

1. FOOTER TO BE CONCRETE.
2. INVERT TO BE 4000 PSI CONCRETE.
3. IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK CEMENT PLASTER.
4. FRAME AND GRATE TO BE **#3193** AS MANUFACTURED BY CAMPBELL FOUNDRY CO., OR APPROVED EQUAL.
5. PROVIDE 3/4" DIAMETER W.I. LADDER RUNGS, 12" O.C. (IF OVER 30" DEEP)
6. EXTERIOR OF ALL CONCRETE SHALL HAVE 2 COATS OF KOPPERS BITUMASTIC #5, OR EQUAL.
7. ALL WORK SHALL BE WATERTIGHT. NOT FOR USE IN PAVED AREAS.

## YARD INLET DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1400 — 07/01/19

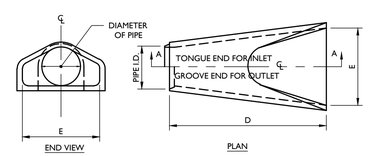



NOTES:

1. TRENCH DRAINS TO BE HEAVY DUTY CAST IRON TYPE AS MANUFACTURED BY CAMPBELL CORPORATION, PATTERN # 4504 (COVER) & # 4529 (GRATE) FOR H-20 LOADING OR APPROVED EQUAL .
2. WIDTH, DEPTH AND BOTTOM SLOPE OF TRENCH AS SPECIFIED ON THE PLANS.
3. MINIMUM BOTTOM SLOPE = 0.50%

## HEAVY DUTY TRENCH DRAIN DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-1700 — 07/01/19



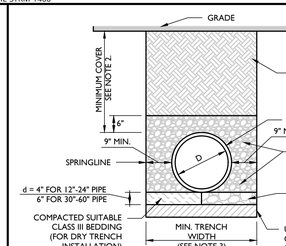

| PIPE INNER DIA. | WALL THICK | A | B | C | D | E | SLOPE |
|---|---|---|---|---|---|---|---|
| 12" | 2" | 4" | 24" | 48 7/8" | 72 7/8" | 30" | 3:1 |
| 15" | 2 1/4" | 6" | 27" | 46" | 73" | 30" | 3:1 |
| 18" | 2 1/2" | 9" | 27" | 46" | 73" | 36" | 3:1 |
| 24" | 3" | 9 1/2" | 43 1/2" | 30" | 73 1/2" | 48" | 3:1 |
| 30" | 3 1/2" | 12" | 54" | 19 3/4" | 73 3/4" | 60" | 3:1 |
| 36" | 4" | 15" | 63" | 34 3/4" | 97 3/4" | 72" | 3:1 |
| 42" | 4 1/2" | 21" | 63" | 35" | 98" | 78" | 3:1 |
| 48" | 5" | 24" | 72" | 26" | 98" | 84" | 3:1 |
| 54" | 5 1/2" | 27" | 65" | 35" | 100" | 90" | 2.4:1 |
| 60" | 6" | 30" | 60" | 39" | 99" | 96" | 2:1 |
| 66" | 6 1/2" | 32" | 78" | 21" | 99" | 102" | 2:1 |
| 72" | 7" | 34" | 78" | 21" | 99" | 108" | 2:1 |

NOTES:

1. REINFORCING IN THE "C" PORTION SHALL BE THE SAME AS SPECIFIED FOR CONCRETE PIPE ASTM C76 AND AASHTO M170 CLASS III FOR THE SIZE OF CONNECTING PIPE.
2. ALL CONCRETE SHALL BE 4,000 PSI.
3. VARIATIONS IN MANUFACTURING DIMENSIONS SHALL BE AS CALLED FOR IN ASTM C76 AND AASHTO M170.
4. PIPE END SECTION CONNECTION SHALL MATCH JOINTS OF STANDARD PIPE DETAILS.

## CONCRETE FLARED END SECTION DETAIL

NOT TO SCALE — MCNY-UTIL-STRM-2200 — 07/01/19




NOTES:

1. ALL PIPE SYSTEMS AND BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.
2. MINIMUM COVER FOR HDPE PIPES IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR UP TO 60" DIAMETER PIPE. PIPE COVER IS MEASURED FROM TOP OF PIPE TO THE BOTTOM OF FLEXIBLE PAVEMENT, OR TO THE TOP OF RIGID PAVEMENT, OR TO THE GROUND SURFACE.
3. MINIMUM TRENCH WIDTH PER MANUFACTURER'S RECOMMENDATIONS.
4. SUITABLE AND FINAL BACKFILL MATERIAL SHALL BE SITE SOILS FREE OF LARGE STONES. CLEAN FILL, OR ITEM 4.

## HDPE STORM PIPE BEDDING DETAIL

NOT TO SCALE — 07/01/19

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2023\23010468A\Engineering\Site Plans\C-DTLS.dwg,C-17 DETAILS, By:KYLE.SHALLOW

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |

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Doing Business as MASER CONSULTING

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:42-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

Colliers Engineering & Design
NEWBURGH
555 Hudson Valley Avenue
Suite 101
New Windsor, NY 12553
Phone: 845.564.4495
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-DTLS

SHEET TITLE: CONSTRUCTION DETAILS

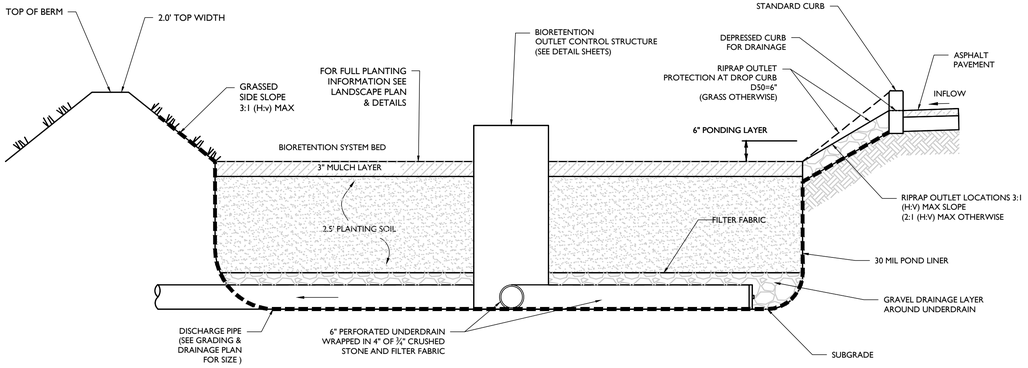
SHEET NUMBER: 17 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

| BIORETENTION ELEVATIONS | | | | | |
|---|---|---|---|---|---|
| SYSTEM | OUTLET NAME | OUTLET SIZE | BED ELEVATION | 100 YR PEAK ELEVATION | TOP OF BERM ELEVATION |
| P-1 | OCS S-8 | 4'X4' | 98.50 | 99.57 | 100.60 |

PLANTING SOIL NOTE:

THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 25% BY VOLUME. SOILS SHOULD FALL WITHIN THE SM, OR ML CLASSIFICATIONS OD THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5"/HR) IS REQUIRED (A CONSERVATIVE VALUE OF 0.5 FEET PER DAY IS USED FOR DESIGN). THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER, AND BRUSH OR SEED FROM NOXIOUS WEEDS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN LIFTS OF 12" TO 18", LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET). THE SPECIFIC CHARACTERISTICS ARE AS FOLLOWS:



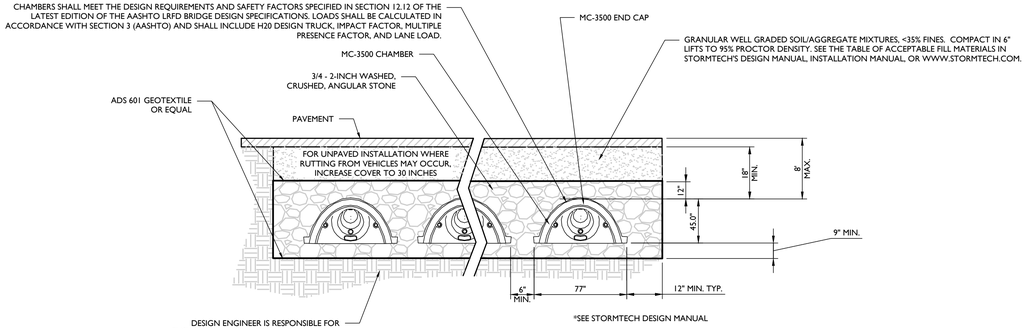

NOTES:

1. SEE PLAN FOR DROP CURB LOCATIONS AND BIORETENTION AREA CONFIGURATION.
2. PLANTING SOIL TO BE IN ACCORDANCE WITH NEW YORK STATE STANDARDS AND SPECIFICATIONS FOUND WITHIN THE PROJECT SWPPP.

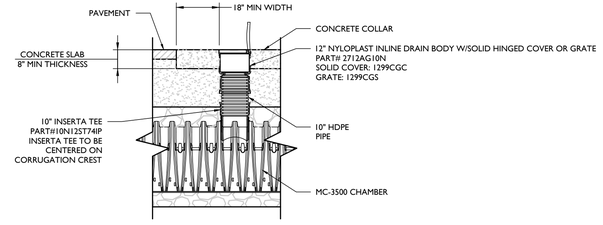
## BIORETENTION SYSTEM CROSS SECTION DETAIL

NOT TO SCALE MCNY-UTIL-STMW-24001 07/01/19

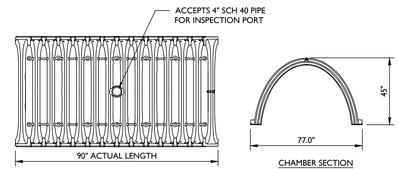
CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND SAFETY FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. LOADS SHALL BE CALCULATED IN ACCORDANCE WITH SECTION 3 (AASHTO) AND SHALL INCLUDE H20 DESIGN TRUCK, IMPACT FACTOR, MULTIPLE PRESENCE FACTOR, AND LANE LOAD.




SYSTEM SECTION



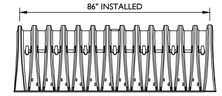

STORMTECH STORM CHAMBER INSPECTION PORT DETAIL







CHAMBER SECTION



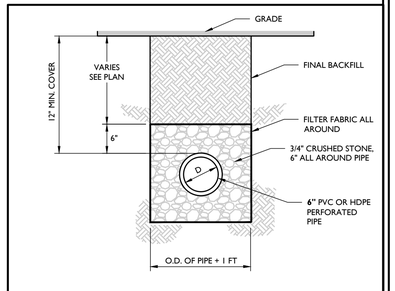

STORMTECH MC-3500 STORM CHAMBER DETAIL
N.T.S.

STORMTECH NOTES:

1. CHAMBERS SHALL BE STORMTECH MC-3500 OR APPROVED EQUAL.
2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW.
4. 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.
5. THE INSTALLATION OF CHAMBERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S LATEST INSTALLATION INSTRUCTIONS.
6. THE STONE USED FOR FILLING THE SUBSURFACE SYSTEM MUST BE CLEAN WASHED STONE FREE OF ALL SEDIMENT, FINES, AND DUST. THE CONTRACTOR MAY BE REQUIRED TO WASH THE STONE ON SITE UNTIL IT IS CLEAN TO THE TOUCH LEAVING NO RESIDUE BEHIND PRIOR TO PLACEMENT IN THE SYSTEM FOOTPRINT.
7. THE PROPOSED SUBSURFACE STORMWATER SYSTEM BOTTOM MUST BE PROTECTED FROM STORM RUNOFF AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE INFILTRATION CAPACITY OF THE VIRGIN SOIL IS NOT COMPROMISED.
8. VEHICLE TRAFFIC MUST AVOID THE CHAMBER FOOTPRINT DURING CONSTRUCTION.
9. CONTRACTOR MUST SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW & APPROVAL.
10. END STONE TO BE 6" MIN. BEYOND END OF CHAMBER CAPS WITH 12" MIN. SIDE STONE TO PROVIDE MIN.

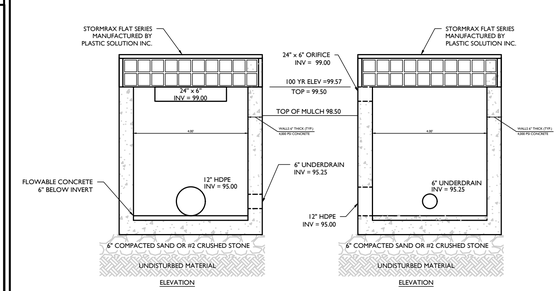
## STORMTECH SUBSURFACE DETAIL

NOT TO SCALE MCNY-UTIL-STMW-3500 MOD: 01/20/21 07/01/19

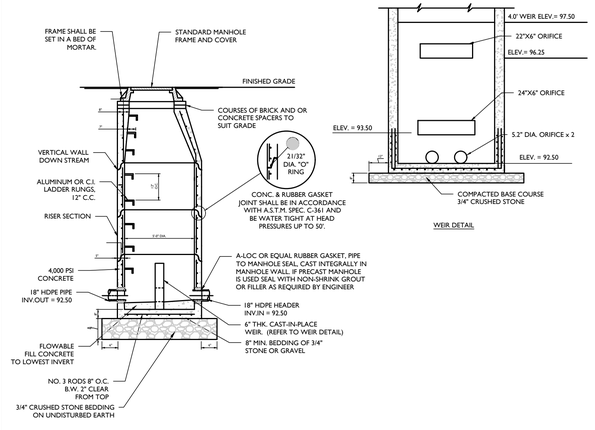



## UNDERDRAIN DETAIL

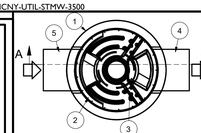
NOT TO SCALE MCNY-UTIL-STRM-2400 07/01/19




## BIORETENTION BASIN P-1 OUTLET CONTROL STRUCTURE (S-9) DETAIL




## OUTLET CONTROL STRUCTURE (S-6) DETAIL



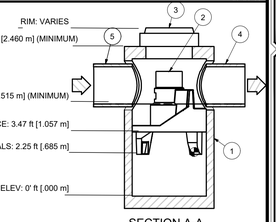

PLAN VIEW

HYDRO FRAME AND COVER (INCLUDED) GRADE RINGS BY OTHERS AS REQUIRED

PRODUCT SPECIFICATION:

1. Peak Hydraulic Flow: 18.0 cfs (510 l/s)
2. Min Sediment Storage Capacity: 0.7 cu. yd. (0.5 cu. m.)
3. Maximum Inlet/Outlet Pipe Diameters: 24 in. (600 mm)
4. The Treatment System Shall Use An Induced Vortex To Separate Pollutants From Stormwater Runoff.
5. For More Product Information Including Regulatory Acceptances, Please Visit https://hydro-int.com/en/products/first-defense

GENERAL NOTES:
1. General Arrangement drawings only. Contact Hydro International for site specific drawings.
2. The diameter of the inlet and outlet pipes may be no more than 24".
3. Multiple inlet pipes possible (refer to project plan).
4. Inlet/outlet pipe angle can vary to align with drainage network (refer to project plans).
5. Peak flow rate and minimum height limited by available cover and pipe diameter.
6. Larger sediment storage capacity may be provided with a deeper sump depth.




SECTION A-A

NOTE: ADDITIONAL HEIGHT MAY BE REQUIRED DEPENDING ON PIPE SIZE

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.
3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

| PARTS LIST | | | | |
|---|---|---|---|---|
| ITEM | QTY | SIZE (in) | SIZE (mm) | DESCRIPTION |
| 1 | 1 | 48 | 1200 | I.D. PRECAST MANHOLE |
| 2 | 1 | | | INTERNAL COMPONENTS (PRE-INSTALLED) |
| 3 | 1 | 30 | 750 | FRAME AND COVER (ROUND) |
| 4 | 1 | 24 (MAX) | 600 (MAX) | OUTLET PIPE (BY OTHERS) |
| 5 | 1 | 24 (MAX) | 600 (MAX) | INLET PIPE (BY OTHERS) |

## 4' DIAMETER FIRST DEFENSE STORMWATER SEPARATOR

MOD: 09/25/20 07/01/19

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-DTLS.dwg|C-18 DETAILS By: KYLE SHALLOW

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
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Digitally signed by Justin E. Dates
Date: 2025.01.02 10:25:42-04'00'

Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
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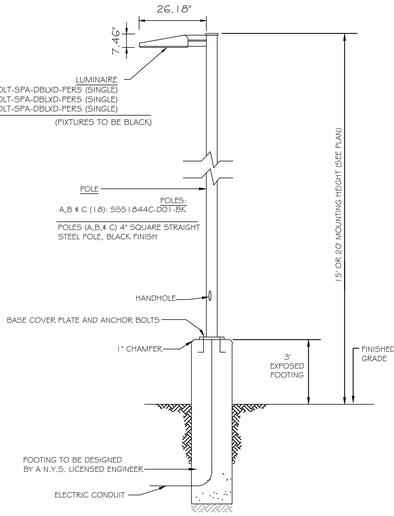
| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |

PROJECT NUMBER: 23010468A
DRAWING NAME: C-DTLS

SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: 18 of 19

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

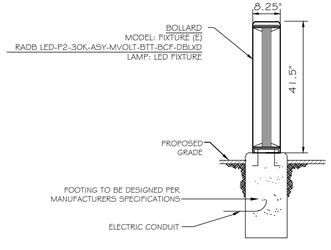



NOTES:

1. LUMINAIRES TO BE MANUFACTURED BY LITHONIA LIGHTING AND POLES BY HOLOPHANE (MANUFACTURER TO CONFIRM POLE SIZE) OR APPROVED EQUAL.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
3. FOOTING TO BE DESIGNED, SIGNED, AND SEALED BY A N.Y.S. LICENSED ENGINEER.
4. *VOLTAGE TO BE CONFIRMED BY ELECTRICIAN CONTRACTOR.
5. PROPOSED POLES HEIGHT TO BE MODIFIED IN FIELD TO MEET DESIGN. (AS REQUIRED)

## POLE MOUNTED FIXTURE DETAIL

NOT TO SCALE | GNRL-DTLS-LGHT | 09/21/23

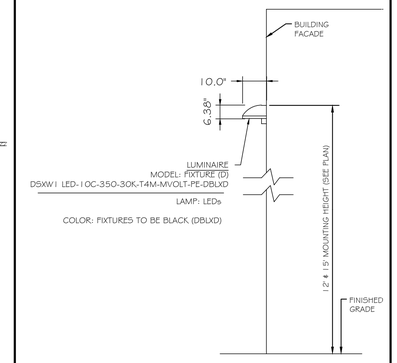



NOTES:

1. LUMINAIRES TO BE MANUFACTURED BY HYDREL OR APPROVED EQUAL.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
3. FOOTING TO BE DESIGNED PER MANUFACTURERS SPECIFICATIONS.
4. * - VOLTAGE TO BE PROVIDED BY ELECTRICIAN.

## BOLLARD LIGHT DETAIL

NOT TO SCALE | GNRL-LGHT-DETL | 01/25/2024




NOTES:

1. LUMINAIRES TO BE MANUFACTURED BY LITHONIA LIGHTING OR APPROVED EQUAL.
2. CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL BY THE OWNER OR PROJECT LANDSCAPE ARCHITECT.
3. *VOLTAGE TO BE CONFIRMED BY ELECTRICIAN CONTRACTOR.

## WALL MOUNTED FIXTURE DETAIL

NOT TO SCALE | GNRL-DTLS-LGHT | 09/21/23

1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES AND STRUCTURES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION.
3. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. THE OWNER AND/OR THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
4. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSION OF THE LANDSCAPE CONSULTANT. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED.
5. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL, AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT.
6. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT HAVE BRANCHES BELOW 10'-0".
7. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
8. ALL PLANT MATERIAL SHALL BE PROPERLY INSTALLED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. CUT AND REMOVE JUTE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL. WIRE BASKETS AND NOT JUTE BURLAP SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING THE PLANT PIT.
9. BRANCHES OF DECIDUOUS TREES SHALL BE PRUNED BACK BY NO MORE THAN ONE QUARTER (1/4) TO BALANCE THE TOP GROWTH WITH ROOTS AND TO PRESERVE THEIR CHARACTER AND SHAPE. THE CENTRAL LEADER OF TREE SHALL NOT BE PRUNED.
10. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PEAT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH CRUSHED STONE OR UNTIL FREE DRAINING.
11. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE AT NURSERY.
12. OPTIMUM PLANTING TIME: DECIDUOUS - APRIL 1 TO JUNE 1 & OCTOBER 15 TO NOVEMBER 30, CONIFEROUS - APRIL 1 TO JUNE 1 & SEPTEMBER 1 TO NOVEMBER 1. PLANTING OUTSIDE OF THE OPTIMUM DATES SHALL NOT BE CONDUCTED WITH OUT PRIOR APPROVAL FROM THE LANDSCAPE CONSULTANT.
13. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS. WATERING AMOUNTS SHOULD BE ADJUSTED AS RAIN EVENTS OCCUR. WATERING AFTER THE INITIAL 4 WEEKS SHALL BE ADJUSTED BASED ON SEASONAL CONDITIONS. WATERING SHALL NOT TAKE PLACE DURING THE HOTTEST POINT OF THE DAY.
14. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR TWO YEARS AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING THE STUMP, AND REPLACED BY A TREE OF SIMILAR SIZE AND SPECIES AT NO EXPENSE TO THE OWNER.
15. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 4" LAYER OF TOPSOIL IN ALL LAWN AREAS AND A MINIMUM OF 12" OF TOPSOIL IN ALL PLANTING AREAS. A FULL SOIL ANALYSIS SHALL BE CONDUCTED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED. SOIL PH SHOULD BE 5.5-6.5.
16. ALL DISTURBED LAWN AREAS SHALL BE STABILIZED WITH SEED AS INDICATED ON THE LANDSCAPE PLANS. TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH THE GENERAL SEEDING NOTES ON THIS SHEET. ALL DISTURBED LAWN AREAS SHALL BE TOPSOILED, LIMED, FERTILIZED AND FINE GRADED PRIOR TO LAWN INSTALLATION.
17. ALL PLANTING BEDS SHALL RECEIVE 3" OF SHREDDED HARDWOOD BARK MULCH.
18. ALL SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
19. ALL PLANTING DEBRIS (WIRE, TWINE, RUBBER HOSE, BACKFILL ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. PROPERTY IS TO BE LEFT IN A NEAT ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.

## GENERAL PLANTING NOTES

NOT TO SCALE | GNRL-PLNT-NOTE | 01/29/24

1. TEMPORARY SEEDING: REFER TO SOIL EROSION AND SEDIMENT CONTROL PLANS.
2. PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL; OPTIMUM SEEDING DATES ARE BETWEEN APRIL 1 AND MAY 31; AND AUGUST 16 AND OCTOBER 15. SEEDING OUTSIDE OF THE OPTIMUM DATES SHALL NOT BE CONDUCTED WITH OUT PRIOR APPROVAL. PERMANENT SEEDING TO BE APPLIED BY RAKING OR DRILLING INTO THE SOILS AT THE RATE GIVEN ABOVE.

TURF MIX

-TALL FESCUE, 'STINGRAY' (34%)
-TALL FESCUE, RAPTOR III (33%)
-HARD FESCUE, 'RIDU' (33%)

SEEDING RATE: 7-10 LBS./1,000 S.F. MIN

BIORETENTION AREA SEED MIXTURE
(NEW ENGLAND WETLAND PLANTS, INC. - NEW ENGLAND WETMIX, OR APPROVED EQUAL)

SPECIES LIST:

- FOX SEDGE, (CAREX VULPINIODEA)
- BLUNT BROOM SEDGE (CAREX SCOPARIA)
- LURID SEDGE (CAREX LURIDA)
- HOP SEDGE (CAREX LUPULINA)
- FOWL BLUEGRASS (POA PALUSTRIS)
- BEGGAR TICKS (BIDENS FRONDOSA)
- GREEN BULRUSH (SCIRPUS ATROVIRENS)
- SWAMP MILKWEED (ASCLEPIAS INCARNATA)
- FRINGED SEDGE (CAREX CRINITA)
- NEW YORK IRONWEED (VERONIA NOVEBORACENSIS)
- SOFT RUSH (JUNCUS EFFUSUS)
- STARVED/CALICO ASTER (ASTER LATERIFLORUS)
- BLUE FLAG (IRIS VERSICOLOR)
- AMERICAN MANNAGRASS (GLYCERIA GRANDIS)
- SQUARE STEMMED MONKEY FLOWER (MIMULUS RINGENS)
- SPOTTED JOE PYE WEED (EUPATORIUM MACULATUM)

SEEDING RATE: 18 LBS PER ACRE.

NATIVE UPLAND WILDLIFE FORAGE & COVER MEADOW MIX
(ERNST CONSERVATION SEEDS - ERNMX-123, OR APPROVED EQUAL)

SPECIES LIST:

| | |
|---|---|
| - BIG BLUESTEM, (ANDROPOGON GERARDII) | 34.4% |
| - SWITCHGRASS (PANICUM) | 27.0% |
| - VIRGINIA WILDRYE (ELYMUS VIRGINICUS) | 21.0% |
| - INDIANGRASS (SORGHASTRUM NUTANS) | 9.0% |
| - PARTRIDGE PEA (CHAMAECRISTA FASCICULATA) | 3.0% |
| - BLACKEYED SUSAN (RUDBECKIA HIRTA) | 3.0% |
| - OXEYE SUNFLOWER (HELIOPSIS HELIANTHOIDES) | 1.5% |
| - PLAINS COREOPSIS (COREOPSIS TINCTORIA) | 0.5% |
| - SHOWY TICKTREFOIL (DESMODIUM CANADENSE) | 0.4% |
| - COMMON MILKWEED (ASCLEPIAS SYRIACA) | 0.1% |
| - WILD BERGAMOT (MONARDA FISTULOSA) | 0.1% |

SEEDING RATE: 20 LBS PER ACRE

3. FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE IN COMPLIANCE WITH THE LATEST NYSDEC REGULATIONS. THIS INCLUDES, BUT LIMITED TO:
   1. NO FERTILIZER SHALL BE APPLIED BETWEEN DEC. 1 AND APRIL 1 IN ANY YEAR.
   2. SHALL NOT BE APPLIED WITHIN 20 FEET OF A WATER BODY.
   3. ONLY LAWN FERTILIZER WITH LESS THAN 0.67% BY WEIGHT PHOSPHATE CONTENT MAY BE APPLIED.
   (A SOIL TEST PRIOR TO FERTILIZER APPLICATION IS RECOMMENDED.)
4. IF SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 4.
5. MULCH TO CONSIST OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH A WOOD AND FIBER MULCH BINDER OR AN APPROVED EQUAL. MULCH WILL BE SPREAD AT RATES PER NYSDEC STANDARDS AND ANCHORED WITH A MULCH ANCHORING TOOL OR LIQUID MULCH BINDER, AND SHALL BE PROVIDED ON ALL SEEDLINGS. HYDROMULCH SHALL ONLY BE USED DURING OPTIMUM GROWING SEASONS.
6. AS NEEDED, WORK LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
7. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
8. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.

## GENERAL SEEDING NOTES

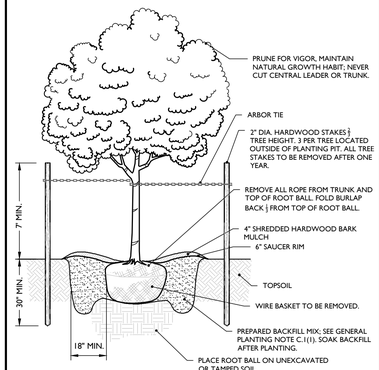
NOT TO SCALE | GNRL-SEED-NOTE | 01/29/24

## PLANT DETAIL NOTES

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT. MULCH SHALL NOT TOUCH THE TREE TRUNK.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
3. WIRE BASKETS AND NON-JUTE BURLAP MUST BE ENTIRELY REMOVED FROM THE ROOT BALL. JUTE BURLAP MUST BE REMOVED FROM THE TOP 1/3 OF THE ROOT BALL.
4. DEPTH OF PLANT PIT SHALL BE INCREASED BY 12" WHEREVER POOR SOIL CONDITIONS OCCUR, WITH THE ADDITION OF LOOSE AGGREGATE.
5. CONTRACTOR SHALL PARTIALLY FILL WITH WATER A REPRESENTATIVE NUMBER OF PITS IN EACH AREA OF THE PROJECT PRIOR TO PLANTING TO DETERMINE IF THERE IS ADEQUATE PERCOLATION. IF PIT DOESN'T PERCOLATE, MEASURES MUST BE TAKEN TO ASSURE PROPER DRAINAGE BEFORE PLANTING.
6. PLANTING MUST BE GUARANTEED FOR TWO FULL GROWING SEASONS FROM THE TIME OF FINAL ACCEPTANCE BY THE LANDSCAPE CONSULTANT. CONTRACTOR SHALL REMOVE ALL WRAPPING AT THE END OF GUARANTEE PERIOD OR SOONER PER PROJECT LANDSCAPE ARCHITECT.
7. BACKFILL MIXTURE TO BE SPECIFIED BASED UPON SOIL TEST AND CULTURAL REQUIREMENTS OF PLANT.
8. PRUNE DAMAGED AND CONFLICTING BRANCHES MAINTAINING NORMAL TREE SHAPE. NEVER CUT CENTRAL TRUNK OR LEADER.

## PLANT DETAIL NOTES

NOT TO SCALE | PLNT-NOTE | 01/29/24

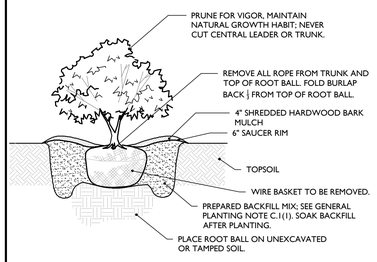



NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

## DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE | GNRL-DTLS-TREE | 09/21/23

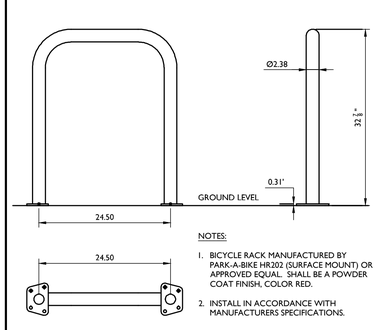



NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

## SHRUB PLANTING DETAIL

NOT TO SCALE | GNRL-DTLS-TREE | 09/21/23

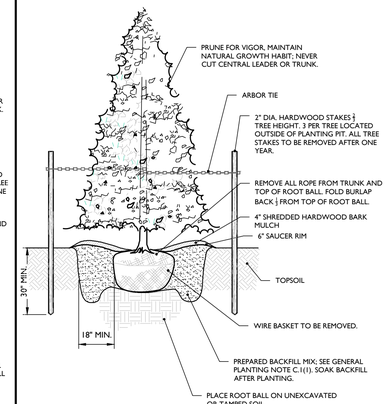



NOTES:

1. BICYCLE RACK MANUFACTURED BY PARK-A-BIKE HR202 (SURFACE MOUNT) OR APPROVED EQUAL. SHALL BE A POWDER COAT FINISH, COLOR RED.
2. INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

## INVERTED 'U' BICYCLE RACK DETAIL

NOT TO SCALE | MCCM-SITE-FNCE-2401 | 07/01/19

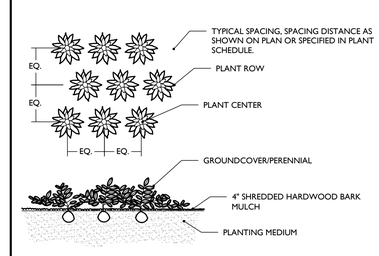



NOTES:

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

## EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE | GNRL-DTLS-TREE | 09/21/23

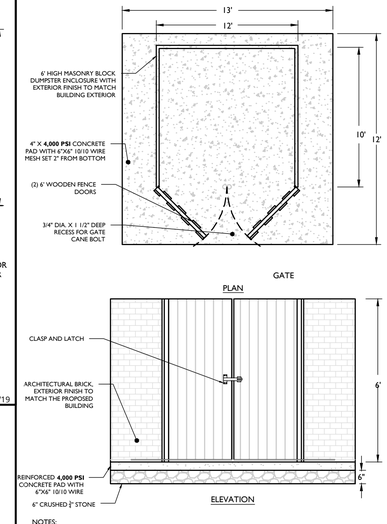



NOTES:

1. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

## GROUNDCOVER/PERENNIAL PLANTING DETAIL

NOT TO SCALE | GNRL-DTLS-TREE | 09/21/23




NOTES:

1. GATE TO REMAIN CLOSED WHEN NOT IN USE. HINGES TO INCLUDE SELF-CLOSING MECHANISM.

## MASONRY TRASH ENCLOSURE (10' X 12') DETAIL

NOT TO SCALE | GNRL-DTLS-STND-GRID | 01/30/24

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY OR ENGINEERING MAP BEARING A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY MAPS WITH THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S SEAL ARE GENUINE TRUE AND CORRECT COPIES OF THE LAND SURVEYOR OR PROFESSIONAL ENGINEER'S ORIGINAL WORK AND OPINION.

2023\23010468A\Engineering\Site Plans\C-DTLS.dwg|C-19-DETAILS By: KYLE SHALLOW

| REV | DATE | DRAWN BY | DESCRIPTION |
|---|---|---|---|
| 1 | 05/25/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 2 | 08/27/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 3 | 09/23/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 4 | 10/29/24 | JED | REVISED PER PLANNING BOARD COMMENTS |
| 5 | 11/26/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| 6 | 12/31/24 | KAS | REVISED PER PLANNING BOARD COMMENTS |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

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Justin Eric Dates
NEW YORK REGISTERED LANDSCAPE ARCHITECT
LICENSE NUMBER: 001964-01
COLLIERS ENGINEERING & DESIGN CT, P.C.

SITE PLAN

FOR

BEEKMAN ARTS CENTER LLC & BAY RIDGE STUDIOS LLC

TAX LOTS:
5955-19-706012
5954-26-689990
5954-26-781983

CITY OF BEACON
DUTCHESS COUNTY
NEW YORK STATE

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COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

| SCALE: | DATE: | DRAWN BY: | CHECKED BY: |
|---|---|---|---|
| AS SHOWN | 01/30/2024 | KAS | CPM |
| PROJECT NUMBER: | DRAWING NAME: | | |
| 23010468A | C-DTLS | | |

SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NUMBER:
19 of 19

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