PLANNING COMMISSION - PC - REGULAR MEETING

WEDNESDAY, MAY 3, 2023
REGULAR SESSION: 6:00 P.M.

COUNCIL CHAMBERS 23873 CLINTON KEITH ROAD SUITE 106 WILDOMAR, CA 92595
REGULAR SESSION 6:00 PM

Kim Strong - Chair
Eric Filar - Vice Chair
Arrin Banks - Commissioner
Brianna Bernard - Commissioner
George Cambero - Commissioner

Matthew Bassi - Community Development Director Stephanie Gutierrez, Assistant City Attorney

The City of Wildomar will be a Safe and Active Community with Responsible Growth and Quality Infrastructure while keeping a Hometown Feel

NOTICE:
Planning Commission meetings may be live-streamed, photographed and/or videotaped. Participation at the meeting constitutes consent by members of the public to the City's and any third party's use in any media, without compensation or further notice, of audio, video, and/or pictures of meeting attendees.

CALL TO ORDER - REGULAR SESSION - 6:00 P.M.

ROLL CALL

FLAG SALUTE

PUBLIC COMMENTS
This is the time when the Commission receives general public comments regarding any items or matters within the jurisdiction that **do not** appear on the agenda.

APPROVAL OF THE AGENDA AS PRESENTED
The Planning Commission to approve the agenda as it is herein presented, or, if it is the desire of the Planning Commission, the agenda can be reordered, added to, or have items tabled at this time.

1. CONSENT CALENDAR
All matters listed under the Consent Calendar are considered routine and will be enacted by one roll call vote. There will be no separate discussion of these items unless members of the Commission, the Public, or Staff request to have specific items removed from the Consent Calendar for separate discussion and/or action.

1.1 Planning Commission Meeting Minutes - April 5, 2023
Presented By: Matthew Bassi , Planning Department

RECOMMENDATION:
Staff recommends the Planning Commission approve the April 5, 2023 regular meeting minutes as submitted.

2. PUBLIC HEARINGS

2.1 **Plot Plan/CUP No. 22-0181 (Catt Crossings Retail Center):**
Presented By: Abdu Lachgar , Planning Department

RECOMMENDATION:
The Planning Division recommends the Planning Commission take the following actions:

1. Find and determine that the approval of CUP/Plot Plan No. 22-0181 meets the findings for adoption of a Class 32 (In-Fill Development Projects) Categorical Exemption in accordance with Section 15332 of the California Environmental Quality Act (CEQA) Guidelines; and

2. Adopt a Resolution entitled:

PC RESOLUTION NO. 2023-12

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, ADOPTING A CLASS 32 (IN-FILL DEVELOPMENT) CATEGORICAL EXEMPTION IN ACCORDANCE WITH SECTION 15332 OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES, AND APPROVING CONDITIONAL USE PERMIT/PLOT PLAN NO. 22-0181 (CATT CROSSINGS RETAIL CENTER) TO ALLOW THE DEVELOPMENT OF AN 11,817 SQUARE-FOOT RETAIL CENTER, INCLUDING AN EXPRESS CAR WASH, SINGLE-STORY RETAIL BUILDING AND DRIVE-THROUGH RESTAURANT LOCATED AT THE TERMINUS OF CATT ROAD ABOUT 242 FEET WEST OF ARYA ROAD (NEC OF 1-15 FREEWAY & CLINTON KEITH ROAD) (APN: 380-240-001, -052, -064, -062, -06, & 367-130-036)

2.2 **Tentative Parcel Map No. 38646 (Wildomar Commerce Center):**
Presented By: Abdu Lachgar , Planning Department

RECOMMENDATION:
The Planning Division recommends the Planning Commission take the following actions:

1. Find and determine that the approval of Tentative Parcel Map No. 38646 does not require additional environmental review in accordance with Section 15162 of the California Environmental Quality Act (CEQA) guidelines; and

2. Adopt a Resolution entitled:

PC Resolution No. 2023-13
A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, MAKING A DETERMINATION THAT ADDITIONAL ENVIRONMENTAL REVIEW IS NOT REQUIRED PER CEQA GUIDELINES SECTION 15162 AND APPROVING TENTATIVE PARCEL MAP NO. 38646, SUBJECT TO CONDTIONS, TO SUBDIVIDE A 26.8-ACRES SITE INTO SEVEN (7) PARCELS FOR FUTURE BUSINESS PARK/INDUSTRIAL/SERVICE COMMERICAL USES LOCATED AT THE SOUTHWEST CORNER OF ELIZABETH LANE AND CLINTON KEITH ROAD (APN: 380-250-052, -053, -054, -055, -056 & -057)

3. GENERAL BUSINESS

3.1 **Capital Improvement Program/General Plan Consistency (FY 2023/24)**
Presented By: Jason Farag , Public Works/ Engineering Department

RECOMMENDATION:
Adopt a Resolution entitled:

PC RESOLUTION NO. 2023-XX
A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, DETERMINING THAT FISCAL YEAR 2023/24 CIP PROJECTS OF THE FY 2023/24 – 2027/28) FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP) IS IN CONFORMANCE WITH THE CITY OF WILDOMAR GENERAL PLAN

PLANNING COMMISSION COMMUNICATIONS

PLANNING DIRECTOR REPORT

CITY ATTORNEY REPORT

FUTURE AGENDA ITEMS

ADJOURN THE MEETING

The City of Wildomar encourages your participation in the meeting. The following options are available for the public to participate:

1. You may view the Regular Session meeting live on the City of Wildomar's website at http://www.cityofwildomar.org or on cable TV through Frontier Channel 36 or AT&T channel 99. To view from the website, select the live stream link on the top of the front page.

2. You may participate in person.

PUBLIC COMMENT: During Public Comment not on the agenda and after each Agenda Item, the Chair will announce Public Comment. If you would like to speak on that item, please fill out a speaker slip and submit it in the inbox at the front of the room. When the City Clerk announces your name, please come up to the podium. Public Comments are limited to 3 minutes or such other time as the Commission may provide. Commissioners are not allowed to respond to public comments.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, you should contact the City Clerk's Office at 951-677-7751 x210.

REPORTS: All agenda items and reports are available for review at City Hall, 23873 Clinton Keith Road and on the City's website at the following address: http://www.cityofwildomar.org/government/agendas___minutes. Any writings or documents provided to a majority of the Planning Commission regarding any item on this agenda (other than writings legally exempt from public disclosure) will be made available by appointment for public inspection at City Hall during regular business hours.

If requested, the agenda and backup materials will be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans With Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Any person that requires a disability-related modification or accommodation, including auxiliary aids or services, in order to participate in the public meeting, may request such modification, accommodation, aid or service by contacting the City Clerk either in person or by phone at 951-677-7751, no later than 10:00 a.m. on the day preceding the scheduled meeting.

AFFIDAVIT OF POSTING

I, Heidi Jemane-Lobjoit, Wildomar Deputy City Clerk, do certify that at least 72 hours prior to the meeting, a true and correct copy of this agenda was posted at Wildomar City Hall, 23873 Clinton Keith Road; U.S. Post Office, 21392 Palomar Street; Wildomar Library, 34303 Mission Trail Blvd; and on the City's website at www.cityofwildomar.org.

Heidi Jemane-Lobjoit
Deputy City Clerk
Dated:

CITY OF WILDOMAR
PC - REGULAR MEETING
CONSENT CALENDAR
Agenda Staff Report # 1.1
Meeting Date: May 3, 2023

SUBJECT: Planning Commission Meeting Minutes - April 5, 2023

SUBMITTED BY: Matthew Bassi

PREPARED BY: Matthew Bassi

ACTION:
Staff recommends the Planning Commission approve the April 5, 2023 regular meeting minutes as submitted.

ATTACHMENTS:
04-05-23 PC Meeting Minutes.pdf

MINUTES
CITY OF WILDOMAR
PLANNING COMMISSION PC - REGULAR MEETING
WEDNESDAY, APRIL 5, 2023
COUNCIL CHAMBERS
23873 CLINTON KEITH ROAD SUITE 106
WILDOMAR, CA 92595

REGULAR SESSION 6:00 PM

Members in attendance: Arrin Banks, Kim Strong, Brianna Bernard, George Cambero
Members absent: Eric Filar

Staff in Attendance: Assistant City Attorney, Erica Vega
Vice Chair Filar was not present. Commissioner Bernard arrived at 6:25pm with prior notice.

NOTICE:
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CALL TO ORDER - REGULAR SESSION - 6:00 P.M.

ROLL CALL
Staff in Attendance: City Clerk Jemane-Lobjoit, Assistant City Attorney Vega, IT Specialist Sung, Associate Planner Lachgar, Development Manager Stadnick, Economic Development Director, Davidson.

FLAG SALUTE
Commissioner Cambero led the flag salute.

PUBLIC COMMENTS
No public comments.

APPROVAL OF THE AGENDA AS PRESENTED
No changes to the agenda as present. Agenda approved.

1. CONSENT CALENDAR

Consent calendar was presented by Abdu Lachgar.

1.1 Planning Commission Meeting Minutes - March 1, 2023 Regular Meeting:

Moved by Arrin Banks; seconded by George Cambero to Approve

Motion Approved: 3 - 0

Voting For: Arrin Banks, Kim Strong, George Cambero
Voting Against: None
Abstain: None
Absent: Brianna Bernard, Eric Filar

2. PUBLIC HEARINGS

2.1 Conditional Use Permit No. 23-0030 (Golden Coast Veterinary Clinic):
Planning Commission review of a CUP to establish a 2,629 sq. ft. veterinary hospital in the Clinton Keith Village retail center (existing Suite #105 & 106) located at the NEC of Clinton Keith Road and Wildomar Trail (APN: 362-250-003).
Ken Mayes provided public comments.

Moved by Arrin Banks; seconded by Kim Strong to Approve

Motion Approved: 3 - 0

Voting For: Arrin Banks, Kim Strong, George Cambero
Voting Against: None
Abstain: None
Absent: Brianna Bernard, Eric Filar

2.2 Beyond Gas Station/Warehouse Project (CUP/Plot Plan No. 22-0006)
Planning Commission review of an MND/MMRP and CUP/Plot Plan for a gas station with beer and wine sales, 2 fast-food restaurants and a 17,312 square-foot industrial building.

The following individuals provided public comments:

1. Michael Ramirez, Applicant
2. Jessie Max
3. Brad Shay
4. Carlos Cardenas

Moved by Arrin Banks; seconded by Brianna Bernard to Approve

Motion Approved: 3 - 1

Voting For: Arrin Banks, Brianna Bernard, George Cambero
Voting Against: Kim Strong
Abstain: None
Absent: Eric Filar

2.3 Tentative Tract Map No. 33840 (EOT #2)

The following individuals provided public comments:

1. Dan Harris
2. Kathy Bundy
3. Rich Soltysiak, Applicant Rep.
4. Ismael Covarrubies

Moved by George Cambero; seconded by Brianna Bernard to Approve

Motion Approved: 4 - 0

Voting For: Arrin Banks, Kim Strong, Brianna Bernard, George Cambero
Voting Against: None
Abstain: None
Absent: Eric Filar

2.4 Zoning Ordinance Amendment No. 2023-05:
Presented by Assistant City Attorney, Erica Vega.

Moved by Kim Strong; seconded by Arrin Banks to Approve

Motion Approved: 4 - 0

Voting For: Arrin Banks, Kim Strong, Brianna Bernard, George Cambero
Voting Against: None
Abstain: None
Absent: Eric Filar

3. GENERAL BUSINESS

PLANNING COMMISSION COMMUNICATIONS
None

PLANNING DIRECTOR REPORT
There will be new agenda items for the May 3rd meeting, as presented by Abdu Lachgar.

CITY ATTORNEY REPORT
None

FUTURE AGENDA ITEMS
None

ADJOURN THE MEETING
With there being no further business, Chair Strong adjourned the meeting at. 7:21pm.

AFFIDAVIT OF POSTING

Matthew Bassi
_____
Matthew Bassi, Minutes Secretary

CITY OF WILDOMAR
PC - REGULAR MEETING
PUBLIC HEARING
Agenda Staff Report # 2.1
Meeting Date: May 3, 2023

SUBJECT: Plot Plan/CUP No. 22-0181 (Catt Crossings Retail Center):

SUBMITTED BY: Matthew Bassi

PREPARED BY: Matthew Bassi

ACTION:
The Planning Division recommends the Planning Commission take the following actions:

1. Find and determine that the approval of CUP/Plot Plan No. 22-0181 meets the findings for adoption of a Class 32 (In-Fill Development Projects) Categorical Exemption in accordance with Section 15332 of the California Environmental Quality Act (CEQA) Guidelines; and

2. Adopt a Resolution entitled:

PC RESOLUTION NO. 2023-12

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, ADOPTING A CLASS 32 (IN-FILL DEVELOPMENT) CATEGORICAL EXEMPTION IN ACCORDANCE WITH SECTION 15332 OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES, AND APPROVING CONDITIONAL USE PERMIT/PLOT PLAN NO. 22-0181 (CATT CROSSINGS RETAIL CENTER) TO ALLOW THE DEVELOPMENT OF AN 11,817 SQUARE-FOOT RETAIL CENTER, INCLUDING AN EXPRESS CAR WASH, SINGLE-STORY RETAIL BUILDING AND DRIVE-THROUGH RESTAURANT LOCATED AT THE TERMINUS OF CATT ROAD ABOUT 242 FEET WEST OF ARYA ROAD (NEC OF 1-15 FREEWAY & CLINTON KEITH ROAD) (APN: 380-240-001, -052, -064, -062, -06, & 367-130-036)

FISCAL IMPACT:
The Catt Crossings project will not have a fiscal impact on the City's general fund. In accordance with the Development Impact Fee (DIF) ordinance adopted by Council in December 2021, the City DIF fees (11,817 s.f. of retail) will be approximately $232,910. Required regional impact fees (i.e., TUMF, MSHCP, LEUSD, SKR, etc.) are approximately $199,210. Total impact fees equal approximately $432,120. These fees are paid typically

prior to the issuance of building permits or occupancy permits. In addition, the project is conditioned to be annexed into the city-wide CFD 2022-1 which will pay its fair share of park maintenance and Measure Z fees.

PROJECT DESCRIPTION:

The Applicant (Catalyst Retail, Inc.) is proposing the "Catt Crossings Retail Center" that is comprised of 11,817 square feet of various retail uses on a 2.78-acre site located at the northeast corner of the I-15 freeway and Clinton Keith Road. The retail project will include a 3,385 square-foot Quick-Quack Express carwash, a 2,356 square-foot fast food/drive-through restaurant and a 1-story, 6,076 square-foot retail building. The proposed project consists of the following applications for review and consideration by the Planning Commission:

1) CEQA Categorical Exemption - The small retail project is eligible for a Class 32 (In-Fill Development Projects) Categorical Exemption in accordance with Section 15332 of the California Environmental Quality Act (CEQA) Guidelines.

2) Conditional Use Permit No. 22-0181: The project requires approval of a Conditional Use Permit (CUP) in accordance with Section 17.76 of the Wildomar Municipal Code (WMC) develop a 3,385 square-foot Quick-Quack Express carwash located at the northwestern part of the project site.

3) Plot Plan No. 22-0181: The project requires approval of a Plot Plan to develop the 11,817 square-foot retail center including landscaping and on-off-site improvements in accordance with the development standards of the C-P-S (Scenic Highway Commercial) zone, subject to conditions. Please refer to Attachment D (Location Map - Development Standards Tables) for consistency tables related to the C-P-S zone development standard).

PROJECT ANALYSIS:

CEQA/Categorical Exemption Analysis:

The proposed Catt Crossings project is considered a "project" as defined by the California Environmental Quality Act, Public Resources Code § 21000 et seq. ("CEQA"). The approval of CUP/Plot Plan No. 22-0181; however, is exempt from further environmental review under the requirements of the California Environmental Quality Act (Cal. Code Regs. Tit. 14 § 15332) because it is consistent with Class 32, In-Fill Development Projects. Class 32, In-Fill Development Projects (CEQA Guidelines § 15332) consists of projects characterized as in-fill development meeting the following conditions:

a) The project consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

c) The project site has no value as habitat for endangered, rare or threatened species.

d) Approval of the project would not result in any significant effects to traffic, noise, air quality or water quality.

e) The site can be adequately served by all required utilities and public services

The Planning Commission has the authority to adopt this CEQA Exemption which staff is recommending they do. Detailed findings supporting this CEQA Exemption is provided in PC Resolution No. 2023-12, Attachment A/Section 1. The CEQA Exemption analysis if provided for Commission consideration in Attachment E.

Conditional Use Permit 22-0181 Analysis:

The Applicant is requesting approval of a CUP to establish 3,385 square-foot Quick-Quack Express carwash which will include multiple individual vacuum stations. In accordance with Section 17.76.010 of the Wildomar Municipal Code, a CUP is required for car washes. This car wash will be an independent operation. The proposed hours of operation are 7 am to 10 pm. As such, the car wash has been designed consistent with the commercial design guidelines and employ the latest recycle, water re-use systems available. Development of the express car wash meets and exceeds the minimum development standards of the C-P-S zone, in terms of setbacks, parking, etc. The development standards consistency table is provided in Attachment D.

Pursuant to Chapter 17.200 (Conditional Use Permits) of the Wildomar Municipal Code, the Planning Commission must make three (3) findings to approve the CUP. The required findings to support CUP No. 22-0181 are discussed in PC Resolution No. 2023-12 (Attachment A, Section 3). The proposed site plan and architectural elevations are provided for Commission consideration in Attachment B and C.

Plot Plan 22-0181 Analysis (Commercial Retail Center):

In accordance with Section 17.76 (C-P-S) of the Wildomar Municipal Code (WMC), the Catt Crossings retail center project is a permitted use subject to the approval of a Plot Plan. The Plot Plan (i.e., development plans package) serves as the permit to develop the proposed 11,817 square-foot retail center with three (3) buildings. The project site is about 2.62 +/- and includes three (3) separate buildings/users. The Applicant has secured one (1) lease for the Quick Quack car wash at this time. The other 2 uses are unidentified at this time.

Building 1 (Quick Quack Car Wash) - This building is 3,385 square feet in size and will include multiple individual vacuum stations. The location on the site adjacent to the northbound I-15 freeway on-ramp so its further away from the nearby residential areas. The use of the carwash will comply with the city's noise ordinance requirements as outlined in Chapter 9.48 of the WMC. The use will also comply with Chapter 8.64 regarding light

pollution. This parcel also includes the required 12 space (double-stacked) stacking area behind the entrance (15 are provided); however, as an express car wash the line moves quickly. The architectural design proposed is “Farm Chic” which is consistent with the City’s Commercial Design Standards and Guidelines.

Building 2 (QSR Drive-through Restaurant) - This building is 2,356 square feet in size and includes a 485 square-foot outdoor seating area. The location on the site is adjacent to the Clinton Keith Road so its further away from the nearby residential areas. This parcel also includes the required 12 space (double-stacked) stacking area behind the menu as required by the city’s parking ordinance. The use of this building will comply with the city’s noise ordinance requirements as outlined in Chapter 9.48 of the WMC. The use will also comply with Chapter 8.64 regarding light pollution. The architectural design proposed is “Farm Chic” which is consistent with the City’s Commercial Design Standards and Guidelines.

Building 3 (single use retail building) – This building is 1-story, 6,076 square-foot retail building. The Applicant does not have a lease with a specific user as of the writing of this report, but, they are in discussions with a retail cannabis user. if the user turns out to be a retail cannabis business, a separate CUP and Development Agreement will be required to be submitted and also will require a public hearing before the Planning Commission and City Council. As staff was evaluating a potential cannabis use in this building, it was determined that it could meet all the requirements of Ordinance No. 187 & 188, especially in terms of locational requirements from sensitive uses. The use of this building will comply with the city’s noise ordinance requirements as outlined in Chapter 9.48 of the WMC. The use will also comply with Chapter 8.64 regarding light pollution. The architectural design proposed is “Farm Chic” which is consistent with the City’s Commercial Design Standards and Guidelines.

C-P-S Development Standards (Chapter 17.76.030):

The uses planned for the commercial retail center are permitted and conditionally permitted uses listed in the C-P-S zone as outlined in Chapter 17.76 of the WMC. Physical development of the commercial retail center is subject to the development standards of Chapter 17.76.030 of the C-P-S zone which establishes standards and requirements related to lot area, setbacks, building height, etc. The retail project is consistent with the C-P-S zone standards as determined by staff, and has been designed to meet and exceed the development standards of the C-P-S zone. The overall theme of the center (Farm Chic) is consistent with the City’s Commercial Design Standards and Guidelines. A copy of the overall site plan and architectural elevations, landscaping, etc. is provided in Attachments B, C and D.

Site Plan/Building Layout:

The site plan has been designed to meet the development standards of the C-P-S zone in accordance with Section 17.76 of the WMC. Staff has analyzed the proposed project site plan to ensure compliance with the development standards related to setbacks, building height,

landscaping and parking. The development standards table provides the detail on consistency and can be found in Attachment D.

Off-Street Parking:

The proposed retail project complies with the parking standards outlined in Section 17.188 of the WMC. The retail project has a total size of 11, 817 square feet which requires 71 spaces (6/1000 ratio). The total required provided on the site plan is 73 spaces, thus, the parking requirement has been met. This amount includes all required handicap/accessible stalls as well as bicycle parking and EV spaces per Cal Green codes. Each parking stall has also been designed to meet the minimum stall dimensions, including drive aisles and back-up areas. Since the Applicant intends to sell the lots eventually, the project has been conditioned to record a reciprocal access and parking agreement. This ensures that visitors and patrons will be able park wherever they want on the site, and be able access between the parcels. The development standards table provides the detail on consistency and can be found in Attachment D.

On-Site Vehicular Circulation and Access:

The primary vehicular access for visitors and employees will occur from Catt Road with no access onto Clinton Keith Road. Given the proximity to the northbound I-15 freeway onramp, it was not feasible to provide direct access to Clinton Keith Road. The site has also been conditioned to construct public improvements along both Catt Road and Arya Hidden Springs and Clinton Keith Road. These improvements will provide safe pedestrian and vehicular circulation for the project, including emergency vehicle access. Refer to the Public Works conditions for specific detail on these public improvements (Attachment D, Exhibit 1).

Landscaping Plan:

The Applicant has provided a detailed conceptual landscape plan for staff's review as part of the development review process. The landscape plan was designed to meet the requirements of the city's newly adopted Landscape Design Standards and Guidelines manual. The project achieves valuable water conservation through the use of water efficient landscaping. The landscape plans provide for a variety of landscape species (including drought tolerant turf) in varying sizes to accommodate the project. The landscape plans were reviewed by the City's Landscape Architect and based on this review; the conceptual landscape plans are consistent with City standards. During the construction plan check process, staff will perform a more detailed landscape and irrigation plan review to determine that the proposed water usage meets the Landscape Design Standards and Guidelines manual. The proposed landscape plan is shown on Attachment C.

Architecture Program:

The architectural theme for the retail center site is characterized as "Farm Chic" which is one of the four design themes allowed on the city's Commercial Design Standards and Guidelines. Farm Chic is a contemporary interpretation of traditional rural forms adapted to a commercial

setting. This style reflects Wildomar's agricultural and ranching history and regional context. As indicated in the accompanying precedent images and illustrative diagram, the style utilizes elements of recognizable farm and ranch forms such as barns, sheds, silos, tank houses and granary towers. Common materials such as metal, wood and stone are utilized. Board and batten siding and corrugated metal panels are used to give texture and variation to exterior walls. Roofs are typically medium to high-pitched. Large openings are patterned after the functional design of typical agricultural buildings. The proposed architecture is a high quality design. The architectural plans for the Catt Crossings retail center are provided in Attachment C.

The Findings for support of the CUP and Plot Plan are provided in the PC Resolution No. 2023-12 (Attachment A). Staff has provided exhibits of the site plan, architectural elevations, landscape plans and other materials in Attachment B – H.

Conclusion:

The Planning Commission has the authority to approve the proposed CUP and Plot Plan. Staff's analysis of the findings in support of the CUP/Plot Plan is provided in the PC Resolution No. 2023-12 (Attachment A). Based on review of the proposed site plan, grading plan, landscaping plan and architectural elevations, the Planning Department has determined that the Catt Crossings retail project does meet and exceed all applicable development standards of the C-P-S zone and is consistent with the General Plan land use designation of CR.

ATTACHMENTS:

Attach A - PC Reso 2023-12-CUP-PP.pdf
Attach B - Proposed Site Plan-Grading Plan 5-3-23.pdf
Attach C - Proposed Arch-Landscape Plans 5-3-23.pdf
Attach D - Location Map - Development Standards.pdf
Attach E - Catt Crossings CEQA Exempt Analysis.pdf
Attach F - Catt Crossings TIA Doc.pdf
Attach G - Catt Crossings TIA Memo.pdf
Attach H - Catt Crossings VMT Analysis-final.pdf

ATTACHMENT A

PC Resolution No. 2023-12
CUP & Plot Plan No. 22-0181

PC RESOLUTION NO. 2023-12

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, ADOPTING A CLASS 32 (IN-FILL DEVELOPMENT) CATEGORICAL EXEMPTION IN ACCORDANCE WITH SECTION 15332 OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES, AND APPROVING CONDITIONAL USE PERMIT/PLOT PLAN NO. 22-0181 (CATT CROSSINGS RETAIL CENTER) TO ALLOW THE DEVELOPMENT OF AN 11,817 SQUARE-FOOT RETAIL CENTER, INCLUDING AN EXPRESS CAR WASH, SINGLE-STORY RETAIL BUILDING AND DRIVE-THROUGH RESTAURANT LOCATED AT THE TERMINUS OF CATT ROAD ABOUT 242 FEET WEST OF ARYA ROAD (NEC OF 1-15 FREEWAY & CLINTON KEITH ROAD) (APN: 380-240-001, -052, -064, -062, -06, & 367-130-036)

WHEREAS, the Planning Department has received an application for a Conditional Use Permit to establish an express carwash and a Plot Plan to develop a 11,817 square-foot retail center, including full on-site and off-site improvements from:

Project Applicant:	Catalyst Commercial Group (Mark Cooper)
Project Location:	Northeast corner of Clinton Keith Road and I-15 Freeway
APN:	380-240-001, -052, -064, -062, -06, & 367-130-036
Project Area:	2.62 +/- acres

WHEREAS, in accordance with Section 17.200, 17.216 and 17.248 of the Wildomar Municipal Code, the Planning Commission has the authority to review the proposed Catt Crossing retail center project as described above; and

WHEREAS, the proposed Catt Crossing retail center project is exempt from further environmental review under the requirements of the California Environmental Quality Act (Cal. Code Regs. Tit. 14 § 15332) because it is consistent with Class 32, In-Fill Development Projects, and

WHEREAS, in accordance with Section 17.192.040 of the Wildomar Municipal Code, the Planning Department on April 19, 2023 gave public notice to all property owners within a 600-foot radius of the project boundary notifying said property owners of the May 3, 2023 Planning Commission meeting at which time the Planning Commission would consider CUP/Plot Plan No. 22-0181 for the Catt Crossing retail center project; and

WHEREAS, In accordance with Ordinance No. 135, the Planning Department on April 21, 2023 posted one (1) public hearing notice “sign board” on Clinton Keith Road notifying the general public of the May 3, 2023 Planning Commission meeting at which time the Planning Commission would consider CUP/Plot Plan No. 22-0181 for the Catt Crossing retail center project; and

WHEREAS, in accordance with Section 17.192.040 of the Wildomar Municipal Code, the Planning Department on April 21, 2023 published a legal notice in the "Press Enterprise", a local newspaper of general circulation, notifying the general public of the of the May 3, 2023 Planning Commission meeting at which time the Planning Commission would consider CUP/Plot Plan No. 22-0181 for the Catt Crossing retail center project; and

WHEREAS, in accordance with Section 17.192.040 of the Wildomar Municipal Code, the Planning Commission conducted the duly noticed public hearing on May 3, 2023, at which time interested persons had an opportunity to testify in support of, or opposition to, the proposed CUP/Plot Plan No. 22-0181 and at which time the Planning Commission received public testimony concerning the proposed Catt Crossing retail center project.

NOW, THEREFORE, the Planning Commission of the City of Wildomar does hereby resolve, determine and order as follows:

SECTION 1. CEQA.

The approval of CUP/Plot Plan No. 22-0181 is exempt from further environmental review under the requirements of the California Environmental Quality Act (Cal. Code Regs. Tit. 14 § 15332) because it is consistent with Class 32, In-Fill Development Projects. Class 32, In-Fill Development Projects (CEQA Guidelines § 15332) consists of projects characterized as in-fill development meeting the following conditions:

a) The project consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

Finding: The project site has a land use designation of Commercial Retail and is zoned C-P-S (Scenic Highway Commercial Zone) (Wildomar 2022a; 2022b). According to the Wildomar General Plan, the Commercial Retail designation permits the development of commercial retail uses at a neighborhood, community, and regional level (Wildomar 2022a). Additionally, according to Chapter 17.76, C-P-S Scenic Highway Commercial Zone, of the Wildomar Municipal Code, the CPS Zone allows restaurants and other eating establishments (Section 17.76.010(A)). Car washes and cannabis retailers are permitted in the CPS zone with a Conditional Use Permit (Section 17.76.010(B)) (Wildomar 2022b). The proposed project would construct a commercial retail center with a car wash, fast food/drive-through restaurant, retail cannabis business, and office space and is located within an urbanized area surrounded by various uses. The proposed project does not include or require any amendments to the Wildomar General Plan or zoning regulations, nor would the proposed project result in any inconsistencies with the general plan or zoning standards. Therefore, project implementation would not conflict with the Wildomar General Plan or Wildomar Municipal Code.

b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

Finding: The project site is 2.48 acres (less than 5 acres) and is surrounded by residential uses to the north, commercial uses to the east and south, and I-15 to the west (see Figure 1 and Figure 2). The project site is within the city limits of the City of Wildomar. Therefore, the proposed project meets Condition B.

c) The project site has no value as habitat for endangered, rare or threatened species.

Finding: According to the City of Wildomar's Multiple Species Habitat Conservation Plan (MSHCP), the project site is not located within a criterial cell (Wildomar 2017). Furthermore, the project site is in an urbanized area surrounded by commercial, residential, and vacant uses. The project site is unlikely to have value as habitat for endangered, rare, or threatened biological resources. According to the National Wetlands Inventory, the project site is 0.1-mile north of a riverine habitat (USFWS 2023). However, project construction would occur within the footprint of the project site and would not impact the riverine habitat. Therefore, the proposed project meets Condition C.

d) Approval of the project would not result in any significant effects to traffic, noise, air quality or water quality.

Finding: The following analysis supports this finding

Air Quality - Project construction- and operational-source emissions would not exceed applicable regional thresholds of significance and applicable Localized Significance Thresholds (LST) established by the South Coast Air Quality Management District (SCAQMD). The proposed project would also comply with the Basin Air Quality Management Plan (AQMP), California Ambient Air Quality Standards (CAAQS), National Ambient Air Quality Standards (NAAQS), West Riverside Council of Governments (WRCOG) Subregional Climate Action Plan (CAP), California Air Resources Board (CARB) Scoping Plan, AB 32, and SB 32.

Additionally, project-related traffic would not cause or result in carbon monoxide (CO) concentrations exceeding applicable state and/or federal standards (CO "hotspots"). Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the proposed project. Project-related GHG emissions meet the SCAQMD draft screening threshold of 3,000 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year and are also considered to be less than significant (MD Acoustics 2022a).

Finally, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people; and the proposed project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Therefore, potential construction- and operational-source odor impacts would be considered less than significant.

Noise - According to the Noise Analysis study that was prepared for the proposed project, the project would not result in significant impacts from construction and operational noise or vibration. Ambient noise data taken indicated that daytime levels are 56 to 62 Leq(h), and the predominant source of noise impacting the existing uses is traffic noise from Clinton Keith Road and existing commercial uses (MD Acoustics 2022b). Ambient operational noise levels are anticipated to range from 56 dBA Leq to 59 dBA Leq at the adjacent residential and commercial uses. Therefore, potential operational noise impacts would be considered less than significant.

Traffic and Transportation - Intersections surrounding the project site are projected to operate at an acceptable level of service (LOS) during the AM and PM peak hours for Opening Year 2024 and Cumulative Year With Project conditions. Where necessary, roadways adjacent to the project site and site access points will be constructed in compliance with recommended roadway classifications and respective cross-sections in the Wildomar General Plan or as directed by the City Engineer. Sight distance at each project access point would be reviewed with respect to standard Caltrans and City sight distance standards at the time of final grading, landscaping and street improvement plans. Additionally, in accordance with the City of Wildomar Vehicle Miles Travelled (VMT) CEQA Threshold Policy Guidelines, the project is screened from a VMT analysis as the proposed project is a local-serving retail center under 50,000 square feet. Therefore, impacts would be less than significant impact (TJW Engineering 2022).

Water Quality -
According to the Preliminary Hydrology Report prepared for this project, the project site is in Zone X per the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM). Flood Zone X is defined by FEMA as the area determined to be outside the 100-year flood. No portion of the project site is located within the special flood hazard area inundated by the 100-year flood (Kimley-Horn 2022).

The proposed project site will predominantly drain southwest to maintain the existing flow pattern to the maximum extent possible. Resulting post-development flows would exceed existing flows in a 100-year storm. However, through the proposed underground detention system, the proposed project is not expected to cause a significant impact to downstream systems.

Additionally, the proposed project would comply with the Wildomar Municipal Code Section 13.12.050, which requires development to comply with a Municipal Separate Storm Sewer System (MS4) Permit from the San Diego Regional Water Quality Control Board, would reduce impacts to water quality. Section F.1 of the MS4 permit specifies requirements for new developments, and Section F.1.D details the requirements for standard stormwater mitigation plans (also known as water quality management plans). The MS4 permit imposes pollution prevention requirements on planned developments, construction sites, commercial and industrial businesses,

municipal facilities and activities, and residential activities. Therefore, the development of the project site would not cause a significant impact to downstream systems for storms up to the 100-year condition.

e) The site can be adequately served by all required utilities and public services

Finding: The proposed project would extend and connect to existing water and sewer lines along Catt Road. The Elsinore Valley Municipal Water District (EVMWD) confirmed it would provide water and sewer services to the project site, and the proposed project would comply with the list of general and project-specific requirements provided by EVMWD. Therefore, service providers and utilities have determined that the site can be properly serviced.

SECTION 2. MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP).

The Planning Commission finds that the Catt Crossing retail center project is consistent with the MSHCP, and the project is not located in any MSHCP criteria cell area, and required mitigation is provided through payment of the MSHCP Mitigation Fee.

SECTION 3. CONDITIONAL USE PERMIT FINDINGS.

Pursuant to Chapter 17.200 (Conditional Use Permits) of the Wildomar Municipal Code, the Planning Commission, in light of the whole record before it, including but not limited to the Planning Department's staff report and all documents incorporated by reference herein, the City's General Plan and any other evidence within the record or provided at the public hearing of this matter, hereby finds and determines as follows:

A. That the proposed conditional use permit is consistent with the General Plan and in accord with the purposes of the zone in which the site is located.

Evidence: The proposal to have an express car wash within this retail center is consistent with the General Plan land use designation of CR and C-P-S zoning in that it is a conditionally permitted use in the C-P-S (Scenic Highway Commercial) zone. The project is consistent with General Plan Policy LU 23.1 because the project accommodates the development of a commercial use in an area appropriately designated by the General Plan land use map for a retail center project which includes car washes.

B. The proposed use will not be detrimental to the health, safety, or general welfare of the community.

Evidence: The proposal to have a car wash within this retail center use will not be detrimental to the health, safety, or general welfare of the community. The car wash will be situated along Clinton Keith and away from any residences, so noise will not be a factor in this project. The car wash is proposed to be designed to meet our commercial design guidelines and employ the latest recycle, water re-use and solar energy systems available.

C. The proposed conditional use permit is consistent with the development standards of Section 17.76 (C-P-S Zone).

Evidence: The proposed conditional use permit is consistent with Section 17.76 that permits car washes with the approval of a CUP in the C-P-S zone. As the project site has an existing C-P-S zone designation, the project meets this finding.

SECTION 4. PLOT PLAN FINDINGS.

In accordance with Chapter 17.216 of the Wildomar Municipal Code (Title 17), the Planning Commission, in light of the whole record before it, including but not limited to the Planning Department's staff report and all documents incorporated by reference herein, the City's General Plan and any other evidence within the record or provided at the public hearing of this matter, finds and determines as follows:

A. The proposed use is consistent with the Wildomar General Plan and Zoning Ordinance.

Evidence: The Applicant is proposing a Plot Plan (in accordance with Section 17.76 of the Wildomar Municipal Code) to develop an 11,817 square-foot commercial retail center consisting of a 3,385 square-foot Quick Quack express car wash; a 2,356 square-foot fast food/drive-through restaurant (with a 400-square-foot outdoor dining patio); and a 6,076 square-foot, one-story retail building. Approval of the Plot Plan is consistent with the General Plan land use designation of Commercial Retail (CR) and development standards of the C-P-S zone (Section 17.76 of the Wildomar Municipal Code).

In evaluating the proposed plot plan, the site design and proposed uses are consistent with the existing CR general plan land use designation in that this land use designation specifically encourages the development of neighborhood commercial centers. With its close proximity to the adjacent approved Westpark Promenade condo project and existing Hartford Park single family residential neighborhood, the Catt Crossings retail project will provide commercial and retail services to meet the needs of city residents and provide jobs and sales tax revenue. In addition, the proposed use also is consistent with the following General Plan policies:

LU 4.1 The proposed commercial retail project will accommodate a land use development proposal that is located and designed to visually enhance and not degrade the character of the surrounding area.

LU 6.1 The proposed commercial retail project has been developed in accordance with the proposed General Plan land use designation of CR which ensures land use consistency.

LU 22.1 The commercial retail project will accommodate the development of commercial and retail uses on a site that is appropriately designated by the General Plan for these types of uses.

LU 22.10 The proposed commercial retail project is designed to consider the surrounding areas to visually enhance the appearance and character of the area.

LU 23.1 The proposed commercial retail project is properly located and designated for commercial development in accordance with the General Plan land use category of CR.

LU 23.8 The commercial retail project is located in a commercially designated area that will provide neighborhood services, jobs and sales tax revenues for the City in accordance with the General Plan.

Further, the proposed plot plan has been evaluated in detail to ensure the site is developed in compliance with the development standards of the C-P-S zone. Based upon a detailed review of the development plans, all development standards outlined in the C-P-S zone related to setbacks, building height, etc., have been met and/or exceeded (refer to the development standards summary table for additional detail (Attachment C). Further, the design and layout of the project, meets and exceeds the parking, signage and landscaping standards outlined in Section 17.188, 17.252 and 17.276 of the Zoning Ordinance. Given that the C-P-S zone is highly consistent with the CR land use designation. Based on this, the proposed Catt Crossing retail center project meets this finding.

B. The overall development of the land shall be designed to conform to the logical development of the land and to be compatible with the present and future logical development of the surrounding property.

Evidence: The proposed Catt Crossings retail center project has been designed to conform to the logical development of the land and is compatible with the present and future logical development of the surrounding property. The site has an existing general plan land use designation of Commercial Retail (CR) which has existed since the city incorporated in 2008, including the area to the east and south. The Clinton Keith corridor has always been anticipated in the General Plan as a commercial and retail corridor given its immediate proximity to Clinton Keith Road (a highly traveled street)and the I-15 freeway. In addition, there are several existing commercial retail centers near the proposed project location which when combined create the commercial retail-like corridor anticipated along Clinton Keith Road. Based on this, the proposed Catt Crossing retail center project meets this finding.

C. The Plot Plan considers the location and need for dedication and improvement of necessary streets and sidewalks, including the avoidance of traffic congestion.

Evidence: The proposed plot plan has been designed to consider the location and need for dedication and improvement of necessary streets and sidewalks, including the avoidance of traffic congestion. As part of the City Engineer's review of the proposed project it was determined that certain public improvements (as conditioned) were needed related to Catt Road and Arya Drive. Further, a detailed Traffic Impact Analysis (TIA) was prepared for the proposed project and was extensively analyzed by the City's Traffic Engineer and approved (Attachment F). The project must comply with all improvement measures identified in the approved TIA that will also reduce Vehicle Miles Traveled (VMT) consistent with the intent of SB 743 (refer to Attachment G). Based on this, the proposed Catt Crossing retail center project meets this finding.

D. The Plot Plan takes into consideration topographical and drainage conditions, including the need for dedication and improvements of necessary structures.

Evidence: The construction of the project has been designed and conditioned to comply with all applicable City ordinances, codes, and standards including, but not limited to, requirements relating to storm water runoff management and other drainage control regulations. The project drainage has been designed to accommodate a series of filtration and detention areas (within and around the drive aisles and parking areas) to capture storm runoff and treat it in accordance with local and state laws. Further the project was required to prepare a Hydrology/Hydraulic study and Preliminary Water Quality Management Plan as part of the proposed retail project which analyzed and addressed in detail all drainage impacts that could have resulted from this project. Based on this, the proposed Catt Crossing retail center project meets this finding.

E. All plot plans which permit the construction of more than one structure on a single legally divided parcel shall, in addition to all other requirements, be subject to a condition which prohibits the sale of any existing or subsequently constructed structures on the parcel until the parcel is divided and a final map recorded in accordance with Title 16 (Subdivisions) in such a manner that each building is located on a separate legally divided parcel.

Evidence: The project does include a tentative parcel map (TPM No. 38333) to subdivide the 2.62-acre site that allows three (3) legal parcels to accommodate the proposed Catt Crossing retail center project. Based on this, the proposed Catt Crossing retail center project meets this finding.

SECTION 5. PLANNING COMMISSION ACTION:

Based on the foregoing findings, and on substantial evidence in the whole of the record, the Planning Commission hereby adopts PC Resolution No. 2023-12 approving Conditional Use Permit and Plot Plan No. 22-0181, subject to conditions of approval, as provided herein and attached hereto to this Resolution as Exhibit 1.

PASSED, APPROVED AND ADOPTED this 3rd day of May, 2023 by the following vote:

AYES:

NOES:

ABSENT:

RECUSED:

_____
Kim L. Strong
Planning Commission Chair

ATTEST:

_____
Matthew C. Bassi
Community Development Director/Minutes Secretary

APPROVED AS TO FORM:

_____
Stephanie Gutierrez
Assistant City Attorney

ATTACHMENT A – EXHIBIT 1 "CATT CROSSINGS" RETAIL CENTER PROJECT			
Project No.: CUP / Plot Plan No. 22-0181			
Applicant: Catalyst Commercial Group (Mr. Brandon Humann) **APN: 380-240-001; 380-240-052; 380-240-064; 380-240-063; 380-240-062**			
CUP/Plot Plan No. 22-0181 - Approval Date: **May 3, 2023**	**CUP/Plot Plan No. 22-0181 - Expiration Date:** **May 3, 2026**		
Conditions of Approval	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (Date and Signature)**
PLANNING DIVISION CONDITIONS			
Standard Conditions			
1. In compliance with Section 15322 of the CEQA Guidelines, a Notice of Exemption (NOE) shall be filed by the City with the Riverside County Clerk within five (5) working days of project approval by the City Council. The notice shall include the Riverside County Clerk administrative fee (paid by the Applicant) in the amount of **$50.00**. Failure to pay the required fee will result in the project being deemed null and void (California Fish and Game Code Chapter 711.4(c).	May 10, 2023	Planning Division	
2. The Applicant's signature below, which shall be submitted to the Planning Division on or before May 17, 2023 hereby verifies the "Acceptance of the Conditions of Approval" contained within this condition's matrix. _____ Applicant Signature Date	May 17, 2023	Planning Division	
3. The Applicant shall indemnify, protect, defend, and hold harmless, the City of Wildomar, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, from any and all claims, demands, law suits, writs of mandamus, and other actions and proceedings (whether legal, equitable, declaratory, administrative or adjudicatory in nature), and alternative dispute resolutions procedures	Ongoing	Planning Division & City Attorney	

	(including, but not limited to arbitrations, mediations, and other such procedures), (collectively "Actions"), brought against the City, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, that challenge, attack, or seek to modify, set aside, void, or annul, the any action of, or any permit or approval issued by, the City and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof (including actions approved by the voters of the City), for or concerning the Project, whether such Actions are brought under the California Environmental Quality Act, the Planning and Zoning Law, the Subdivision Map Act, Code of Civil Procedure Chapter 1085 or 1094.5, the California Public Records Act, or any other state, federal, or local statute, law, ordinance, rule, regulation, or any decision of a court of competent jurisdiction. City shall promptly notify the Applicant of any Action brought and request that Applicant defend the City. It is expressly agreed that Applicant may select legal counsel providing the Applicant's defense and the City shall have the right to approve separate legal counsel providing the City's defense. The Applicant shall reimburse City for any attorneys' fees, costs and expenses directly and necessarily incurred by the City in the course of the defense. Applicant agrees that City will forward monthly invoices to Applicant for attorneys' fees, costs and expenses it has incurred related to its defense of any Action and Applicant agrees to timely payment within thirty (30) days of receipt of the invoice. Within fourteen (14) days of an Action being filed, Applicant agrees to post adequate security or a cash deposit with City in an amount to cover the City's estimated attorneys' fees, costs and			

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	expenses incurred by City in the course of the defense in order to ensure timely payment of the City's invoices. The amount of the security or cash deposit shall be determined by the City. City shall cooperate with Applicant in the defense of any Action.			
4.	Approval of CUP/Plot Plan No. 22-0181 shall expire on May 3, 2026, if grading and/or building permits have not been issued and substantial construction work has commenced on the project site. The Applicant may apply in writing for an Extension of Time (EOT) for review and approval of the Community Development Director in accordance with Section 17.216.070 of the Wildomar Municipal Code. Said extension of time application and required fee must be submitted to the Planning Division prior to the expiration date.	May 3, 2023	Planning Division	
5.	In accordance with Chapter 66020 of the Government Code, the Applicant has 90 days from project approval to file a protest of the imposition of fees, dedications, reservations, or other exactions being imposed on this project. Notice is hereby to the Applicant that the 90-day appeal hereby begins with approval of this project.	August 3, 2023	Planning Division	
6.	Within 60 days after approval of CUP/Plot Plan No. 22-0181 by the City Council, the Applicant shall pay all applicable outstanding/negative deposit account balances (#22-0181). Failure to pay the outstanding balance by the due date may result in delays in the processing of grading plans, improvement plans and/or building/construction plans.	July 3, 2023	Planning Division	

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7. If Pad 3 on the approved site plan is used for retail cannabis sales, the Applicant shall first authorize (in writing on forms provided by the Planning Division) the proposed cannabis tenant to make a formal submittal to the City in accordance with Ordinance No. 187 and Ordinance No. 188 of the Wildomar Municipal Code. Said submittal shall include the required Local License, Conditional Use Permit and Development Agreement applications in accordance with Ordinance No. 187 and Ordinance No. 188 of the Wildomar Municipal Code. All cannabis regulations and requirements can be found at: https://www.cityofwildomar.org/government/departments/planning/cannabis_business_requirements.	Ongoing	Planning Division	
8. The proposed "Express Car-Wash Facility" shall comply with all noise requirements of the General Plan and Noise Ordinance (Chapter 9.48)	On-Going	Planning and Building Divisions	
9. Applicant herby understands and agrees that failure to comply with all Conditions of Approval may result in the Planning Commission taking action resulting in a modification to the Conditions of Approval and/or suspension or revocation of the CUP/Plot Plan.	On-Going	Planning Division	
10. The project shall be developed in accordance with the approved plot plan approved by the Planning Commission on May 3, 2023. The Applicant may request a modification/revision to the approved project, if needed, in accordance with Sections 17.228 of the Wildomar Municipal Code.	On-Going	Planning Division	

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11. The proposed Project shall comply with existing SCAQMD rules for the reduction of fugitive dust emissions in accordance with SCAQMD Rule 403, including the following: • All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions. • The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project are watered as necessary throughout the day. • The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less. • Only "Low-Volatile Organic Compounds" paints (no more than 100 gram/liter of VOC) and/or High-Pressure Low Volume (HPLV) applications consistent with South Coast Air Quality Management District Rule 1113 shall be used. • The proposed Project shall be required to comply with General Plan Policy AQ 4.9 and SCAQMD Rule 403 to address Project- specific fugitive dust emissions. • The proposed Project would also be required to comply with City of Wildomar Solid Waste Regulations (Municipal Code Section 8.104) and SCAQMD Rule 402 to prevent occurrences of public nuisances as it pertains to odors.	On-Going	Planning Division	

	• Additional SCAQMD rules shall be applicable during Project construction and include Rule 1113 (Architectural Coatings), Rule 431.2 (Low Sulfur Fuel, and Rule 1186/1186.1 (Street Sweepers). • The proposed Project will be conditioned to comply with all other applicable/mandated SCAQMD requirements related to commercial retail development.			
12.	All grading shall conform to the California Building Code and all other relevant laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.	On-Going	Planning Division	
13.	Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect. Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer. Protection of Rough graded slopes will be based on the approved BMP's as depicted in the approved Storm Water Pollution Prevention Plan.	On-Going	Planning and Engineering Divisions	
14.	The proposed lighting and signage plans shall comply with the standards and requirements of the City's Light Pollution Ordinance in accordance with Chapter 8.64 of the Wildomar Municipal Code.	On-Going	Planning Division	

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15.	As required by Chapter 8.56 of the WMC, subsequent development on the site will need to comply with the County of Riverside, Department of Environmental Health, Local Enforcement Agency (LEA) for all activities related to potential hazardous materials.	On-Going	Planning Division	
16.	The Applicant shall provide bike racks/spaces within the project interior & centrally located in accordance with the current version of the Cal-Green Building Code as administered by the Building Official.	On-Going	Planning & Building Divisions	
17.	To minimize noise impacts from delivery trucks entering and exiting the project site on surrounding residential land uses and residences, deliveries of any kind shall only be allowed between the hours of 7:00 am and 8:00 pm. The Applicant shall include this restriction in the Conditions, Covenants and Restrictions (CC&R's) and individual lease agreements.	On-Going	Planning Division	
18.	As required by the City of Wildomar Municipal Code Section 9.48.020, all construction and general maintenance activities shall be limited to the hours 7:00 AM and 6:00 PM from October through May (Monday–Saturday), and between 6:00 AM and 6:00 PM (Monday–Saturday) from June through September. No construction is permitted on Sundays or City-observed holidays unless approved by the City Building Official or City Engineer.	On-Going	Planning Division	

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19.	The Applicant shall be subject to, and comply with, the following four (4) state mandated codes/ordinances including all other applicable state & local codes/ordinances already in effect: • California Building Code, Chapter 7A; • California Residential Code, Chapter R327; • California Referenced Standards Code, Chapter 12-7A; and • California Fire Code, Chapter 49.	On-Going	Building & Safety and Riverside County Fire Dept.	
20.	The Applicant is prohibited from using any sort of blasting device or similar activity during all grading and/or construction operations.	On-Going	Planning Division	
21.	The Project shall comply with the vegetation management requirements prescribed in California Fire Code Section 4906, including California Government Code Section 51182, as applicable.	On-Going	Building & Safety and Riverside County Fire Dept.	
22.	The following materials are prohibited from being stored anywhere on the project site without the expressed written permission by the City Building Official and Riverside County Fire Chief: a) Flammable or explosive matter or material; b) Matter or material which creates obnoxious dust, odor or fumes; c) Hazardous or extremely hazardous waste, as defined by applicable provisions of the Hazardous Waste Control Law (Health and Safety Code Section 25100, et seq.).	On-Going	Building & Fire Departments	

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23.	In accordance with, Chapter 17.216 of the WMC, this project is prohibited from selling any existing or subsequently constructed structures on the parcel until the lot line adjustment is recorded in accordance with Title 16 (Subdivisions) in such a manner that each building is located on a separate legally divided parcel.	On-Going	Planning Division	
24.	The following practices shall be required by the Project to reduce any noise level increases produced by the construction equipment to the nearby noise-sensitive residential land uses: a) Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall only occur between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May (City of Wildomar Municipal Code, Section 9.48.020 (I)). The project construction supervisor shall ensure compliance with the note and the City shall conduct periodic inspection at its discretion. b) During all project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.	On-Going	Building / Planning / Engineering Divisions	

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	c) The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the project site (i.e., to the center) during all Project construction. d) The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May). The contractor shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise. e) 30 days prior to any grading and construction activity for the project site, the Applicant shall notify by mailing all residents within a 600-foot radius of the project site of the days, and hours when grading and construction activity will commence.			
25.	Any septic system removal must comply with Riverside County Environmental Health requirements that require removal of most of the system and filling the tank with sand.	On-Going	Building / Planning / Engineering Divisions	
26.	The Project shall obtain any required regulatory permits from the USACE, RWQCB, and CDFW for drainage, runoff and water quality affecting any river or stream.	On-Going	Building / Planning / Engineering Divisions	

ATTACHMENT A – EXHIBIT 1 "CATT CROSSINGS" RETAIL CENTER PROJECT			
Project No.: CUP / Plot Plan No. 22-0181			
Applicant: Catalyst Commercial Group (Mr. Brandon Humann) **APN: 380-240-001; 380-240-052; 380-240-064; 380-240-063; 380-240-062**			
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27. The Project shall comply with City of Wildomar Municipal Code Section 8.28 as implemented by the Riverside County Fire Department.	On-Going	Building / Planning / Engineering Divisions	
28. As required by City of Wildomar Municipal Code Section 13.12.050, Regulatory Consistency, and the MS4 Permit from the San Diego Regional Water Quality Control Board, stormwater drainage improvements must be consistent and in accordance with these provisions.	On-Going	Public Works Department	
29. As required by City of Wildomar Municipal Code Section 16.40.10, Installation Requirements, the project would comply with all applicable requirements for undergrounding utilities per this code section.	On-Going	Public Works Department	
30. As required by City of Wildomar Municipal Code Section 8.104, Solid Waste Collection and Disposal, the generation, accumulation, handling, collection, transportation, conversion, and disposal of solid waste must be controlled and regulated through the provisions of this chapter.	On-Going	Public Works Department	
31. The contractor shall adhere to applicable measures contained in Table 1 of Rule 403 including, but not limited to: • All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions.	On-Going	Building / Planning / Engineering Divisions	

	• The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered as necessary throughout the day. • The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 mph or less.			
32.	The following measures shall be incorporated into Project plans and specifications as implementation of SCAQMD Rule 1113: Only "Low-Volatile Organic Compounds (VOC)" paints (no more than 50 gram/liter (g/L) of VOC) consistent with SCAQMD Rule 1113 shall be used.	On-Going	Building / Planning / Engineering Divisions	
33.	Wildomar Municipal Code Section 13.12.060 requires that new construction and renovation control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. The City shall identify the best management practices (BMPs) that may be implemented in addition to those provided in the WQMP to prevent such deterioration, as part of the building plan check review process prior to construction.	On-Going	Building / Planning / Engineering Divisions	
34.	Wildomar Municipal Code Section 13.12.090 states that any Industrial/Commercial Construction Activity are subject to any NPDES permit issues by the United States Environmental Protection Agency, the State Water Resources Control Board, the Santa Ana Regional Water Quality Control Board, the San Diego Regional Water Quality Control Board or the Colorado River Basin Regional Water Quality Control Board, shall comply with all requirements of such permit.	On-Going	Building / Planning / Engineering Divisions	

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35. The grading plan shall include the following information in the Notes Section of the Grading Plan: "No grubbing/clearing of the site shall occur prior to scheduling the pre-grading meeting with Engineering. All project sites containing suitable habitat for burrowing owls, whether owls were found or not, require a 30-day preconstruction survey that shall be conducted within 30 days prior to ground disturbance to avoid direct take of burrowing owls. If the results of the survey indicate that no burrowing owls are present on-site, then the project may move forward with grading, upon Planning Division approval. If burrowing owls are found to be present or nesting on-site during the preconstruction survey, then the following recommendations must be adhered to: Exclusion and relocation activities may not occur during the breeding season, which is defined as March 1 through August 31, with the following exception: From March 1 through March 15 and from August 1 through August 31 exclusion and relocation activities may take place if it is proven to the City and appropriate regulatory agencies (if any) that egg laying or chick rearing is not taking place. This determination must be made by a qualified biologist."	On-Going	Planning & Engineering Divisions	
Prior to the Issuance of Grading Permits			
36. Prior to the issuance of a grading permit, the Applicant shall comply with the construction noticing sign board requirements of Chapter 15.04.030 of the WMC as follows: A. Intent. It is the intent of this section to establish regulations for posting on-site construction information signs during construction	Prior to Issuance of Grading Permits	Building and Engineering Divisions	

	activity for new residential, commercial and industrial development projects. B. Applicability. The posting of on-site construction information signs during construction activity for new residential, commercial and industrial development projects shall be limited to projects located in residential, commercial and industrial zoned lands. C. Construction Sign Standards. 1. One non-illuminated sign shall be required per development site, except that if the site has two or more street frontages, one additional sign shall be required per street frontage. 2. The sign(s) shall be placed along the street frontage nearest to the construction entrance(s) to the project site and include information identifying the name of the developer and contractor, on-site contact information and phone number, allowed days and hours of construction activity (i.e., Monday - Saturday, 6:30 a.m. to 7:00 p.m. with no construction activity on Sundays or legal holidays). The information shall also include a statement that complaints regarding the operation can be lodged with the City of Wildomar Code Enforcement Division (951) 677-7751, and any other information deemed appropriate by the City. 3. The size of the sign board shall be four feet wide by six feet high (24 square feet) made of wood, or similar durable material and mounted with two vertical four-inch by four-inch posts, made of wood or similar durable material. The total height of the sign			

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	board shall not exceed eight feet from the ground and include the city logo in the upper left corner of the sign board. 4. The sign(s) shall be reviewed by the Building Official prior to construction of said sign. Sign(s) shall be posted on the property a minimum of two weeks prior to any grading activities and be removed from the property within 30 days after the last certificate of occupancy is issued by the City.			
37.	Concurrent with the submittal of grading plans, the applicant shall submit one (1) electronic set of detailed/complete landscape and irrigation construction drawings (electronic Pdf format) to the Planning Division, including on-site and public right-of-way for review and approval by the Planning Division. Said landscape and irrigation plans shall be prepared by a licensed Landscape Architect and shall comply with all requirements of the City's Landscape Design Guidelines and Standards. The landscape plans shall also include the following: a) Landscape plans shall be drawn at a scale of 20 feet equal to 1 foot or larger. b) No light fixture shall be designed for any location in a planting area, which would make it necessary to eliminate a tree. The location of all overhead light fixtures and utilities shall be identified on the grading and site plan. c) All above ground utilities shall be shown on the precise grading plans in their exact locations. Building and landscape backflow prevention units and transformers shall be located in shrub areas. Double detector checks shall be fully screened from view. The	Concurrent with the submittal of grading plans	Planning and Landscape Divisions	

	detector check/backflow device shall be painted a neutral/earth tone color and any pipes extending above ground shall be finished and painted to match the device. The detector check and post indicator shall be set back at least 10 feet away from the driveway or sidewalk in a shrub area. Transformers shall be screened with 5 feet of landscaping outside the required setback (18 inches on sides and 8 feet at the front doors). d) All ground covers shall be installed from living plant materials. Spacing shall be such that 100% coverage is achieved within 1 year of the installation. e) All parking lot planter areas shall be a minimum of 5 feet wide excluding curbs, walkways and required concrete strip adjacent to parking spaces (6" curb with a 12" wide by 4" deep reinforced concrete strip adjacent). A detail shall be drawn on the civil engineer's plan to illustrate this application in all relevant locations. f) All plants within the detention basin shall be California native. The trees shall include *Quercus agrifolia* (coast live oak) and *Platanus racemosa* (sycamore). The shrubs shall include *Heteromeles arbutifolia* (toyon) or as approved by the City Landscape Architect per the project landscape plans. g) All planting areas damaged during construction shall be replaced at the direction of the City Landscape Architect. h) The irrigation controller shall be a weather-based controller that measures evapo-transpiration. A rain shut-off device is required. Drip irrigation is required in all planting areas.			

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i) All soil amendments and fertilizers shall be organic as a storm-water best management practice. Soil analysis and agronomic soil report shall be submitted to the City with the landscape plans, including the following: soil texture, percentage of organic matter, soil infiltration rate (measured or derived from soil texture/infiltration rate tables), pH and total soluble salts, macro-nutrients, micro-nutrients, recommendations for organic fertilizers and amendments. j) No plant materials that could freeze, damage paving, or have thorns are allowed. k) Prior to construction, the job site superintendent and the landscape contractor shall meet with the City's Landscape Architect and Planning Division representative shall meet for a pre-job meeting. No landscaping shall occur prior to the meeting. l) Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect. m) Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. Protection of Rough graded slopes will be based on the approved BMP's as depicted in the approved Storm Water Pollution Prevention Plan. n) The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or			

	greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer. o) Several buildings have undersized landscape planters. The plant material for these areas will be further evaluated during the review of construction drawings. Carefully select plant material that will naturally grow within the restricted planter widths. Do not propose shrubs that will require continuous trimming to control width or height. p) Water quality basin bottom is typically planted with material from containers, 4" pots, or plugs. Hydroseed is not preferred. This allowance shall be further evaluated with landscape construction drawings. q) Slope planting shall achieve full coverage and consist of permanent ground cover adequately planted with shrubs and/or trees to the satisfaction of the Community Development Director. Plant material and mulch shall be suitable for slope conditions and prevention of surface erosion. r) Stormwater basin slopes shall be planted with spreading, stabilizing ground covers and shrub groupings from containers. s) Stormwater basin bottom shall be planted with species suitable for both wet and dry conditions. Basin bottom shall be planted with the plant material from containers, 4" pots, or plugs. Hydroseed is not preferred, and the allowance shall be further evaluated with landscape construction drawings.			

	t) If required by the Fire Department, provide a fuel modification plan in compliance with the Fire Department's requirements. All planting shall be designed using approved fire resistive plants, review and modify preliminary plant list to comply. u) Fire apparatus access roads shall be illustrated and noted on landscape plan. Trees are to be located so that mature canopies do not encroach into the access road. Remove any tree in conflict with this restriction.			
38.	Special Landscape Conditions: • All plantings within the Very High Fire Severity Zone shall be designed using only fire resistive plants. • Trees are to be located so that the mature canopies do not encroach into the fire access road clear zone of 28 feet wide and 13.5 feet high. Remove any tree in conflict with this restriction. • If required by the Fire Department, provide a fuel modification plan in compliance with the Fire Department's requirements. All landscape shall follow any required fuel modification horizontal or vertical spacing and requirements. • Avoid plants that require cutting back to keep them within a specific area or at a trimmed height. Carefully select and locate plants where they will be allowed to grow to maturity and keep their natural shape. • Above ground utilities shall be located in shrub areas and screened as required from public view. Utilities and light standard locations	Prior to Issuance of Grading Permits	Planning and Landscape Divisions	

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	shall be coordinated with Owner's engineering team to avoid conflicts with required tree locations and utility screening.			
39.	Prior to the issuance of a grading permit, the developer shall submit a final geotechnical soils reports to the City Engineer and/or Building Official for review and approval. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by the City of Wildomar.	Prior to Issuance of Grading Permits	Building and Engineering Depts.	
40.	Prior to the issuance of a mass or precise grading permit, the Applicant shall submit a haul permit for any import of material to the site or export of material off-site for review and approval by the City Engineer and Community Development Director. The request for a haul permit shall include a haul route plan addressing the limitations of haul hours, number of loads per day and the posting of traffic control personnel at all approved entrances/exits onto public roads. This haul permit shall be in place prior to the issuance of the grading permit and the mobilization of equipment on the project site. If the proposed material source or disposal site does not have an approved environmental assessment, a grading environmental assessment shall be submitted for review and approval by the Community Development Director prior to the issuance of the haul permit.	Prior to Issuance of Grading Permits	Planning and Engineering Depts.	
41.	Prior to the issuance of grading permits, the Project will obtain any required permits under Section 404, Section 402 and Section 401 of the Clean Water Act (33 U.S.C.1341, 1342, 1344) related to impacts and discharges in jurisdictional waters of the United States, including	Prior to Issuance of Grading Permits	Planning and Engineering Depts.	

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	any required corresponding state permits or authorizations under the California Water Code and Title 27, CCR Section 20005 et seq.			
42.	Prior to the issuance of grading permits, the Project will obtain any required permits from the California Department of Fish & Wildlife for any activity that may adversely affect any river, stream, channel or lake as set forth in Cal. Fish & Game Code, Section 1602 et seq.	Prior to Issuance of Grading Permits	Planning and Engineering Depts.	
Prior to Issuance of Building Permits				
43.	Prior to issuance of building permits, the Applicant shall submit a detailed/final photometric analysis and lighting plan for review and approval by the Planning and Building departments. The proposed development approved by the City Council shall comply with the standards and requirements of the City's Light Pollution Ordinance in accordance with Chapter 8.64 of the Wildomar Municipal Code.	Prior to Issuance of Building Permits	Planning and Building Departments	
44.	Prior to issuance of building permits, the Applicant shall pay City Development Impact Fees (DIF) in accordance with the Wildomar DIF Program (Commercial Retail category) adopted by the City Council in June 2015, and all applicable Regional Impacts Fees (i.e., WRCOG/TUMF fees, LEUSD school fees, MSHCP fees, SKR fees, etc.).	Prior to Issuance of Building Permits	Planning, Building and Engineering Depts	
45.	Prior to the issuance of a building permit for any sign(s) within the project, the Applicant shall obtain approval of sign permits (building & electrical) from the Building Department. All signs within the center shall be consistent with the project sign program which shall be submitted and approved by the Planning Division prior to the issuance	Prior to Issuance of Building Permits	Planning Division	

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	of any building permit. All applicable provisions of Chapter 17.252 (Sign Regulations), and Chapter 8.64 (Light Pollution) of the Wildomar Municipal Code. The following additional lighting conditions shall be complied with: All lighting shall be indirect, hooded and positioned so as not to reflect onto adjoining property or public streets.			
Prior to Issuance of a Certificate of Occupancy			
46.	Prior to the issuance of occupancy permits, the following conditions shall be satisfied: • Prior to occupancy permits, the landscape improvements outlined in Planning Condition No. 37 & 38 above shall be completed. • Performance securities, in the amount determined by the City Landscape Architect and Community Development Director, shall be provided to guarantee the adequate maintenance of the landscaping materials and irrigation system in accordance with the approved plans for a period of one (1) year from the date of final clearance of the installed landscaping by the City. Acceptable forms of security shall be limited to cash deposit, cash bonds, or irrevocable letters of credit. The performance securities shall be released one (1) year after final clearance of the installed landscaping by the City, upon written request by the owner, if the landscaping has been adequately maintained in accordance with the approved landscape plans. A deposit to cover re-inspection of the landscape, at the current City rate shall be posted with the	Prior to the Issuance of Occupancy Permits	Planning Dept.	

	Planning Division prior to re-inspection for maintenance bond release. • The project landscape contractor shall provide the City with the Landscape Installation Certification of Completion stating that the landscaping was installed per the approved plans. The City will review the Certificate and conduct inspections to ensure that the landscape installation is in compliance with the approved landscape plans.			
47.	Prior to the issuance of the final Certificate of Occupancy permit, all required onsite landscape planting and irrigation improvements for the planning area shall have been installed and fully operational consistent with the approved construction plans. The plants shall be healthy and free of weeds, disease, or pests. The irrigation system shall be properly constructed and in good working order. The Applicant shall contact the Planning Division to schedule the final inspection(s).	Prior to the Issuance of Occupancy Permits	Planning Dept.	
48.	Prior to the Issuance of the final Certificate of Occupancy permit, all Riverside County Fire Department conditions shall be complied with and cleared by the Fire Department. The Applicant shall provide written verification from County Fire that all applicable conditions have been met.	Prior to final Certificate of Occupancy	Planning Dept.	

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PUBLIC WORKS/ENGINEERING/BUILDING DEPARTMENT CONDITIONS			
General Requirements/Conditions			
1. The developer shall obtain City approval for any modifications or revisions to the approval of this project in accordance with State law (Gov. Code 65913.4). Deviations not identified on the plans may not be approved by the City, potentially resulting in the need for the project to be redesigned. Amended entitlement approvals may be necessary as a result.	On-Going	Engineering	
2. The developer shall comply with the State of California Subdivision Map Act and all City ordinances and resolutions.	On-Going	Engineering	
3. No grading shall be performed without the prior issuance of a grading permit by the City.	On-Going	Engineering	
4. Written permission shall be obtained from the affected property owners allowing the proposed grading and/or facilities to be installed outside of the project boundaries.	On-Going	Engineering	
5. All grading shall conform to the California Building Code, including Appendix J, and all other relevant and applicable laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from PW/Engineering.	On-Going	Engineering	
6. All necessary measures to control dust shall be implemented by the developer during grading to the satisfaction of the City Engineer. A PM10 plan may be required at the time a grading permit is issued.	On-Going	Engineering	

7.	Graded slopes shall be limited to a maximum steepness ratio of 2:1 (horizontal to vertical) unless otherwise approved by the City Engineer.	On-Going	Engineering	
8.	Grading in excess of 199 cubic yards will require performance security to be posted with the City.	On-Going	Engineering	
9.	All retaining walls shall require a separate permit from the Building Department. The retaining wall calculations shall address earth and hydrostatic loads associated with the water basins. The footings along the westerly property line must be designed in a manner that additional loads are not placed on the existing structure to the west.	On-Going	Engineering	
10.	The developer/owner or contractor shall apply for an Encroachment Permit for work performed within the public right of way. Compliance with current environmental regulations applies and additional studies and/or permits may be required to the extent applicable under State law (Gov. Code 65913.4).	On-Going	Engineering	
11.	The developer's contractor is required to submit for a haul route permit for the hauling of material to and from the project site. Said permit will include limitations of haul hours, number of loads per day and the posting of traffic control personnel at all approved entrances/exits onto public roads. Hauled material shall be to/from an environmentally approved site.	On-Going	Engineering	
12.	Storm water and non-storm water discharges from the project site shall be mitigated in conformance with the Regional Water Quality Control Board permit(s) and/or site specific SWPPP prior to entering into the MS4s including, but not limited to, storm drains, streets, channels, etc...	On-Going	Engineering	

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13.	For commercial/industrial projects, the developer/applicant shall submit a Business Registration application to the City for approval. The business shall be required to pay a fee to the City with the Business Registration for Stormwater Compliance Inspections that are required by the City's NPDES Permit. The requirement for stormwater compliance inspections is recurring for the duration of the development, unless otherwise approved. The developer/applicant shall also submit to the City, prior to Certificate of Occupancy, a document that includes the Business' Statement of Operations and a summary of the business' best management practices for stormwater pollution prevention.	On-Going	Engineering	
14.	The developer/applicant shall provide all tenants/employees/homeowners with educational materials regarding Best Management Practices for Stormwater Pollution Prevention. Educational materials are available on the Riverside County Flood Control and Water Conservation District's website.	On-Going	Engineering	
15.	The developer/owner/tenant shall comply with all applicable laws and regulations regarding the proper disposal of waste materials generated from the business.	On-Going	Engineering	
16.	The Developer shall dedicate, design and construct all improvements in accordance with the City of Wildomar Road Improvement Standards & Specification, Improvement Plan Check Policies and Guidelines, as further conditioned herein and to the satisfaction of the City Engineer. In the absence of a subdivision map, rights-of-way and easements shall be dedicated by separate instrument.	On-Going	Engineering	

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17.	Erosion control – landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect. and bonded. The soils engineer shall review the erosion control plans for conformance with the Geotechnical Report's Findings and Recommendations. Erosion control shall be placed within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The Developer shall plant & irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with soil stabilizers and ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer and City Planner. Protection of Rough graded slopes will be based on the approved BMP's as depicted in the approved Storm Water Pollution Prevention Plan.	On-Going	Engineering	
18.	The landscape plans of all parkway and Landscape Maintenance/ Community Facilities District (CFD) lots shall be prepared by a licensed Landscape Architect and shall be submitted to the City for review and approval.	On-Going	Engineering	
19.	Should this project lie within any assessment/benefit district, the project proponent shall, prior to acceptance of improvements, make application for and pay for their reapportionment of the assessments or pay the unit fees in the benefit district unless said fees are otherwise deferred or covered under the City's Community Facility District (CFD Services).	On-Going	Engineering	

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20.	The developer shall annex into the City's Community Facility District (CFD Services) and pay associated costs for annexation. Should this project lie within any assessment/benefit district that duplicates the services to be covered under CFD Services then the developer shall de-annex from said assessment/benefit district.	Prior to First Building permit issuance	Engineering	
21.	The developer shall design and construct all driveways in accordance with the applicable City of Wildomar Improvement Standards.	On-Going	Engineering	
22.	The improvement plans for the required public improvements must be prepared and shall be based upon a design profile extending a minimum of 300 feet beyond the project boundaries at a grade and alignment as approved by the City Engineer. Catt Road plans shall be submitted and approved for construction to its ultimate classification as a Local Road. The plans shall include construction of applicable curb, gutter and sidewalk improvements along its frontage. The ultimate modified design shall be coordinated with the City Engineering Division and subject to the satisfaction of the City Engineer. Arya Road plans shall be submitted and approved for construction to its ultimate classification as a Local Road, and as identified to support the proposed project per the approved TIA and subject to the satisfaction of the City Engineer.	Prior to approval of Improvement Plans	Engineering	
23.	Above-ground utilities shall be undergrounded by the developer in accordance with City of Wildomar Municipal Code 16.04.010. The undergrounding of utilities shall be reflected on the project improvement	On-Going	Engineering	

	plans. A non-interference letter from Southern California Edison (SCE), shall be submitted for the proposed development.			
24.	Improvement Plans for underground utilities (eg. Water, sewer, electrical, telecommunications, etc.) to be placed in public right of way or easement that will be owned and maintained by other entities shall be reviewed by the City. The City shall have a place on the Title Sheet to accept the plans with a statement "The city's acceptance is limited to the placement of utilities relative to public infrastructure clearances, uses and future plans within the right of way." The plans shall be attached to a city Encroachment Permit.	On-Going	Engineering	
25.	All flood control plans to be reviewed by the City or the Riverside County Flood Control District (RCFCD) shall be submitted through the City of Wildomar, unless otherwise directed by the City Engineer. For projects requiring RCFCD review the developer shall pay the appropriate fees to RCFCD.	On-Going	Engineering	
26.	Prior to approval of improvement plans, the improvement plans shall show all streets to be improved consistent with improvements outlined in these conditions of approval. At the discretion of the applicant, the existing pavement may be cored to confirm adequate section and R values during the design process and any findings shall be incorporated into the project design. Therefore, improvements may include full pavement reconstruction, grind and overlay, or slurry seal. All striping shall be replaced in kind.	Prior to Improvement Plan Approval	Engineering	

27.	Prior to improvement plans approval, the applicant shall ensure that all water meters, fire hydrants or other water appurtenances shall not be located within a drive aisle or path of travel.	Prior to Improvement Plan Approval	Engineering	
28.	Prior to approval of improvement plans, the improvement plans submitted by the applicant shall include the following: a) All driveways shall conform to the applicable City of Wildomar standards and shall be shown on the street improvement plans. c) All street intersections shall be at ninety (90) degrees or as approved by the City Engineer. e) Under grounding of existing and proposed utility lines. f) Street lights. g) All other public improvements shall conform to City of Wildomar standards.	Prior to Improvement Plan Approval	Engineering	
Prior to Issuance of Grading Permit				
29.	The developer shall submit a geotechnical/soils reports to the City Engineer for review and approval prior to issuance of grading permit. The findings and recommendations shall reflect current conditions and the report shall be no older than one (1) year. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by City of Wildomar.	Prior to Issuance of a Grading Permit	Engineering	
30.	The developer shall obtain any and all easements and/or permissions necessary to perform the grading required for the project. A notarized	Prior to Issuance of a Grading Permit	Engineering	

ATTACHMENT A – EXHIBIT 1 "CATT CROSSINGS" RETAIL CENTER PROJECT			
Project No.: CUP / Plot Plan No. 22-0181			
Applicant: Catalyst Commercial Group (Mr. Brandon Humann) **APN: 380-240-001; 380-240-052; 380-240-064; 380-240-063; 380-240-062**			
CUP/Plot Plan No. 22-0181 - Approval Date: **May 3, 2023**	**CUP/Plot Plan No. 22-0181 - Expiration Date:** **May 3, 2026**		
Conditions of Approval	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (Date and Signature)**
	letter of permission from all affected property owners or easement holders, or encroachment permit, is required for all off-site grading.			
31.	Prior to the issuance of a grading permit the developer shall submit recorded slope easements or written letters of permission from adjacent landowners in all areas where grading is proposed to take place outside of the project boundaries.	Prior to Issuance of a Grading Permit	Engineering	
32.	The project specific SWPPP and an Erosion/Sediment Control plan shall be provided to the Public Works Dept. and always provided on the project site.	Prior to Issuance of a Grading Permit	Engineering	
33.	The Developer shall provide the Engineering Department evidence of compliance with the National Pollutant Discharge Elimination System (NPDES); obtain a construction permit from the State Water Resource Control Board (SWRRCB); and, reference the WDID number on the improvement/grading.	Prior to Issuance of a Grading Permit	Engineering	
34.	The developer shall have obtained approval for the import/export location from the City of Wildomar. Additionally, if either location was not previously approved by an Environmental Assessment, prior to issuing a grading permit, a Grading Environmental Assessment shall be submitted to the Planning Director for review and comment and to the City Engineer for approval.	Prior to Issuance of a Grading Permit	Engineering	
35.	A Final Water Quality Management Plan (WQMP), in conformance with the requirements of the City of Wildomar (City) shall be prepared, submitted, and approved. All stormwater quality treatment devices shall be located outside of the ultimate public right of way, unless otherwise	Prior to Issuance of a Grading Permit	Engineering	

	approved. The developer shall prepare the Final WQMP in conformance with the City of Wildomar WQMP (which is based on the SMR Model WQMP) to the satisfaction of the City Engineer. The WQMP shall also address the effects of hydromodification caused by the project, per the City of Wildomar WQMP Model Document. Due to the high-density land-use of this project, the WQMP shall include the installation of Trash Capture Devices for both private and public storm drain facilities, as required by the State Water Board's Trash Amendments and the subsequent order issued by the San Diego Regional Water Quality Control Board to the City. Trash Capture Devices shall be on the State Water Board's "Certified Trash Full Capture Systems List of Trash Treatment Control Devices". Trash Control Devices selected for use in City storm drains shall be approved by the City Engineer. Trash Control Devices installed in City storm drains shall be included in the Community Facilities District (CFD) for maintenance.			
36.	A Grading Agreement and a Storm Water Management Facilities Agreement shall be approved by the City Engineer and/or City Council.	Prior to Issuance of a Grading Permit	Engineering	
37.	The developer shall prepare and submit a comprehensive drainage study and plan that includes, but is not limited to: definition with mapping of the existing watersheds; a detailed pre- and post-project hydrologic and hydraulic analysis of the project and project impacts; definition of the local controlling 100-year frequency water levels existing and with project; the proposed method of flow conveyance to mitigate the potential project impacts with adequate supporting calculations; any proposed improvements to mitigate the impacts of	Prior to Issuance of a Grading Permit	Engineering	

	increased runoff from the project and any change in runoff; including quality, quantity, volume, and duration in accordance with City of Wildomar's Hydrology Manual, Improvement Standards, and to the satisfaction of the City Engineer. Specifically, the study will: a. Analyze the detention basin drainage area for a project using the Rational Method 100-year storm event for the pre-project and post-project. b. Analyze 4 hydrographs for the detention basin drainage area for a project using the Unit Hydrograph 100-year storm event for the 1-hour, 3-hour, 6-hour, and 24-hour storm durations for post-project condition. c. Using the Unit Hydrographs determine which duration provides the highest flow rate. Adjust parameters such as lag time, flow line roughness coefficient or other parameters to calibrate Unit Hydrograph model to provide results similar to the Rational Method. Using the calibrated Unit Hydrograph for the detention basin drainage area perform basin routing analysis to demonstrate that the outflow is less than the pre-project Rational Method flow rate.			
38.	Prior to approval of improvement plans, the improvement plans submitted by the applicant shall address the following: a) The project drainage design shall be designed to accept and properly convey all on- and off-site drainage flowing on or through the site.	Prior to Issuance of a Grading Permit	Engineering	

	b) The project drainage system design shall protect downstream properties from any damage caused by alteration of drainage patterns such as concentration or diversion of flow. c) Concentrated drainage on commercial lots shall be diverted through parkway drains under sidewalks. All non-residential lots shall drain toward an approved water quality or drainage facility. Once onsite drainage has been treated it may continue into an approved public drainage facility or diverted through under-sidewalk parkway drains.			
39.	Prior to issuance of any grading permit, any environmental Phase I and Phase II applicable findings and recommended actions to remove contamination resulting from previous use of the subject site shall be implemented.	Prior to Issuance of a Grading Permit	Engineering	
40.	The Construction Runoff Management Plan (or Erosion/Sediment Control Plan) shall include enhanced BMPs, for installation of landscaping to minimize the potential runoff of nutrients which is the Priority Water Quality Condition of Concern in the Santa Margarita River Watershed, to the satisfaction of the City Engineer.	Prior to Issuance of a Grading Permit	Engineering	
41.	City storm drain outfalls that will discharge to a Receiving Water, as defined by the City's MS4 Permit, shall be separate from and shall not receive flows from any private storm drain system.	Prior to Issuance of a Grading Permit	Engineering	
42.	The developer shall show all easements per the Title Report to the satisfaction of Public Works. Any conflict with existing easements resulting in the site being redesigned potentially requires a minor change or amendment approval by Planning Commission.	Prior to Issuance of a Grading Permit	Engineering	

ATTACHMENT A – EXHIBIT 1 "CATT CROSSINGS" RETAIL CENTER PROJECT			
Project No.: CUP / Plot Plan No. 22-0181			
Applicant: Catalyst Commercial Group (Mr. Brandon Humann) **APN: 380-240-001; 380-240-052; 380-240-064; 380-240-063; 380-240-062**			
CUP/Plot Plan No. 22-0181 - Approval Date: **May 3, 2023**	**CUP/Plot Plan No. 22-0181 - Expiration Date:** **May 3, 2026**		
Conditions of Approval	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (Date and Signature)**
43.	Prior to issuance of grading permit, the applicant shall demonstrate to the satisfaction of the City Engineer that the proposed project will not unreasonably interfere with the use of any easement holder of the property.	Prior to Issuance of a Grading Permit	Engineering	
44.	Prior to issuance of Grading Permit, the applicant shall provide a final Traffic Impact Analysis for approval acceptable to the City Engineer. This Traffic Impact Analysis shall identify improvements necessary for the project along with information regarding fair-share of project trips at offsite locations.	Prior to Issuance of a Grading Permit	Engineering	
Prior to Issuance of Building Permits			
45.	The developer/owner shall obtain a grading permit prior to building permit issuance, and/or approval to construct from the City Engineer.	Prior to Issuance of a Building Permit	Engineering /Building	
46.	Any public improvements shall be approved by the City Engineer, and all improvements to be constructed shall be secured by the Developer.	Prior to Issuance of a Building Permit	Engineering /Building	
47.	The developer shall provide will serve letters from the appropriate utility agencies.	Prior to Issuance of a Building Permit	Engineering /Building	
48.	The developer shall provide approval letter from Fire Department for fire water service.	Prior to Issuance of a Building Permit	Engineering /Building/ Fire	
49.	The developer shall install any missing streetlight facilities along the project frontage, in accordance with the applicable City of Wildomar Road Improvement Standards & Specification, Improvement Plan Check Policies and Guidelines, City Ordinances and to the satisfaction of the City Engineer.	Prior to Certificate of Occupancy	Engineering /Building	

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50.	The developer shall annex into CFD Service District 2022-1, or current equivalent Community Facilities District, to offset development related costs for maintenance and services for the applicable development.	Prior to Issuance of a Building Permit	Engineering	
51.	The developer/applicant shall demonstrate that all applicable development related fees, impact fees, and mitigation fees have been satisfactorily paid.	Prior to Issuance of a Building Permit or Certificate of Occupancy	Engineering /Building	
52.	The developer shall pay the appropriate impact mitigation fee to the Riverside County Flood Control and Water Conservation District and provide the City receipt of payment.	Prior to Issuance of a Building Permit	Engineering /Building	
53.	The developer shall construct the stormwater quality treatment devices to accommodate all project runoff in accordance with City of Wildomar's Hydrology Manual, Stormwater Quality Best Management Practice Design Handbook, Improvement Standards, and to the satisfaction of the City Engineer. All stormwater quality treatment devices shall be constructed outside of the ultimate public right of way.	Prior to Issuance of a Building Permit	Engineering	
54.	Prior to issuance of Building Permit, the developer shall post security guaranteeing the construction of all required public improvements. Said improvements shall include the following: a) All street facilities: 1. Any missing or substandard public improvements on Catt Road, to half street plus 12' along the project frontage.	Prior to Issuance of a Building Permit	Engineering	

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	2. Traffic Mitigation measures as outlined in approved Traffic Analysis dated March 28, 2023, with minor modifications. 3. Recommended fair share contributions as outlined in Section 7.0, Table 15, 16, and 17 of the approved Traffic Impact Analysis. 4. All ingress and egress shall meet minimum commercial driveway standards. b) All drainage facilities to serve the proposed, and as outlined in the approved Hydrology Study. c) All required grading, including erosion control. Additional erosion control may be required per the City Engineer. d) All required sewer, water and reclaimed water facilities per Elsinore Valley Municipal Water District (EVMWD) standards and specifications, per approved plans. e) All required landscaping facilities on-site, as well as parkway landscaping per approved streetscape plans and design guidelines. f) All under grounding of overhead utilities, except for cables greater than 32k volts, per Wildomar Municipal Code			
55.	Prior to building permit issuance, the applicant shall commence construction or guarantee the construction of all new or upgraded required public improvements including but not limited to, the potable water line, sewer line, reclaimed water line, potable water services, sewer laterals, reclaimed water services, double detector check	Prior to Issuance of a Building Permit	Engineering	

	assemblies and reduced pressure principal assemblies within the public right of way and/or easements.			
56.	Prior to issuance of building permits, the developer shall cause the civil engineer of record and soils engineer of record for the approved grading plans to submit pad certifications and compaction test reports for the subject lots where building permits are requested.	Prior to Issuance of Building Permits	Engineering	
57.	Prior to issuance of Building Permit, the applicant shall provide public improvement plans for approval.	Prior to Issuance of Building Permits	Engineering	
58.	Prior to issuance of Building Permit, the applicant shall provide a current cost estimate with conceptual improvement exhibit for improvements identified in the approved Traffic Impact Analysis including the locations listed below. This cost estimate will be reviewed by the City and shall be acceptable to the City Engineer. Either construction will be completed, or a fair-share shall be paid to the City of Wildomar based on the approved fair-share percentage as listed in table 7 of the approved Traffic Impact Analysis for the project and the approved cost estimate for the listed improvements.	Prior to Issuance of Building Permits	Engineering	
59.	Prior to issuance of Building Permit, the applicant shall either construct or pay to the City of Wildomar a fair share to future improvements at Arya Road and Clinton Keith Road, and Wildomar Trail at Clinton Keith Road associated with traffic signal improvements.	Prior to Issuance of Building Permits	Engineering	

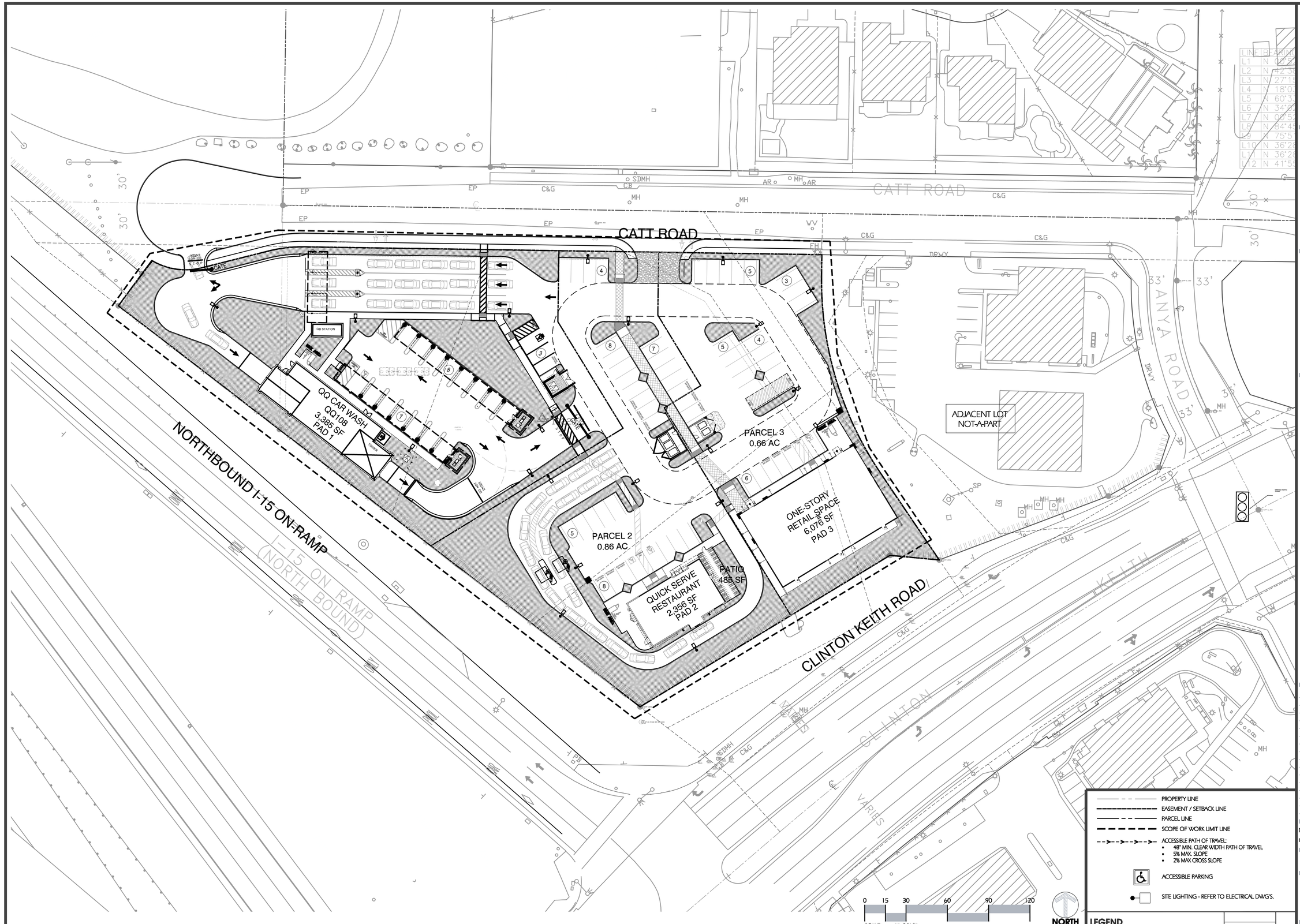
60.	Prior to issuance of Building Permit, the applicant shall either construct or pay to the City of Wildomar a fair share to future improvements at Arya Road and Clinton Keith Road associated with recommended queuing improvements.	Prior to Issuance of Building Permits	Engineering	
61.	Prior to issuance of Building Permit, the applicant shall pay to the City of Wildomar a fair share to future improvements at Arya Road and Clinton Keith Road, and Wildomar Trail at Clinton Keith Road associated with improvements for cumulative year with conditions.	Prior to Issuance of Building Permits	Engineering	
Prior to Building Occupancy, Final Inspection or Surety Release				
62.	Prior to issuance of Certificate of Occupancy, the applicant shall ensure all structural post construction BMPs identified in the approved project specific Final WQMP are constructed and operational.	Prior to Issuance of first Certificate of Occupancy	Engineering	
63.	Prior to issuance of the first Certificate of Occupancy, the applicant shall provide proof of notification to the future occupants of all non-structural BMPs and educational and training requirements for said BMPs as directed in the approved WQMP.	Prior to Issuance of first Certificate of Occupancy	Engineering	
64.	Prior to issuance of a Certificate of Occupancy, all proposed parkway, slope maintenance, and/or median landscaping specified in these Conditions of Approval shall be constructed.	Prior to Issuance of first Certificate of Occupancy	Engineering	
65.	Prior to release of public improvement security, the developer shall cause the civil engineer of record for the approved improvement plans to submit a set of as-built plans for review and approval by the Public Works Department.	Prior to release of public improvement security	Engineering	

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66.	Prior to issuance of a Certificate of Occupancy, the applicant shall field verify sight distance requirements at project driveways per the requirements of the City of Wildomar and provide documentation of adequate sight distance to the satisfaction of the City Engineer.	Prior to Issuance of first Certificate of Occupancy	Engineering	
67.	Walls and fences around the perimeter of the project, or along the public right-of-way, shall be treated with an anti-graffiti coating, consistent with current standards and guidelines, to aid in ongoing maintenance.	Prior to final Certificate of Occupancy	Engineering	
68.	Any deviations/revisions from the approved WQMP plans and specifications shall be submitted by the Engineer of Record and shall be approved by the City, prior to construction. Approved revisions shall be documented in the Final WQMP on-file with the City. The Developer shall also ensure that the Final WQMP on-file with the owner is also updated. Prior to final approval of the constructed WQMP, the Developer shall submit a certification letter, signed by the Engineer of Record, certifying that the WQMP has been constructed and installed per the approved plans and specifications, and that the WQMP is currently operating in conformance with the original design.	On-going	Engineering	
69.	Prior to issuance of certificate of occupancy, the applicant shall construct all frontage improvements including the following: a. Curb, gutter, sidewalk, drainage, ramps, driveways and landscaping on the project frontage with appropriate offsite transition to provide for public safety consistent with City Standards and applicable laws (ADA etc.).	Prior to final Certificate of Occupancy	Engineering	

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	Raised median on Clinton Keith Road with appropriate offsite transition consistent with City Standards and to the satisfaction of the City Engineer.			
RIVERSIDE COUNTY FIRE DEPARTMENT			
General Conditions			
1.	The applicant or developer must provide a fire hydrant system capable of delivering fire flow as required by the California Fire Code and Fire Department standards. Fire hydrants shall be spaced in accordance with the California Fire Code. Based on current standards, the required fire flow is estimated to be 2,500 GPM at 20 PSI for a 2-hour duration. Estimated fire flow is based on a 36,000 square foot building area with Type V-B construction and an approved fire sprinkler system per 2019 California Fire Code.	On-Going	Fire Department	
2.	The applicant or developer shall provide fire hydrants in accordance with the following: a) Prior to placing any combustibles on site, provide an approved water source for firefighting purposes. b) Prior to building permit issuance, submit plans to the water district for a water system capable of delivering fire flow as required by the California Fire Code and Fire Department standards. Fire hydrants shall be spaced in accordance with the California Fire Code. Based on current standards, the required fire flow is estimated to be 1,500 GPM at 20 PSI for a 2-hour duration. Estimated fire flow is based on a 6,076	On-Going	Fire Department	

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	square foot building area with a fire sprinkler system per 2022 California Fire Code.			
3.	Prior to building permit issuance, install the approved water system and contact the Fire Department for a verification inspection.	On-Going	Fire Department	
4.	Fire sprinkler system: buildings 3,600 square feet in area and larger require a fire sprinkler system per Wildomar Municipal Code and California Fire Code.	On-Going	Fire Department	
5.	Emergency vehicle access: California Fire Code requires emergency vehicle access to within 150 feet of all portions of all buildings. The carwash is more than 150 feet from the access road. Upon building plan submittal, plans must comply with access requirements.	On-Going	Fire Department	
6.	Prior to building permit issuance, install the approved water system, approved access roads, and contact the Fire Department for a verification inspection.	On-Going	Fire Department	
7.	If the project is to be constructed in phases, each phase of development must meet applicable standards prior to occupancy.	On-Going	Fire Department	
8.	Emergency vehicle access roads must meet fire department standards at the time of building permit application. Current standards require minimum 24-foot-wide roads. Roads must be capable of supporting at least 80,000 pounds. Gates must have a Knox Rapid Entry System.	On-Going	Fire Department	

End



PROPERTY LINE
EASEMENT / SETBACK LINE
PARCEL LINE
SCOPE OF WORK LIMIT LINE
ACCESSIBLE PATH OF TRAVEL:
- 48" MIN. CLEAR WIDTH PATH OF TRAVEL
- 5% MAX. SLOPE
- 2% MAX CROSS SLOPE

ACCESSIBLE PARKING

SITE LIGHTING - REFER TO ELECTRICAL DWG'S.

LEGEND

OVERALL SITE PLAN

1" = 30'

1

PM DESIGN
Architectural Solutions Group
38 EXECUTIVE PARK
SUITE 310
IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
PHONE: (949) 430-7051
EMAIL: jliederman@pmdginc.com
JEFF LIEDERMAN, ARCHITECT

SEAL:

CONSULTANT:

CATALYST COMMERCIAL GROUP

CATT CROSSING RETAIL CENTER

23825 CATT ROAD
WILDOMAR, CA

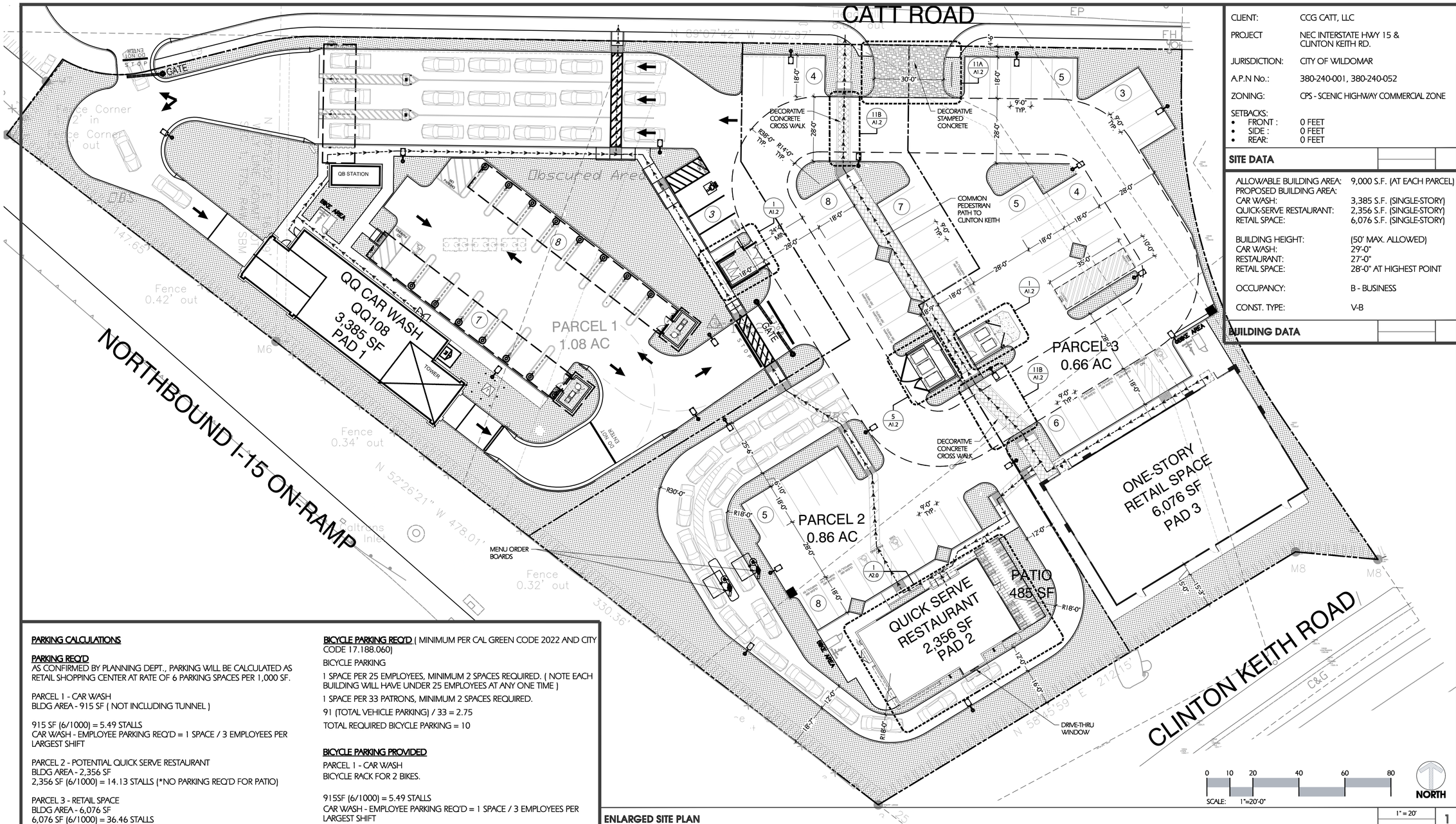
REV	DATE	DESCRIPTION
1	10.11.22	CUP SUBMITTAL
2	12.30.22	CUP RESUBMITTAL
3	03.07.23	CUP RESUBMITTAL
4	04.07.23	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

ARCH. PROJECT NO.:
CCG21001.0

SHEET NAME:
OVERALL SITE PLAN

SHEET NUMBER:
A1.0



CLIENT:	CCG CATT, LLC
PROJECT	NEC INTERSTATE HWY 15 & CLINTON KEITH RD.
JURISDICTION:	CITY OF WILDOMAR
A.P.N No.:	380-240-001, 380-240-052
ZONING:	CPS - SCENIC HIGHWAY COMMERCIAL ZONE
SETBACKS:	
• FRONT :	0 FEET
• SIDE :	0 FEET
• REAR:	0 FEET

SITE DATA

ALLOWABLE BUILDING AREA:	9,000 S.F. (AT EACH PARCEL)
PROPOSED BUILDING AREA:	
CAR WASH:	3,385 S.F. (SINGLE-STORY)
QUICK-SERVE RESTAURANT:	2,356 S.F. (SINGLE-STORY)
RETAIL SPACE:	6,076 S.F. (SINGLE-STORY)
BUILDING HEIGHT:	(50' MAX. ALLOWED)
CAR WASH:	29'-0"
RESTAURANT:	27'-0"
RETAIL SPACE:	28'-0" AT HIGHEST POINT
OCCUPANCY:	B - BUSINESS
CONST. TYPE:	V-B

BUILDING DATA

PM DESIGN
Architectural Solutions Group
38 EXECUTIVE PARK
SUITE 310
IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
PHONE: (949) 430-7051
EMAIL: jliederman@pmdginc.com
JEFF LIEDERMAN, ARCHITECT

SEAL:

CONSULTANT:

CATALYST COMMERCIAL GROUP

CATT CROSSING RETAIL CENTER

23825 CATT ROAD
WILDOMAR, CA

REV	DATE	DESCRIPTION
1	10.11.22	CUP SUBMITTAL
2	12.30.22	CUP RESUBMITTAL
3	03.07.23	CUP RESUBMITTAL
4	04.07.23	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK
ARCH. PROJECT NO.: CCG21001.0
SHEET NAME: ENLARGED SITE PLAN
SHEET NUMBER: A1.1

0 10 20 40 60 80
SCALE: 1"=20'-0"
NORTH

ENLARGED SITE PLAN

1" = 20'
1

PARKING CALCULATIONS

PARKING REQ'D
AS CONFIRMED BY PLANNING DEPT., PARKING WILL BE CALCULATED AS RETAIL SHOPPING CENTER AT RATE OF 6 PARKING SPACES PER 1,000 SF.

PARCEL 1 - CAR WASH
BLDG AREA - 915 SF (NOT INCLUDING TUNNEL)

915 SF (6/1000) = 5.49 STALLS
CAR WASH - EMPLOYEE PARKING REQ'D = 1 SPACE / 3 EMPLOYEES PER LARGEST SHIFT

PARCEL 2 - POTENTIAL QUICK SERVE RESTAURANT
BLDG AREA - 2,356 SF
2,356 SF (6/1000) = 14.13 STALLS (*NO PARKING REQ'D FOR PATIO)

PARCEL 3 - RETAIL SPACE
BLDG AREA - 6,076 SF
6,076 SF (6/1000) = 36.46 STALLS

TOTAL PARKING REQUIRED FOR CENTER = **58** STALLS

PARKING PROVIDED
WHOLE SITE = **73** PARKING STALLS PROVIDED.

BREAKDOWN OF PARKING:
STANDARD PARKING STALLS = 39
ACCESSIBLE PARKING STALLS = 4 (MEETS MINIMUM PER CBC 2022 AND CITY CODE 17.188.050) (INCL. 3 ACCESSIBLE VAN STALLS AS REQ'D)
VACUUM STALLS = 15 (INCL. 1 ACCESSIBLE VAN STALL AS REQ'D)
EV CAPABLE STALL = 13
CAR WASH - EMPLOYEE PARKING (BASED ON MAX 4 EMPLOYEES) = 2

TOTAL PARKING PROVIDED= **73**

LOADING ZONE REQ'D (PER ZONING CODE 17.188.040)

LOADING ZONE PROVIDED:
10' X 35' LOADING ZONE = 1

BICYCLE PARKING REQ'D (MINIMUM PER CAL GREEN CODE 2022 AND CITY CODE 17.188.060)
BICYCLE PARKING
1 SPACE PER 25 EMPLOYEES, MINIMUM 2 SPACES REQUIRED. (NOTE EACH BUILDING WILL HAVE UNDER 25 EMPLOYEES AT ANY ONE TIME)
1 SPACE PER 33 PATRONS, MINIMUM 2 SPACES REQUIRED.
91 (TOTAL VEHICLE PARKING) / 33 = 2.75
TOTAL REQUIRED BICYCLE PARKING = 10

BICYCLE PARKING PROVIDED
PARCEL 1 - CAR WASH
BICYCLE RACK FOR 2 BIKES.

915SF (6/1000) = 5.49 STALLS
CAR WASH - EMPLOYEE PARKING REQ'D = 1 SPACE / 3 EMPLOYEES PER LARGEST SHIFT

PARCEL 2 - POTENTIAL QUICK SERVE RESTAURANT
BICYCLE RACK FOR 2 BIKES.

PARCEL 3 - RETAIL SPACE
BICYCLE RACK FOR 2 BIKES.
TOTAL BICYCLE PARKING = 12 (1 RACK AT EACH BUILDING, EACH HOLDS 4 BIKES)

LANDSCAPE

LANDSCAPE AREA REQ'D (MINIMUM PER ZONING CODE 17.188.070)
WHOLE SITE CALCULATED AS ONE.

INTERIOR PARKING AREA (TOTAL PARKING 91 STALLS)
11% OF PARKING AREA REQUIRED

PARKING CALCS

LANDSCAPE AREA PROVIDED
INTERIOR PARKING AREA

PARCELS =	113,966 (2.62 AC)
LANDSCAPE =	30,109 SF
	27% LANDSCAPE COVERAGE

LANDSCAPE SHADING AREA REQ'D (MINIMUM PER ZONING CODE 17.188.070)
WHOLE SITE CALCULATED AS ONE.

INTERIOR PARKING AREA (TOTAL PARKING 83 STALLS)
50% OF PARKING AREA REQUIRED
LANDSCAPE SHADING PROVIDED
REFER TO PRELIMINARY LANDSCAPE PLAN FOR FURTHER INFO.

LANDSCAPE AREA BREAKDOWN:

PARCEL 1

SITE AREA =	47,579 SF± (1.09 AC)
LANDSCAPE =	14,466 SF
BLDG AREA =	3,385 SF

PARCEL 2

SITE AREA =	37, 506 SF± (0.86 AC)
LANDSCAPE =	10,542 SF
BLDG AREA =	2,356 SF

PARCEL 3

SITE AREA =	28,883 SF± (0.66 AC)
LANDSCAPE =	5,101 SF
BLDG AREA =	6,076 SF

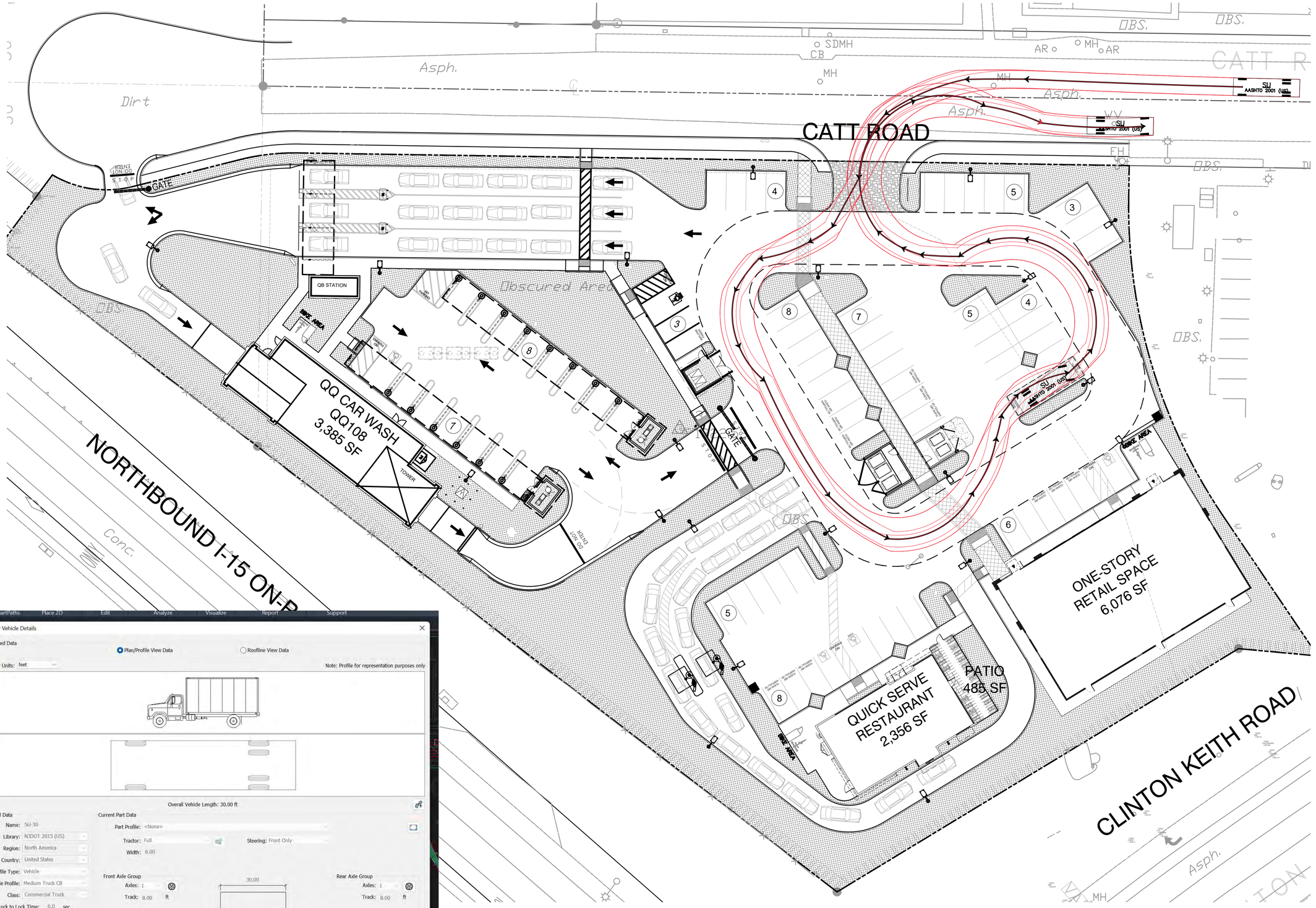
OVERALL:

PARCELS =	113,966 (2.62 AC)
LANDSCAPE =	30,109 SF
	27% LANDSCAPE COVERAGE

LANDSCAPE CALCS

- PROPERTY LINE
- EASEMENT / SETBACK LINE
- PARCEL LINE
- ACCESSIBLE PATH OF TRAVEL:
  - 48" MIN. CLEAR WIDTH PATH OF TRAVEL
  - 5% MAX. SLOPE
  - 2% MAX CROSS SLOPE
- ACCESSIBLE PARKING
- SITE LIGHTING - REFER TO ELECTRICAL DWG'S.
- WALL MOUNTED LIGHTS
- SCONCES
- LANDSCAPE
- CONCRETE AT DRIVE AISLE AND PARKING

LEGEND



0 10 20 40 60 80

SCALE: 1"=20'-0"

NORTH

TRUCK TURN EXHIBIT - DELIVERY TRUCK

1" = 20'

1

PM DESIGN
Architectural Solutions Group
38 EXECUTIVE PARK
SUITE 310
IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
PHONE: (949) 430-7051
EMAIL: jliederman@pmdginc.com
JEFF LIEDERMAN, ARCHITECT

SEAL:

CONSULTANT:

CATALYST COMMERCIAL GROUP

CATT CROSSING RETAIL CENTER

23825 CATT ROAD
WILDOMAR, CA

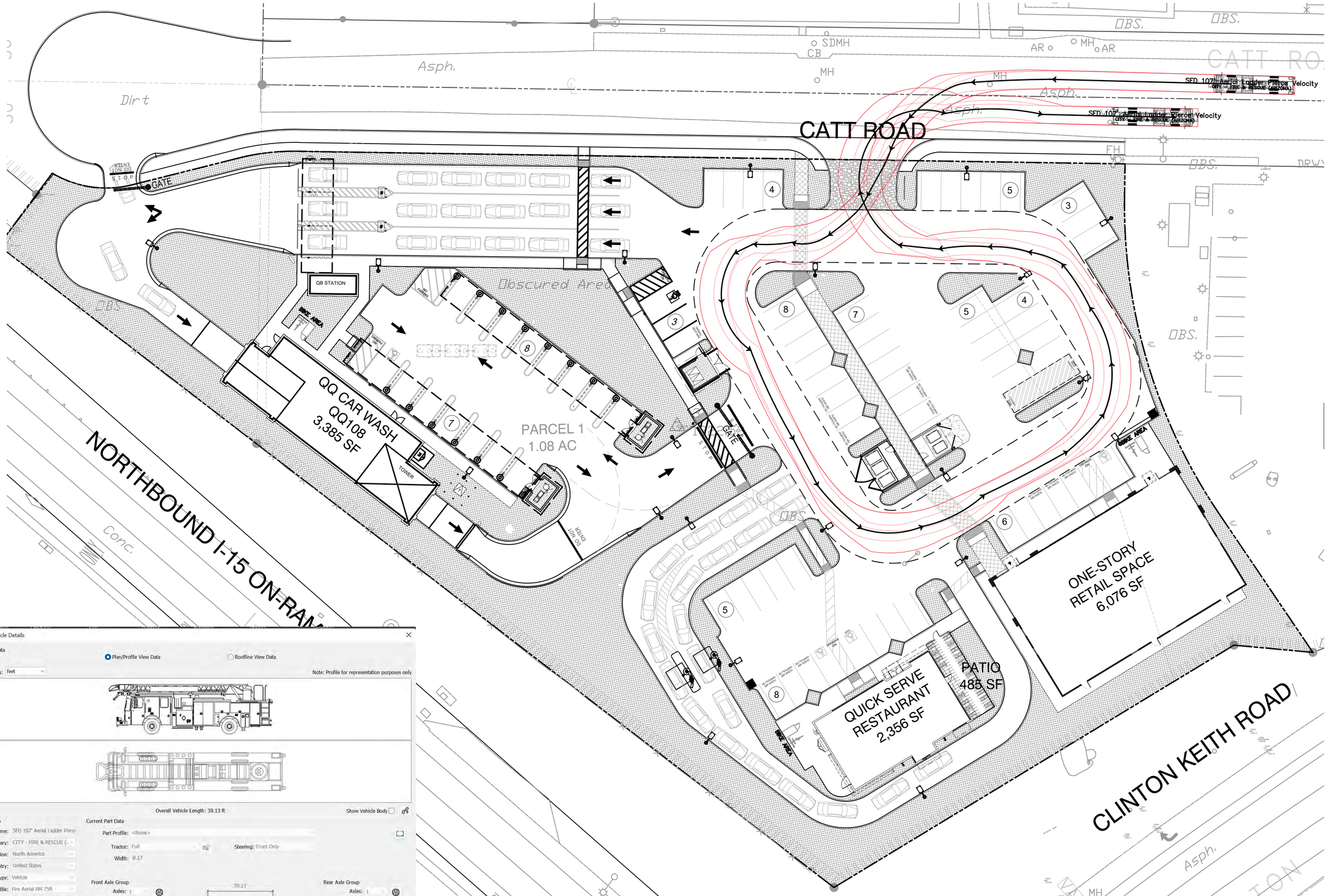
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2	12.30.22	CUP RESUBMITTAL
3	03.07.23	CUP RESUBMITTAL
4	04.07.23	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

ARCH. PROJECT NO.:
CCG21001.0

SHEET NAME:
DELIVERY TRUCK
TRUCK TURN
EXHIBIT

SHEET NUMBER:
A1.1a



0 10 20 40 60 80

SCALE: 1"=20'-0"

NORTH

TRUCK TURN EXHIBIT - FIRETRUCK

1" = 20'

1

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23825 CATT ROAD
WILDOMAR, CA

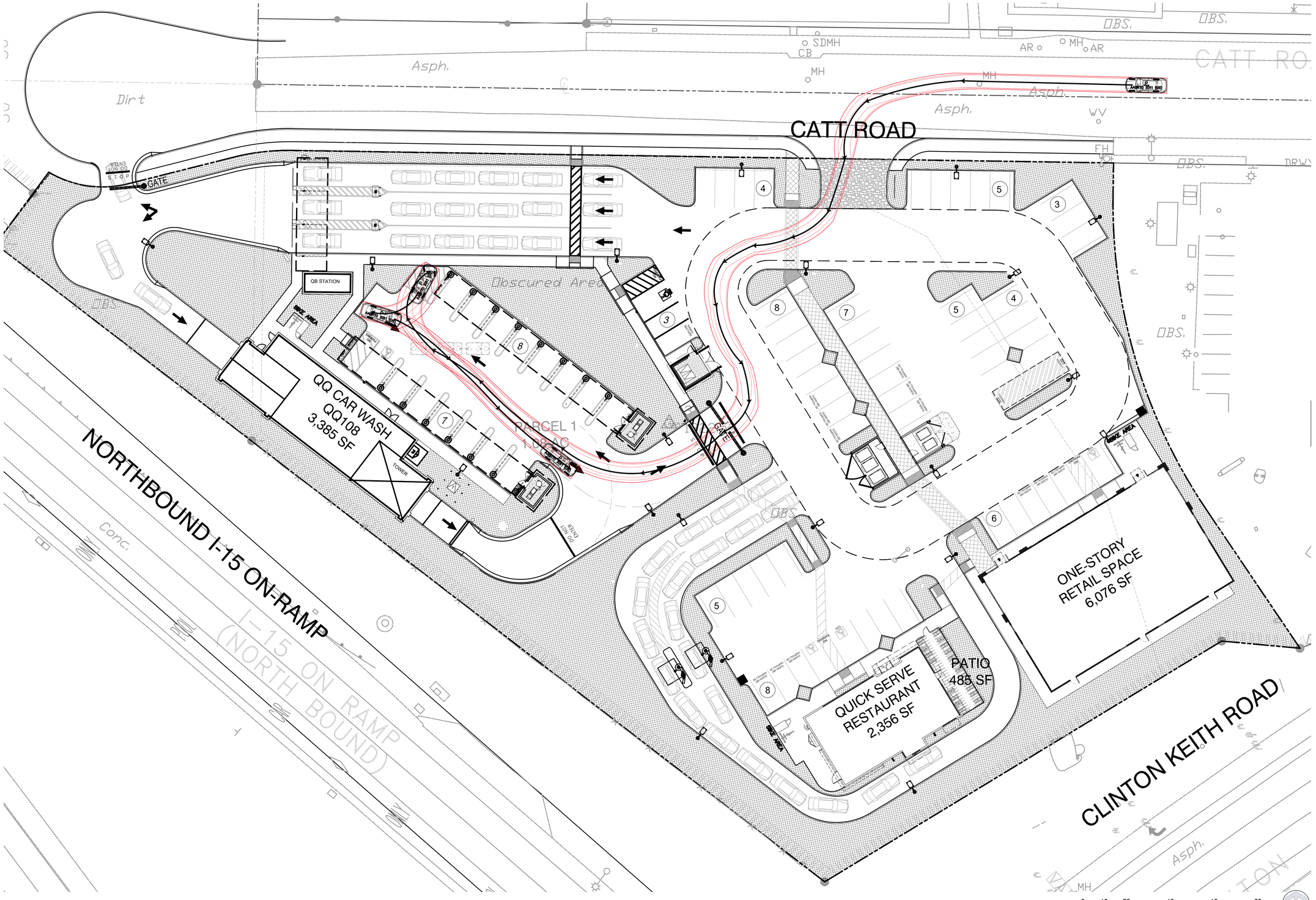
REV	DATE	DESCRIPTION
1	10.11.22	CUP SUBMITTAL
2	12.30.22	CUP RESUBMITTAL
3	03.07.23	CUP RESUBMITTAL
4	04.07.23	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

ARCH. PROJECT NO.:
CCG21001.0

SHEET NAME:
FIRETRUCK TRUCK TURN EXHIBIT

SHEET NUMBER:
A1.1b



TRUCK TURN EXHIBIT - CAR WASH

1" = 20'

1

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Architectural Solutions Group
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JEFF LIEDERMAN, ARCHITECT

SEAL:

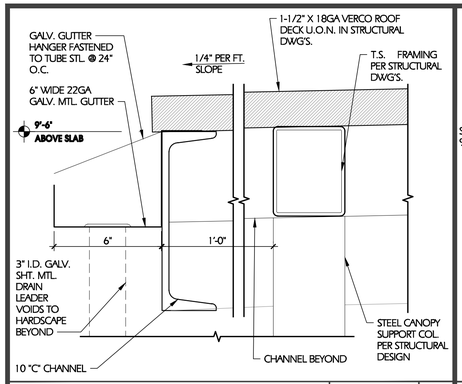
CONSULTANT:

CATT CROSSING RETAIL CENTER

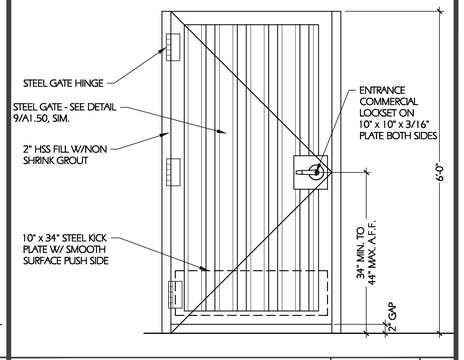
23825 CATT ROAD
WILDOMAR, CA

REV	DATE	DESCRIPTION
1	10.11.22	CUP SUBMITTAL
2	12.30.22	CUP RESUBMITTAL
3	03.07.23	CUP RESUBMITTAL
4	04.07.23	CUP RESUBMITTAL

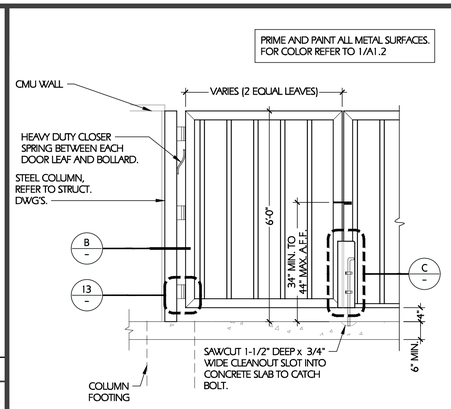
DRAWN BY: MP
CHECKED BY: RK
ARCH. PROJECT NO.: CCG21001.0
SHEET NAME: CAR WASH TRUCK TURN EXHIBIT
SHEET NUMBER: A1.1c



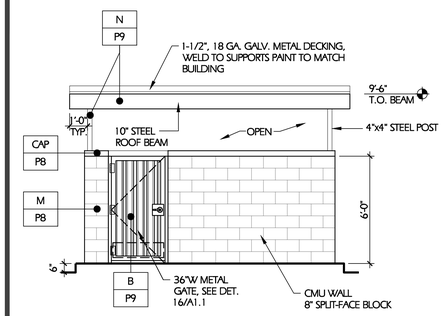
ENCLOSURE ROOF DETAIL — 3" = 1'-0" — 20



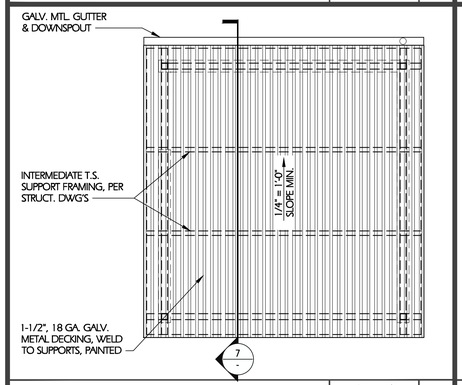
METAL GATE AT TRASH ENCLOSURE — 3/4" = 1'-0" — 16



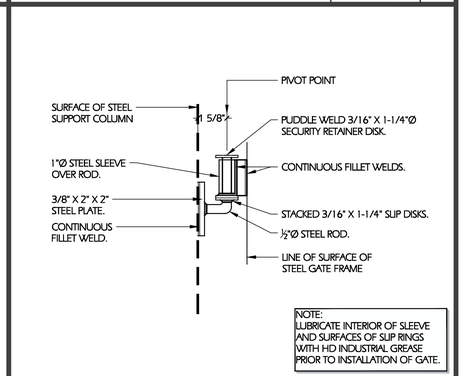
TRASH ENCLOSURE ELEVATION — 1/4" = 1'-0" — 02-SITE-A0150-01 — 02.15.19 — 8



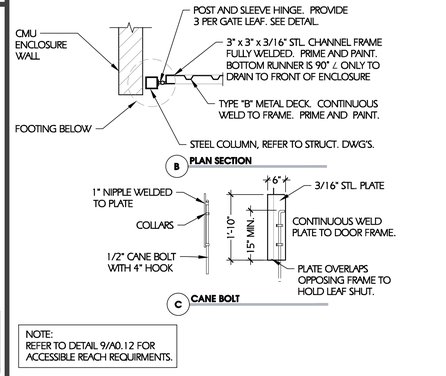
TRASH ENCLOSURE ELEVATION — 1/4" = 1'-0" — 02-SITE-A0150-01 — 02.15.19 — 4



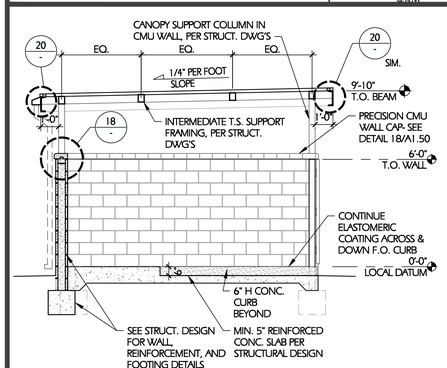
TRASH ENCLOSURE ROOF PLAN — 1/4" = 1'-0" — 02-SITE-A0150-01 — 02.15.19 — 19



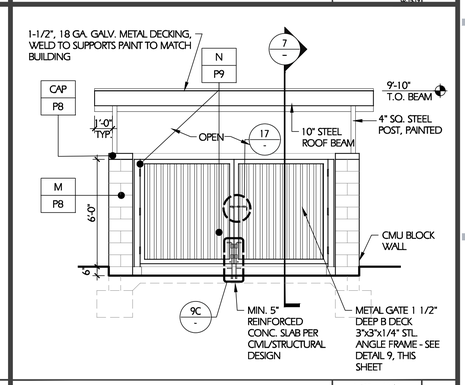
GATE HINGE — 3" = 1'-0" — 02-SITE-A0150-04 — 02.15.19 — 13



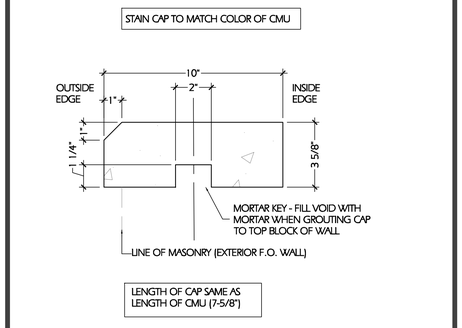
TRASH ENCLOSURE ELEVATION — 1/2" = 1'-0" — 02-SITE-A0150-02 — 02.15.19 — 9



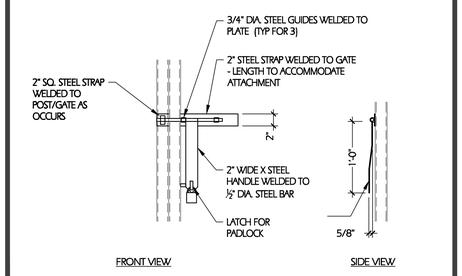
TRASH ENCLOSURE SECTION — 1/4" = 1'-0" — 02-SITE-A0150-01 — 02.15.19 — 7



TRASH ENCLOSURE ELEVATION — 1/4" = 1'-0" — 02-SITE-A0150-01 — 02.15.19 — 3



PRECAST CONC. WALL CAP PROFILE — 3" = 1'-0" — 18



GATE LATCH DETAIL — 1" = 1'-0" — 17

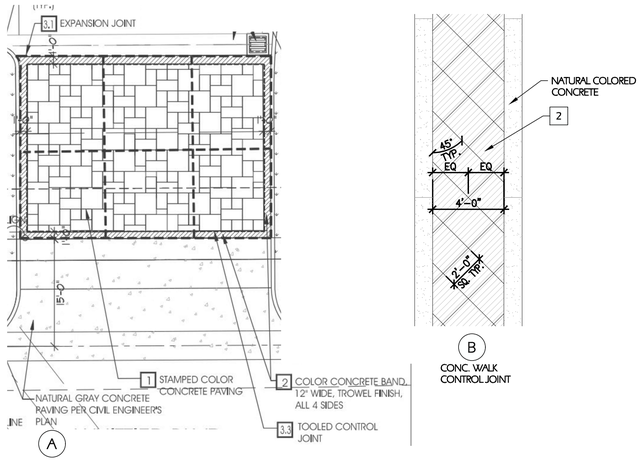
CONSTRUCTION KEY

1 INTEGRAL COLOR STAMPED CONCRETE FIELD. COLORED CONCRETE SHALL BE PRE-MIXED WITH LIQUID COLOR PRIOR TO DELIVERY, SAWCUT AND EXPANSION JOINT PATTERN AS SHOWN ON PLAN.
COLOR: SCOFIELD CHROMIX C-15 'COACHELLA SAND'
STAMP PATTERN: SCOFIELD LITHOTEX ASHLER STONE RANDOM INTERLOCKING PATTERN 400(P) A, B AND C, WITH LITHOCHROME ANTIQUING RELEASE
SEALER: SCOFIELD "CURESEAL-W" CLEAR OR APPROVED EQUAL NO-GLOSS SEALER. INSTALL PER ALL APPROPRIATE SCOFIELD TECH BULLETINS AND SPECIFICATIONS. VEHICULAR PAVING SECTION PER GEOTECH REPORT/STRUCTURAL ENGINEER.

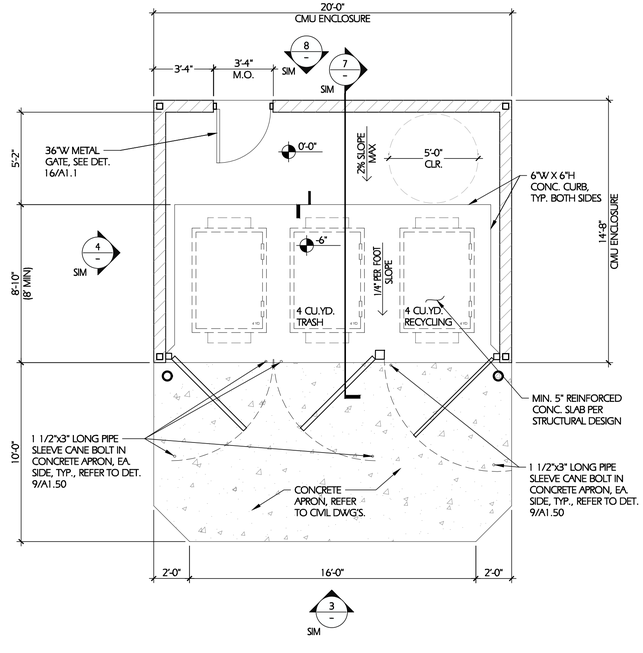
2 INTEGRAL COLOR CONCRETE FIELD. COLORED CONCRETE SHALL BE PRE-MIXED WITH LIQUID COLOR PRIOR TO DELIVERY, SAWCUT AND EXPANSION JOINT PATTERN AS SHOWN ON PLAN.
COLOR: C-15 'COACHELLA SAND'
FINISH: #25 'TOPCAST RETARDANT
SEALER: SCOFIELD 'CURESEAL-W' OR EQUAL NO-GLOSS SEALER.
INSTALL PER ALL APPROPRIATE SCOFIELD TECH BULLETINS AND SPECIFICATIONS.

3.1 EXPANSION JOINT

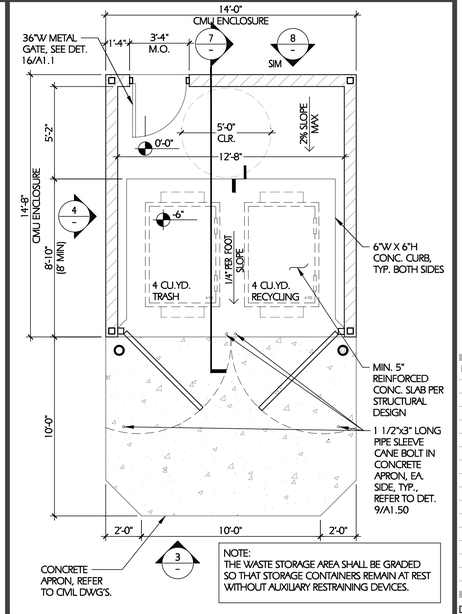
3.3 TOOLED CONTROL JOINT AT 12" OR 18" BAND AROUND STAMPED CONCRETE DRIVEWAY ACCENT PAVING



PAVEMENT DETAILS — 11



TRASH ENCLOSURE PLAN — 1/4" = 1'-0" — 5



TRASH ENCLOSURE ELEVATION — 1/4" = 1'-0" — 1

EXTERIOR FINISH SCHEDULE

	MATERIAL		COLOR / FINISH
M	CMU - SPLIT FACE 8 x 8 x 16 MANUF: ANGELUS BLOCK	P8	NATURAL GRAY OR APPROVED EQUAL
N	METAL ROOF, POSTS, AND GATES	P9	DARK BRONZE OR APPROVED EQUAL

PM DESIGN Architectural Solutions Group
38 EXECUTIVE PARK
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IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
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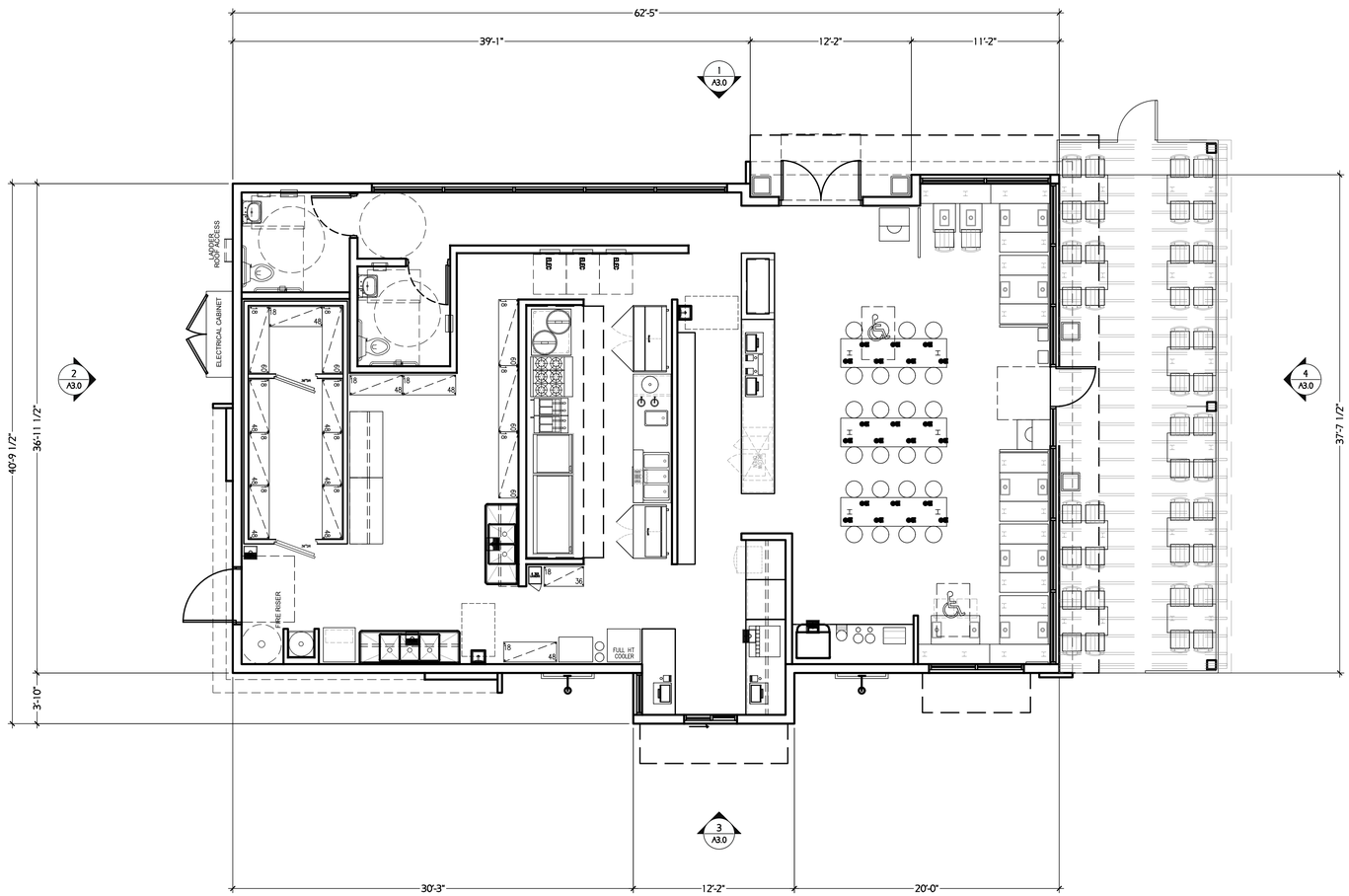
CATALYST COMMERCIAL GROUP

CATT CROSSING RETAIL CENTER

23825 CATT ROAD
WILDOMAR, CA

REV	DATE	DESCRIPTION
1	10.11.22	CUP SUBMITTAL
2	12.30.22	CUP RESUBMITTAL
3	03.07.23	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK
ARCH. PROJECT NO.: CCG21001.0
SHEET NAME: SITE DETAILS
SHEET NUMBER: A1.2



0 30" 5 10 15 20

SCALE: 3/16"=1'-0"

NORTH

FLOOR PLAN - FAST FOOD RESTAURANT

3/16" = 1'-0"

1

PM DESIGN
Architectural Solutions Group

38 EXECUTIVE PARK
SUITE 310
IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
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JEFF LIEDERMAN, ARCHITECT

SEAL:

CONSULTANT:

CATALYST COMMERCIAL GROUP

CATT CROSSING RETAIL CENTER

NEC INTERSTATE HWY 15
& CLINTON KEITH RD.
WILDOMAR, CA

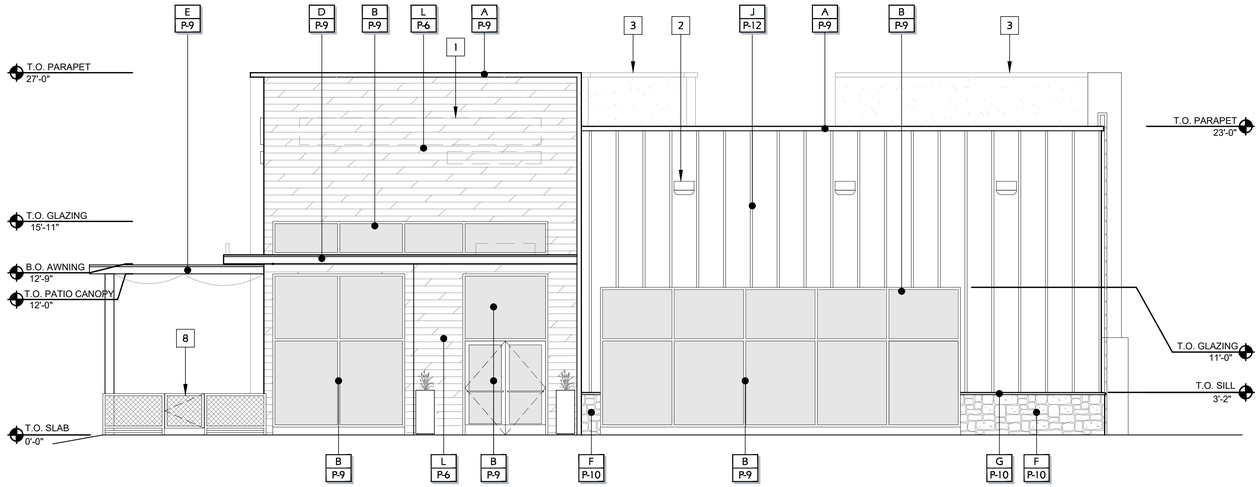
REV	DATE	DESCRIPTION
1	10.11.22	CUP SUBMITTAL
2	12.09.22	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

ARCH. PROJECT NO.:
CCG21001.0

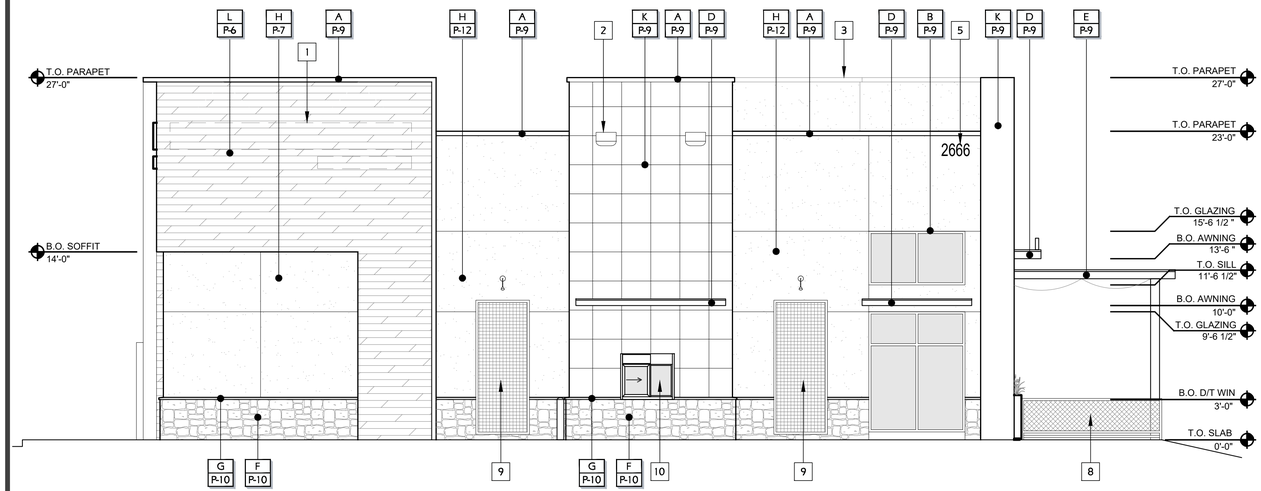
SHEET NAME:
FLOOR PLAN
FAST FOOD

SHEET NUMBER:
A2.0

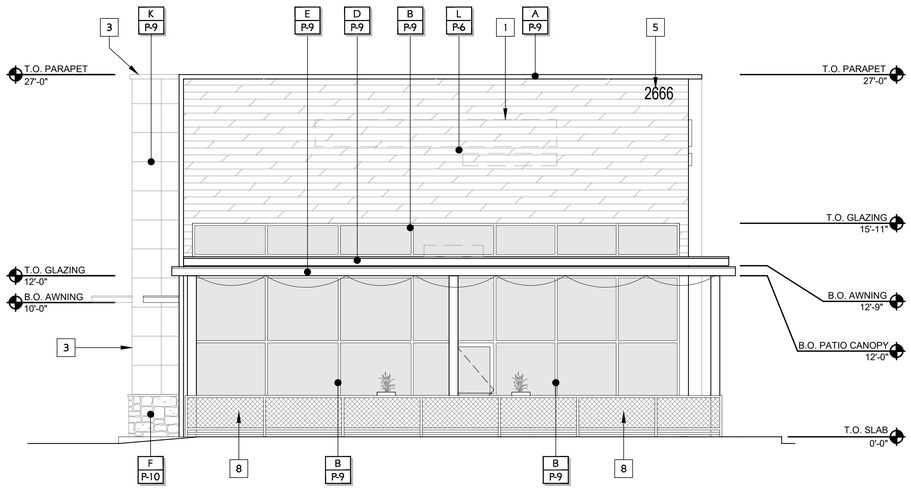


1 EXTERIOR NORTH ELEVATION (FACING PARKING LOT)
A4.0 1/4" = 1'-0"

4 EXTERIOR WEST ELEVATION
A4.0 1/4" = 1'-0"



2 EXTERIOR SOUTH ELEVATION (FACING STREET)
A4.0 1/4" = 1'-0"



3 EXTERIOR EAST ELEVATION
A4.0 1/4" = 1'-0"

#	KEYNOTE DESCRIPTION
1.	SIGNAGE
2.	LED EXTERIOR LIGHT FIXTURE
3.	OUTLINE OF BLDG. ELEMENT BEYOND.
4.	ROOF ACCESS LADDER.
5.	BUILDING ADDRESS.
6.	ROOF DRAIN & OVERFLOW TO DAYLIGHT AT WALL.
7.	ELECTRICAL SWITCH GEAR, PAINT TO MATCH DARK BRONZE.
8.	PATIO FENCE & GATE.
9.	GREEN TRELLIS & LIGHTING.
10.	DRIVE-THRU WINDOW.

EXTERIOR ELEVATION KEYNOTES

EXTERIOR FINISH SCHEDULE

	MATERIAL		COLOR / FINISH
A	METAL TRIM/ CAP	P-1	PANTONE 349 C - 'GREEN'
B	STOREFRONT ALUMINUM DOOR/ WINDOW	P-2	SW 6902 'DECISIVE YELLOW' SHERWIN WILLIAMS
C	HOLLOW METAL DOORS / FRAMES PAINT TO MATCH ADJ. SURFACE	P-3	SW 7004 'SNOWBOUND' SHERWIN WILLIAMS
D	METAL AWNING	P-4	SW 7658 'GRAY CLOUDS' SHERWIN WILLIAMS
E	METAL CANOPY	P-5	SW 7025 'BACKDROP' SHERWIN WILLIAMS
F	STONE VENEER WAINSCOT	P-6	RECLAIMED WOOD OF THE WORLD - "SNOW DRIFT"
G	STONE SILL	P-7	SW6769 'MAXI TEAL' SHERWIN WILLIAMS
H	PLASTER FINISH	P-8	NATURAL GRAY
J	HARDI VERTICAL WALL SIDING W/ BATTEN BOARD TRIM	P-9	DARK BRONZE OR MATCH DARK BRONZE
K	ATAS INTERNATIONAL MCM WALL PANELS - OMAWALL PL SIZE: 26"x26"	P-10	COUNTRY RUBBLE - ASPEN
L	WOOD SIDING	P-11	MONTEREY TAUPE
M	CMU - SPLIT FACE 8 x 8 x 16 MANUF: ANGELUS BLOCK	P-12	ARCTIC WHITE

EXTERIOR ELEVATIONS

3/16" = 1'-0" | 1

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NEC INTERSTATE HWY 15
& CLINTON KEITH RD.
WILDOMAR, CA

CATALYST COMMERCIAL GROUP

REV	DATE	DESCRIPTION
1	10.11.22	CUP SUBMITTAL
1	12.09.22	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

ARCH. PROJECT NO.:
CCG21001.0

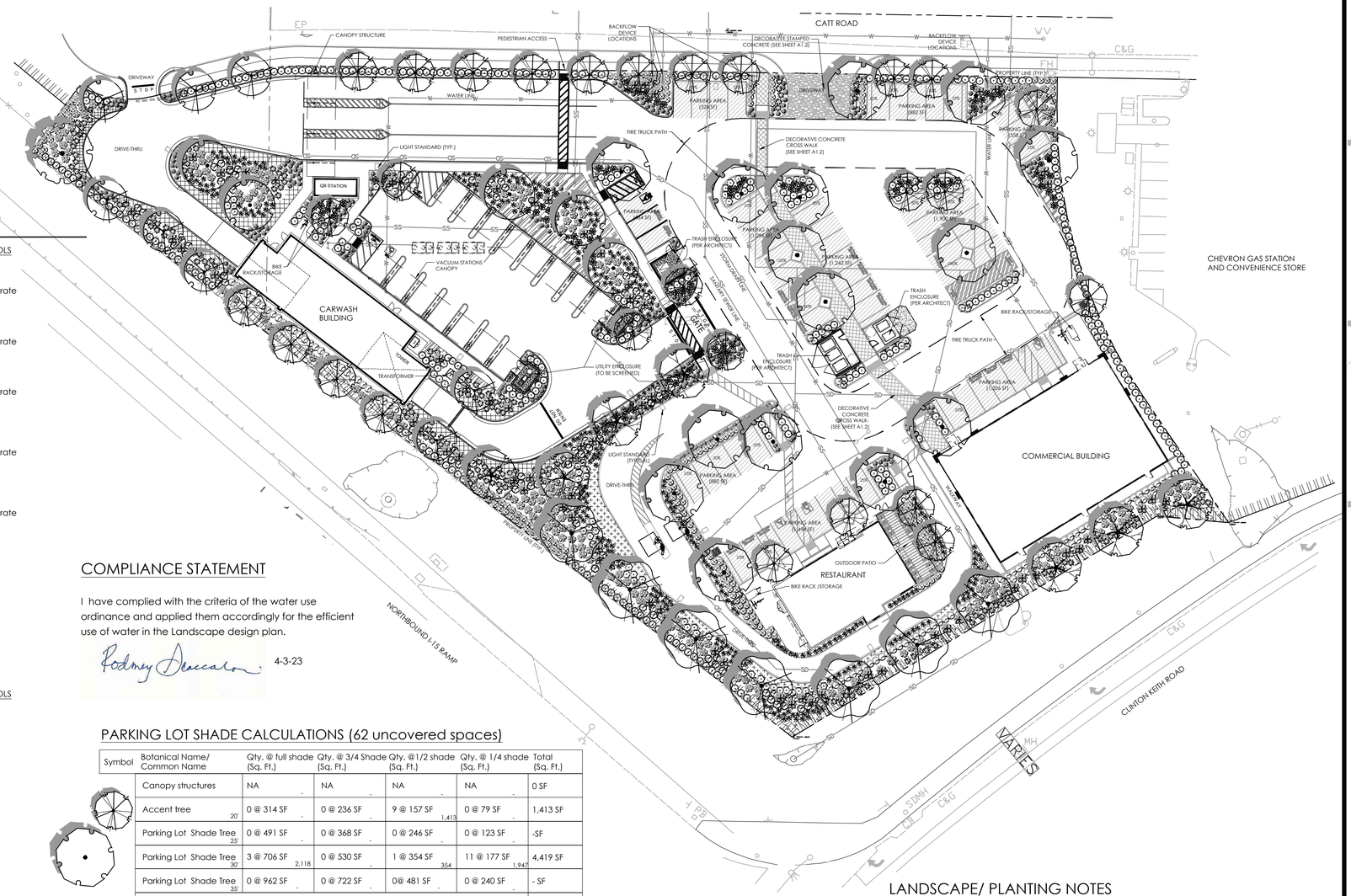
SHEET NAME:
EXTERIOR ELEVATIONS PAD 2

SHEET NUMBER:
A3.0

0 30 60 90 feet

SCALE: 1" = 30'

NORTH



PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	CONT	WUCOLS
	5	Arbutus x 'Marina' / Marina Strawberry Tree Standard	15 gal.	Moderate
	7	Jacaranda mimosifolia / Jacaranda	15 gal.	Moderate
	27	Lagerstroemia indica 'Red' / Red Crape Myrtle	15 gal.	Moderate
	7	Platanus x acerifolia 'Bloodgood' / Bloodgood London Plane Tree	24" box	Moderate
	8	Prunus cerasifera 'Krauter Vesuvius' / Krauter Vesuvius Purple-leaf Plum	15 gal.	Moderate
	1	Quercus agrifolia / Coast Live Oak	15 gal.	Low
	15	Ulmus parvifolia `True Green` / True Green Elm	24" box	Low

SHRUBS	QTY	BOTANICAL / COMMON NAME	CONT	WUCOLS
	81	Agave americana 'Marginata' / Variegated Century Plant	5 gal.	Low
	97	Agave attenuata 'Boutin Blue' / Boutin Blue Foxtail Agave	5 gal.	Low
	342	Anigozanthos x 'Bush Ranger' / Dwarf Bush Ranger Kangaroo Paw	5 gal.	Low
	201	Anigozanthos x 'Tequila Sunrise' / Tequila Sunrise Kangaroo Paw	5 gal.	Low
	353	Callisteman viminalis `Little John` / Dwarf Weeping Bottlebrush	5 gal.	Low
	347	Dianella revoluta `Little Rev` / Little Rev Flax Lily	1 gal	Low
	84	Lantana x 'New Gold' / New Gold Lantana	1 gal.	Low
	96	Leucophyllum candidum 'Thunder Cloud' / Thunder Cloud Texas Sage	5 gal.	Low
	94	Salvia greggii 'Furmans Red' / Furman's Red Autumn Sage	5 gal.	Low
	192	Westringia fruticosa 'Morning Light' / Morning Light Coast Rosemary	5 gal.	Low
	160	Yucca recurvifolia 'Walbristar' / Bright Star Soft Leaf Yucca	5 gal.	Low

VINES/ESPALLIERS	QTY	BOTANICAL / COMMON NAME	CONT	WUCOLS
	16	Magnolia grandiflora `Little Gem` Espallier / Dwarf Southern Magnolia	15 Gal.	moderate

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT	WUCOLS	SPACING
	171	Convolvulus mauritanicus / Morning Glory	1 gal.	Low	36" o.c.
	104	Lantana montevidensis / Purple Trailing Lantana	1 gal.	Low	42" o.c.
	133	Rosmarinus officinalis 'Prostratus' / Trailing Rosemary	1 gal.	Low	42" o.c.
	79	Senecio serpens / Blue Chalksticks	1 gal.	Low	36" o.c.

COMPLIANCE STATEMENT

I have complied with the criteria of the water use ordinance and applied them accordingly for the efficient use of water in the Landscape design plan.

Rodney Scaccalosi 4-3-23

PARKING LOT SHADE CALCULATIONS (62 uncovered spaces)

Symbol	Botanical Name/ Common Name	Qty. @ full shade (Sq. Ft.)	Qty. @ 3/4 Shade (Sq. Ft.)	Qty. @1/2 shade (Sq. Ft.)	Qty. @ 1/4 shade (Sq. Ft.)	Total (Sq. Ft.)
	Canopy structures	NA -	NA -	NA -	NA -	0 SF
	Accent tree 20'	0 @ 314 SF -	0 @ 236 SF -	9 @ 157 SF 1,413	0 @ 79 SF -	1,413 SF
	Parking Lot Shade Tree 25'	0 @ 491 SF -	0 @ 368 SF -	0 @ 246 SF -	0 @ 123 SF -	-SF
	Parking Lot Shade Tree 30'	3 @ 706 SF 2,118	0 @ 530 SF -	1 @ 354 SF 354	11 @ 177 SF 1,947	4,419 SF
	Parking Lot Shade Tree 35'	0 @ 962 SF -	0 @ 722 SF -	0@ 481 SF -	0 @ 240 SF -	- SF
					TOTAL TREE SHADE	5,832 SF
	Paved Area (see hatched area on plan)				TOTAL PARKING AREA =	10,468 SF
					50% SHADE AREA REQUIRED =	5,234 SF
					TOTAL SHADE PROVIDED =	5,832 SF
					PERCENT SHADE =	56%

Water Efficient Landscape Worksheet

HYDROZONE/PLANTING DESCRIPTION	PLANT FACTOR (PF)	IRRIG. METHOD	IRRIG. EFFICIENCY (IE)	ETAF (PF/IE)	LANDSCAPE AREA (Sq. Ft.)	ETAF x AREA	ESTIMATED TOTAL WATER USE (ETWU)
REGULAR LANDSCAPE AREA							
LOW WATER USE PLANTS (SHRUBS)	.2	DRIP	.81	.25	25,905	6,476	220,832 GAL.
MEDIUM WATER USE PLANTS (TREES)	.5	BUBBLERS	.81	.62	1,560	967	32,975 GAL.
HIGH WATER USE PLANTS	-	-	-	-	-	-	-
				TOTALS	(A) 27,465	(B) 7,443	
						ETWU Total	253,806 GAL.

Maximum Applied Water Allowance (MAWA). MAWA= (ETo) (Conversion factor) ((ETAF)(Landscape Area)) + ((1-ETAF) x SLA)
(55) (.62) (.45 x 27,465) + (1-.45) X 0) =421,450 GALLONS

Estimated Total Water use (ETWU). ETWU= (ETo)) (Conversion factor) ((ETAF) (Area))
(55) (.62) (7,443) = 253,806 GALLONS

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B) 7,443
Total Area	(A) 27,465
Average ETAF	(B / A) .27

Note:
1. Average ETAF for Regular Landscape Areas must be below .55 for residential areas and .45 for non-residential areas.

LANDSCAPE/ PLANTING NOTES

1. All new and existing landscape/planting areas shall receive a uniform 3-4" layer of organic wood chip mulch. Shredded bark (Guerilla hair) is not an acceptable mulch.
2. Landscape planters within 5' of a structure shall have a non-combustible aggregate mulch. Wood chip mulch will not be allowed within 5' of a structure.
3. Contractor shall submit soil samples to the laboratory for analysis and recommendations. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.

   Soil analysis should include:
   a. Soil texture;
   b. Infiltration rate determined by laboratory test or soil infiltration rate table;
   c. pH;
   d. Total soluble salts;
   e. Sodium;
   f. Percent organic matter; and
   g. Recommendations.

   The Contractor shall provide Landscape Architect soils analysis results prior to implementing the recommendations. Landscape Architect shall confirm soil amendments application(s).
4. All new plant material shall be irrigated with drip irrigation and a smart controller. Landscape Plans will comply with City of Wildomar Water Conservation Standards.
5. All Landscape areas are to be maintained by the property owner.
6. There shall be a 10' minimum distance between trees and proposed street lights/ power poles. Tree an light pole shall be coordinated to meet this requirement.
7. All trees planted within 6' of pavement or permanent structure shall have a root barrier (24" deep by 16' in length). Root barrier type shall be Deeproot UB-24-2 or equivalent.
8. All trees, at a minimum, shall be 'double staked'. Staking detail shall be provided witth/in the Construction Documents.

PM DESIGN
Architectural Solutions Group
38 EXECUTIVE PARK
SUITE 310
IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
PHONE: (949) 430-7051
EMAIL: jliederman@pmdginc.COM
JEFF LIEDERMAN, ARCHITECT

REGISTERED LANDSCAPE ARCHITECT
Rodney L. Scaccalosi
No. 4452
Exp. 05/31/24
STATE OF CALIFORNIA

OLIVE STREET
LANDSCAPE ARCHITECTURE
P.O. Box 2083
Petaluma CA 94952
707-280-8990
OliveStreetLandscape.com
rod@olivestreetlandscape.com

CATT CROSSING - RETAIL CENTER

23825 CATT ROAD
WILDOMAR, CA 92595

9.26.22	PRELIMINARY DESIGN
1-4-23	PLAN CHECK COMMENTS
03.07.23	CUP RESUBMITTAL
04.07.23	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

CCG21001.0

LANDSCAPE PLAN

L1

0 30 60 90 feet

SCALE: 1" = 30'

NORTH


CATT ROAD
CANOPY STRUCTURE
PEDESTRIAN ACCESS
BACKFLOW DEVICE LOCATIONS
DECORATIVE STAMPED CONCRETE (SEE SHEET A1.2)
PROPERTY LINE (TYP.)
DRIVEWAY
STOP
WATER LINE
DRIVE-THRU
LIGHT STANDARD (TYP.)
FIRE TRUCK PATH
DECORATIVE CONCRETE CROSS WALK (SEE SHEET A1.2)
GB STATION
CARWASH BUILDING
BIKE RACK/STORAGE
VACUUM STATIONS CANOPY
TRANSFORMER
UTILITY ENCLOSURE (TO BE SCREENED)
TRASH ENCLOSURE (PER ARCHITECT)
EXIT ONLY
ENTRY ONLY
CHEVRON GAS STATION AND CONVENIENCE STORE
COMMERCIAL BUILDING
RESTAURANT
OUTDOOR PATIO
NORTHBOUND I-15 RAMP
CLINTON KEITH ROAD
MARIES
PARKING AREA (1,240 SF)
PARKING AREA (882 SF)
PARKING AREA (1,906 SF)
PARKING AREA (1,006 SF)
PARKING AREA (885 SF)
PARKING AREA (1,009 SF)
PARKING AREA (1,555 SF)
PARKING AREA (1,947 SF)
PARKING AREA (1,009 SF)
PARKING AREA (1,009 SF)
PARKING AREA (1,009

GRADING NOTES

1. ALL GRADING SHALL CONFORM TO THE CURRENTLY ADOPTED CALIFORNIA BUILDING CODE AND CITY ORDINANCES.
2. ALL PROPERTY CORNERS SHALL BE CLEARLY DELINEATED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION/GRADING.
3. ALL WALLS (RETAINING AND NON-RETAINING) ARE APPROVED PER SEPARATE PLAN AND PERMIT.
4. ALL WORK UNDER THIS GRADING PERMIT SHALL BE LIMITED TO WORK WITHIN THE PROPERTY LINES. ALL WORK WITHIN THE CITY RIGHT-OF-WAY WILL REQUIRE SEPARATE PLANS AND AN ENCROACHMENT PERMIT.
5. GRADING SHALL BE DONE UNDER THE SUPERVISION OF A SOILS ENGINEER IN CONFORMANCE WITH RECOMMENDATIONS OF THE SOILS INVESTIGATION (PSI PROJECT NO. 0066839) BY PROFESSIONAL SERVICE INDUSTRIES, INC DATED FEBRUARY 15TH, 2017 AND UPDATED LETTER DATED SEPTEMBER 14TH, 2018.
6. COMPACTED FILL TO SUPPORT ANY STRUCTURES SHALL COMPLY WITH SECTION 1803.5. PROJECTS WITHOUT PRELIMINARY SOILS REPORT SHALL HAVE DETAILED SPECIFICATIONS SATISFYING THE REQUIREMENTS IN SECTION 1803.5 PREPARED BY THE EOR.
7. THE CONTRACTOR SHALL NOTIFY THE BUILDING AND SAFETY DEPARTMENT AT LEAST 24 HOURS IN ADVANCE TO REQUEST FINISH LOT GRADE AND DRAINAGE INSPECTION. THIS INSPECTION MUST BE APPROVED PRIOR TO BUILDING PERMIT FINAL INSPECTION FOR EACH LOT.
8. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE DIGGING AT 1-800-227-2600.

CUT /FILL

9. MAXIMUM CUT AND FILL SLOPE = 2:1.
10. NO FILL SHALL BE PLACED ON EXISTING GROUND UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL AND OTHER DELETERIOUS MATERIAL. FILLS SHOULD BE PLACED IN THIN LIFTS (8-INCH MAX OR AS RECOMMENDED IN SOILS REPORT), COMPACTED AND TESTED AS GRADING PROCESS UNTIL FINAL GRADES ARE ATTAINED. ALL FILLS ON SLOPES STEEPER THAN 5 TO 1 (H/V) AND A HEIGHT GREATER THAN 5 FEET SHALL BE KEYED AND BENCHED INTO FIRM NATURAL SOIL FOR FULL SUPPORT. THE BENCH UNDER THE TOE MUST BE 10 FEET WIDE MIN
11. THE SLOPE STABILITY FOR CUT AND FILL SLOPES OVER 30' IN VERTICAL HEIGHT, OR SLOPES STEEPER THAN 2:1 MUST BE VERIFIED WITH A FACTOR OF SAFETY OF AT LEAST 1.5.
12. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12 INCHES SHALL BE BURIED OR PLACED IN FILLS CLOSER THAN 10 FEET TO THE FINISHED GRADE.

DRAINAGE AND EROSION / DUST CONTROL

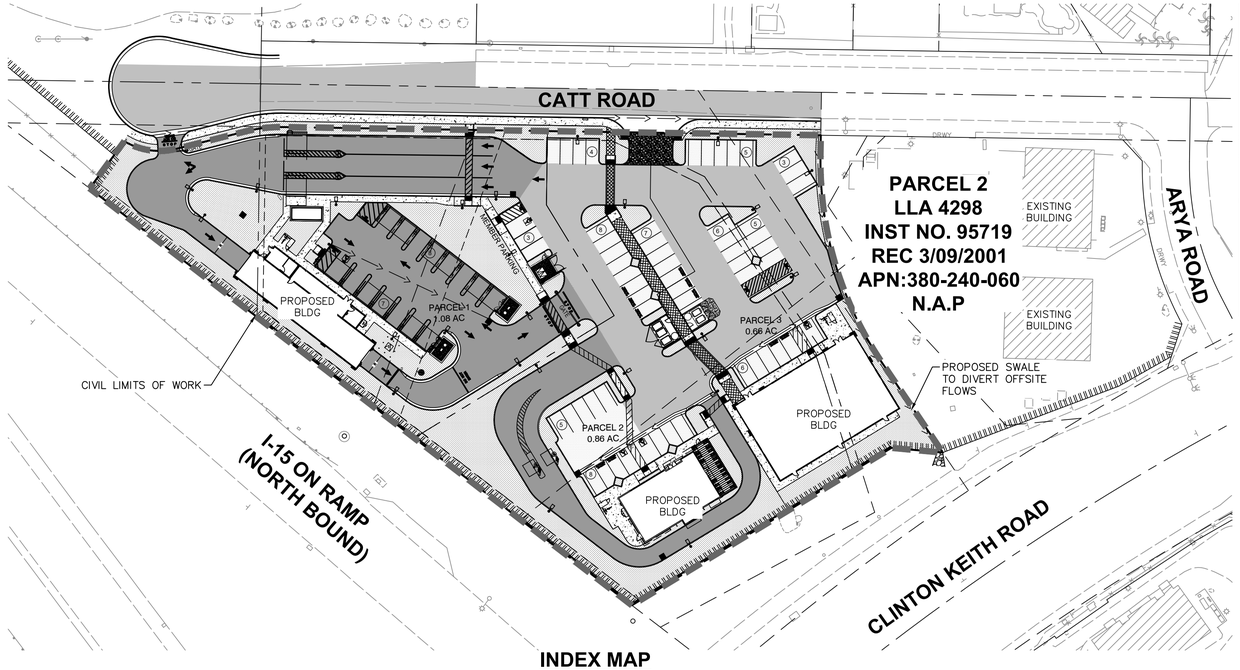
13. DRAINAGE ACROSS THE PROPERTY LINE SHALL NOT EXCEED THAT WHICH EXISTED PRIOR TO GRADING. EXCESS OR CONCENTRATED DRAINAGE SHALL BE CONTAINED ON SITE OR DIRECTED TO AN APPROVED DRAINAGE FACILITY.
14. PROVIDE A SLOPE INTERCEPTOR DRAIN ALONG THE TOP OF CUT SLOPES WHERE THE DRAINAGE PATH IS GREATER THAN 40 FEET TOWARDS THE CUT SLOPE.
15. PROVIDE 5 ' WIDE BY 1' HIGH BERM ALONG THE TOP OF ALL FILL SLOPES STEEPER THAN 3:1.
16. THE GROUND IMMEDIATELY ADJACENT TO THE BUILDING FOUNDATION SHALL BE SLOPED AWAY WITH 5% MIN FOR A MIN DISTANCE OF 10 HORIZONTAL FEET. SWALES WITHIN 10 FEET FROM BUILDING SHALL HAVE 2% MINIMUM SLOPE.
17. NO OBSTRUCTION OF NATURAL WATER COURSES SHALL BE PERMITTED.
18. DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL (BEST MANAGEMENT PRACTICES, BMPS) SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES.
19. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
20. ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING OPERATIONS.
21. FOR SLOPES 3 TO 1 (H/V) OR STEEPER:
ALL SLOPES EQUAL TO OR GREATER THAN 3' IN VERTICAL HEIGHT, ARE REQUIRED TO BE PLANTED WITH GRASS OR ROSEA ICE PLANT (OR EQUAL) GROUND COVER AT A MAXIMUM SPACING OF 12" ON CENTER. SLOPES EXCEEDING 15' IN VERTICAL HEIGHT SHALL BE PLANTED WITH APPROVED SHRUBS NOT TO EXCEED 10' ON CENTER, OR TREES SPACED NOT TO EXCEED 20' ON CENTER OR SHRUBS NOT TO EXCEED 10', OR A COMBINATION OF SHRUBS AND TREES NOT TO EXCEED 15' IN ADDITION TO THE GRASS OR GROUND COVER. SLOPES THAT REQUIRE PLANTING SHALL BE PROVIDED WITH AN IN-GROUND IRRIGATION SYSTEM EQUIPPED WITH AN APPROPRIATE BACKFLOW DEVICE PER U.P.C., CHAPTER 10. THE SLOPE PLANTING AND IRRIGATION SYSTEM SHALL BE INSTALLED PRIOR TO PRECISE GRADING FINAL.

COMPLETION OF WORK

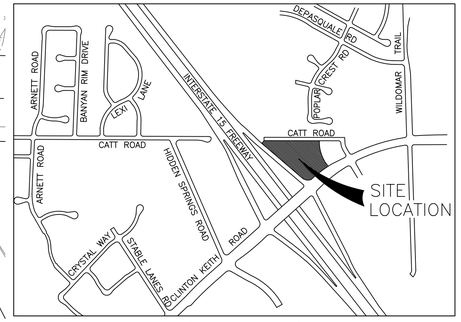
22. A REGISTERED CIVIL ENGINEER SHALL PREPARE FINAL COMPACTION REPORT/GRADING REPORT AND IT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL. THE REPORT SHALL ALSO PROVIDE BUILDING FOUNDATION DESIGN PARAMETERS INCLUDING ALLOWABLE SOIL PRESSURES, EXPANSION INDEX AND REMEDIAL MEASURES IF EL > 20, WATER SOLUBLE SULFATE CONTENT, CORROSIVITY AND REMEDIAL MEASURES IF NECESSARY.
23. EXCEPT FOR NON-TRACT SINGLE RESIDENTIAL LOT GRADING, THE COMPACTION REPORT SHALL INCLUDE THE SPECIAL INSPECTION VERIFICATION LISTED IN TABLE 1705.6 AND APPLICABLE INSPECTION VERIFICATIONS IN SECTION 1704.5 OF THE CALIFORNIA BUILDING CODE.
24. A REGISTERED CIVIL ENGINEER SHALL SUBMIT TO THE BUILDING AND SAFETY DEPARTMENT WRITTEN CERTIFICATION OF GRADING IN ACCORDANCE WITH THE APPROVED GRADING PLAN PRIOR TO REQUESTING INSPECTION AND ISSUANCE OF THE BUILDING PERMIT. CERTIFICATION SHALL INCLUDE LINE GRADE, SURFACE DRAINAGE, ELEVATION, AND LOCATION OF PERMITTED GRADING ON THE LOT.

FLOOD ZONE DESIGNATION

THE LAND SHOWN HEREON IS DESIGNATED AS BEING IN ZONE "X" PER FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 06065C2705G, WHICH BEARS AN EFFECTIVE DATE OF AUGUST 28, 2008 ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), DESIGNATED AREA BEING DESCRIBED AS "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1" ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE." NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMEHE LAND SHOWN



INDEX MAP
1"=50'



VICINITY MAP
N.T.S.

ASSESSOR PARCEL NO.:

380-240-052, 380-240-001, PORTION OF 380-240-063, 380-240-064, PORTION OF 380-240-062

GRAPHIC SCALE IN FEET
0 25 50 100

FIRE NOTES:

- PROJECT SITE IS LOCATED WITHIN A VERY HIGH FIRE HAZARD SEVERITY ZONE.
- FIRE HYDRANTS CAPABLE OF DELIVERING FIRE FLOWS AS REQUIRED BY THE CALIFORNIA FIRE CODE AND FIRE DEPARTMENT STANDARDS WILL BE PROVIDED DURING FINAL ENGINEERING.
- BUILDINGS 3,600 SQUARE FEET IN AREA AND LARGER REQUIRED FIRE SPRINKLER SYSTEM PER WILDOMAR MUNICIPAL CODE AND CALIFORNIA FIRE CODE.
- THE PROJECT WILL BE REQUIRED TO BE ANNEX INTO THE CITY'S CFD 2022-1 (SERVICES) FOR MAINTENANCE, POLICE AND FIRE SERVICES.

BASIS OF BEARINGS

THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, NAD 83 (NSRS2011), ZONE 6 (EPOCH 2010.00) BASED LOCALLY ON CONTROL STATIONS "CNPP", "DSSC", AND "P4744". ALL DISTANCES SHOWN ARE GROUND DISTANCES, UNLESS SPECIFIED OTHERWISE. GRID DISTANCES MAY BE OBTAINED BY MULTIPLYING THE GROUND DISTANCES BY AN AVERAGE COMBINATION FACTOR OF 0.99990620.

BENCHMARK

BENCH MARK NO. T-58-81
ELEVATION: 1217.635 (VERTCON) (NAVD 88) VERTICAL ORDER= FIRST ORDER

A 3" ALUMINUM DISK STAMPED "T-58-81" SET IN THE SIDEWING OF CULVERT WALL, LOCATED FROM THE INTERSECTION OF PALOMAR ST AND CLINTON KEITH ROAD, 0.10' MILE NW OF INTERSECTION AND 76.7' SE'LY OF INTERSECTION OF PALOMAR ST AND SHADOW CANYON ROAD AND 32.50' NE OF THE CENTERLINE OF PALOMAR STREET ON THE SE MIDPOINT OF A CONCRETE BOX CULVERT WINGWALL.

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL A: APN: 380-240-052-6 (AFFECTS PARCEL 2) AND 380-240-001-0 (AFFECTS PARCEL 3) AND A PORTION OF 380-240-063
PARCELS 2 AND 3 OF PARCEL MAP NO. 22776, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 157, PAGE(S) 39 THROUGH 43, INCLUSIVE, OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA AND AS SHOWN ON THE AMENDED MAP THEREOF RECORDED IN BOOK 158, PAGES 37 THROUGH 41 INCLUSIVE OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

TOGETHER WITH THE WEST HALF OF ARYA DRIVE ADJOINING PARCEL 2 OF SAID PARCEL MAP NO. 22776, AS VACATED BY RESOLUTION RECORDED MAY 02, 1995 AS INSTRUMENT NO. 137832 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA AND WOULD PASS TO THE VESTEES BY PRACTICE OF LAW.

PARCEL B: APN: 380-240-064 AND A PORTION OF 380-240-062
PARCEL 1 OF PARCEL MAP NO. 22776, AS SHOWN BY MAP ON FILE IN BOOK 157, PAGE(S) 39 THROUGH 43, INCLUSIVE, OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA AND AS SHOWN ON THE AMENDED MAP THEREOF RECORDED IN BOOK 158, PAGES 37 THROUGH 41 INCLUSIVE OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

TOGETHER WITH THE WEST HALF OF ARYA DRIVE ADJOINING PARCEL 1 OF SAID PARCEL MAP NO. 22776, AS VACATED BY RESOLUTION RECORDED MAY 02, 1995 AS INSTRUMENT NO. 137832 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA THAT WOULD PASS TO THE VESTEES BY PRACTICE OF LAW.

EXCEPTING THEREFROM THAT PORTION THEREOF CONDEMNED TO THE CITY OF WILDOMAR BY FINAL ORDER OF CONDEMNATION RECORDED ON AUGUST 22, 2013 AS INSTRUMENT NO. 2013-0413823 AND RECORDED AUGUST 27, 2013 AS INSTRUMENT NO. 2013-0419813 BOTH OF OFFICIAL RECORDS.

UTILITY PURVEYORS

WATER AND SEWER:	ELSINORE VALLEY MUNICIPAL WATER DISTRICT 31315 CHANEY STREET LAKE ELSINORE, CA 92531 (951) 674-3146
ELECTRIC:	SOUTHERN CALIFORNIA EDISON 6100 MENIFEE ROAD ROMOLAND, CA 92585 (800) 665-4555
NATURAL GAS:	SOUTHERN CALIFORNIA GAS COMPANY P.O. BOX 3003, 1981 W. LUGONIA REDLANDS, CA 92374 (800) 427-2200
TELEPHONE:	FRONTIER COMMUNICATIONS (844) 769-0853
CABLE:	SPECTRUM (888) 255-5789 FRONTIER COMMUNICATIONS (844) 769-0853

OWNER/APPLICANT

CATALYST COMMERCIAL GROUP
38605 CALISTOGA DR. STE 150
MURRIETA, CA 92563
CONTACT: BRANDON HUMANN
PHONE: (951) 395-0000

CIVIL ENGINEER

KIMLEY-HORN AND ASSOCIATES
3880 LEMON STREET, SUITE 420
RIVERSIDE, CA 92501
CONTACT: JOHN POLLOCK
PHONE: (951) 543-9868

SURVEYOR

KWC ENGINEERS
1880 COMPTON AVENUE
SUITE 100
CORONA, CA 92881
CONTACT: THOMAS M. CASELDINE
PHONE: (951) 734-2130

GEOTECH

EARTH STRATA GEOTECHNICAL SERVICES, INC.
42184 REMINGTON AVENUE
TEMECULA, CA 92590
CONTACT: STEPHEN M. POOLE
PHONE: (951) 387-3179

ENGINEER'S NOTE

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT ITS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A DILIGENT SEARCH OF AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT ALL THE UTILITIES SHOWN AND ANY OTHER LINES OR STRUCTURES SHOWN ON THESE PLANS AND IS RESPONSIBLE FOR THE PROTECTION OF, AND ANY DAMAGE TO THESE LINES OR STRUCTURES.

EARTHWORK:

ASSUMPTIONS:
- SEE GEOTECHNICAL REPORT FOR SOILS RESPONSE FACTORS AND GEOTECHNICAL RECOMMENDATIONS.
- IMPORT/EXPORT REQUIRES CITY APPROVED HAUL PERMIT.
- 1' OF REMOVAL AND RECOMPACTION FOR HARDSCAPE AROUND PROPOSED BUILDING.
- EARTHWORK QUANTITIES ARE AN ESTIMATE FOR PERMITTING PURPOSES ONLY. CONTRACTOR IS RESPONSE FOR THEIR OWN QUANTITIES.

ESTIMATED EARTHWORK QUANTITIES

CUT:	4,661 CY
FILL:	16,230 CY
NET:	11,569 CY (FILL)

NOTE: THE EARTHWORK QUANTITIES ABOVE ARE FOR PERMIT PURPOSES ONLY. THE CONTRACTOR IS NOT AUTHORIZED TO USE THE ESTIMATES HEREIN FOR BIDDING AND CONSTRUCTION PURPOSES WITHOUT THE EXPLICIT WRITTEN PERMISSION OF THE ENGINEER OF RECORD. NO REPRESENTATIONS OF SUCH QUANTITIES OR A BALANCED SITE CONDITION ARE MADE BY THE ENGINEER OF RECORD.
UNLESS EXPLICITLY STATED OTHERWISE HEREIN, THE ABOVE QUANTITIES ARE APPROXIMATE, IN PLACE VOLUMES CALCULATED FROM THE EXISTING GROUND TO THE PROPOSED FINISHED GRADE. EXISTING GROUND IS DEFINED BY THE CONTOURS AND SPOT GRADES ON THE BASE SURVEY. PROPOSED FINISHED GRADE IS DEFINED AS THE FINAL GRADE AS INDICATED ON THE GRADING PLAN(S) AS FINISHED GROUND, FINISHED SURFACE, AND FINISHED FLOOR ELEVATIONS.

UNLESS EXPLICITLY STATED OTHERWISE HEREIN, THE ABOVE GRADING QUANTITIES HAVE NOT BEEN FACTORED TO ACCOUNT FOR CHANGES IN VOLUME DUE TO BULKING, CLEARING AND GRUBBING, SHRINKAGE, SUBSIDENCE, OVER-EXCAVATION AND RE-COMPACTION, AND CONSTRUCTION METHODS. NOR DO THEY ACCOUNT FOR THE THICKNESS OF PAVEMENT SECTIONS, STORMWATER QUALITY MEDIA SECTIONS, UTILITY PIPES, TRENCHING AND BEDDING MATERIALS, BUILDING OR WALL FOOTINGS, BUILDING SLAB THICKNESSES AND UNDERLYING BASE OR SAND LAYERS, REUSE OF PULVERIZED MATERIALS THAT WILL UNDERLIE NEW PAVEMENTS, ETC.

ANY OVEREXCAVATION AND RECOMPACTION DEPTHS AND VOLUMES, SHRINKAGE FACTORS, PAVEMENT SECTIONS, BUILDING PAD SECTIONS, AND BULKING FACTORS ARE BASED ON A SEPARATE GEOTECHNICAL REPORT. ANY BUILDING SLAB THICKNESSES ARE BASED ON THE SEPARATE BUILDING STRUCTURAL ENGINEERING PLANS. ANY UTILITY, STORMWATER MITIGATION, AND FOOTING SPOILS ARE BASED ON ESTIMATES PROVIDED BY THE OWNER OR CONTRACTOR.

INDEX OF SHEETS:

SHEET No.	DESCRIPTION
1	COVER SHEET
2	PRELIMINARY GRADING PLAN
3-7	CROSS SECTIONS
8	PRELIMINARY UTILITY PLAN

DIGALERT
DIAL BEFORE YOU DIG
TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 1-800-227-2600
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER CITY ACCEPTANCE OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR ACCEPTANCE BY THE CITY.

MARK	BY	DATE	REVISIONS	APPR.	DATE

ENGINEER | CITY

CITY OF WILDOMAR
ACCEPTED BY:
DANIEL A YORK, CITY ENGINEER
ACCEPTANCE AS TO CONFORMANCE WITH APPLICABLE CITY STANDARDS AND PRACTICES

REGISTERED PROFESSIONAL ENGINEER JOHN K. POLLOCK 86160 CIVIL STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

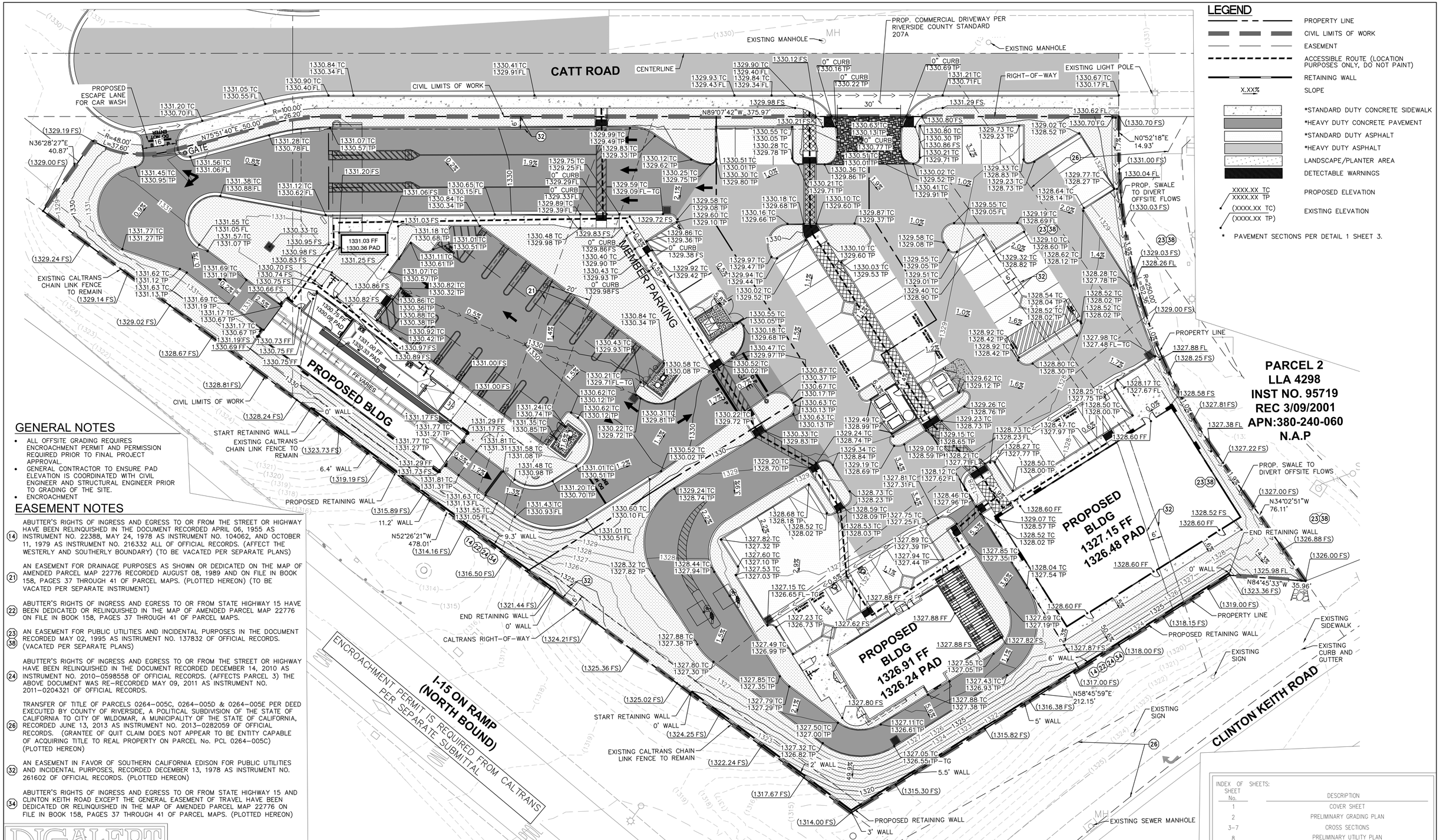
Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
Phone: 951-543-9868
3801 UNIVERSITY AVE, STE. 300
RIVERSIDE, CA 92501
PREPARED BY: JOHN POLLOCK
R.C.E. No. 86160 EXP. 12/31/24

BENCHMARK:
Elevation = 1217.635
Datum = NAVD88
BENCHMARK: T-58-81
DESCRIPTION: SEE SHEET 1.

AERIAL FLIGHT DATED 12/22/21 BY INLAND AERIAL GROUND TOPOGRAPHY WAS CONDUCTED BY KWC FIELD SURVEY ON 12/28/21.

CUP XX-XXXX
PROJECT NUMBER_____
CITY OF WILDOMAR
23825 CATT ROAD WILDOMAR, CA 92595
CATT CROSSING
COVER SHEET

SHEET NO. 1
OF 8 SHTS



LEGEND

- PROPERTY LINE
- CIVIL LIMITS OF WORK
- EASEMENT
- ACCESSIBLE ROUTE (LOCATION PURPOSES ONLY, DO NOT PAINT)
- RETAINING WALL
- X.XX% SLOPE
- *STANDARD DUTY CONCRETE SIDEWALK
- *HEAVY DUTY CONCRETE PAVEMENT
- *STANDARD DUTY ASPHALT
- *HEAVY DUTY ASPHALT
- LANDSCAPE/PLANTER AREA
- DETECTABLE WARNINGS
- XXXX.XX TC / XXXX.XX TP — PROPOSED ELEVATION
- (XXXX.XX TC) / (XXXX.XX TP) — EXISTING ELEVATION
- * PAVEMENT SECTIONS PER DETAIL 1 SHEET 3.

GENERAL NOTES

- ALL OFFSITE GRADING REQUIRES ENCROACHMENT PERMIT AND PERMISSION REQUIRED PRIOR TO FINAL PROJECT APPROVAL.
- GENERAL CONTRACTOR TO ENSURE PAD ELEVATION IS COORDINATED WITH CIVIL ENGINEER AND STRUCTURAL ENGINEER PRIOR TO GRADING OF THE SITE.
- ENCROACHMENT

EASEMENT NOTES

(14) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM THE STREET OR HIGHWAY HAVE BEEN RELINQUISHED IN THE DOCUMENT RECORDED APRIL 06, 1955 AS INSTRUMENT NO. 22388, MAY 24, 1978 AS INSTRUMENT NO. 104062, AND OCTOBER 11, 1979 AS INSTRUMENT NO. 216332 ALL OF OFFICIAL RECORDS. (AFFECT THE WESTERLY AND SOUTHERLY BOUNDARY) (TO BE VACATED PER SEPARATE PLANS)

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(22) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM STATE HIGHWAY 15 HAVE BEEN DEDICATED OR RELINQUISHED IN THE MAP OF AMENDED PARCEL MAP 22776 ON FILE IN BOOK 158, PAGES 37 THROUGH 41 OF PARCEL MAPS.

(23) (38) AN EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES IN THE DOCUMENT RECORDED MAY 02, 1995 AS INSTRUMENT NO. 137832 OF OFFICIAL RECORDS. (VACATED PER SEPARATE PLANS)

(24) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM THE STREET OR HIGHWAY HAVE BEEN RELINQUISHED IN THE DOCUMENT RECORDED DECEMBER 14, 2010 AS INSTRUMENT NO. 2010-0598558 OF OFFICIAL RECORDS. (AFFECTS PARCEL 3) THE ABOVE DOCUMENT WAS RE-RECORDED MAY 09, 2011 AS INSTRUMENT NO. 2011-0204321 OF OFFICIAL RECORDS.

(26) TRANSFER OF TITLE OF PARCELS 0264-005C, 0264-005D & 0264-005E PER DEED EXECUTED BY COUNTY OF RIVERSIDE, A POLITICAL SUBDIVISION OF THE STATE OF CALIFORNIA TO CITY OF WILDOMAR, A MUNICIPALITY OF THE STATE OF CALIFORNIA, RECORDED JUNE 13, 2013 AS INSTRUMENT NO. 2013-0282059 OF OFFICIAL RECORDS. (GRANTEE OF QUIT CLAIM DOES NOT APPEAR TO BE ENTITY CAPABLE OF ACQUIRING TITLE TO REAL PROPERTY ON PARCEL No. PCL 0264-005C) (PLOTTED HEREON)

(32) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RECORDED DECEMBER 13, 1978 AS INSTRUMENT NO. 261602 OF OFFICIAL RECORDS. (PLOTTED HEREON)

(34) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM STATE HIGHWAY 15 AND CLINTON KEITH ROAD EXCEPT THE GENERAL EASEMENT OF TRAVEL HAVE BEEN DEDICATED OR RELINQUISHED IN THE MAP OF AMENDED PARCEL MAP 22776 ON FILE IN BOOK 158, PAGES 37 THROUGH 41 OF PARCEL MAPS. (PLOTTED HEREON)

PARCEL 2
LLA 4298
INST NO. 95719
REC 3/09/2001
APN:380-240-060
N.A.P

INDEX OF SHEETS:

SHEET No.	DESCRIPTION
1	COVER SHEET
2	PRELIMINARY GRADING PLAN
3-7	CROSS SECTIONS
8	PRELIMINARY UTILITY PLAN

DIGALERT — DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG — TOLL FREE 1-800-227-2600 — A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

NOTE:
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MARK	BY	DATE	REVISIONS	APPR.	DATE

ENGINEER — CITY

CITY OF WILDOMAR
ACCEPTED BY:
DANIEL A YORK, CITY ENGINEER
ACCEPTANCE AS TO CONFORMANCE WITH APPLICABLE CITY STANDARDS AND PRACTICES

REGISTERED PROFESSIONAL ENGINEER — JOHN A. POLLOCK — 86160 — CIVIL — STATE OF CALIFORNIA — NOT FOR CONSTRUCTION

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
Phone: 951-543-9868
3801 UNIVERSITY AVE, STE. 300
RIVERSIDE, CA 92501
PREPARED BY: JOHN POLLOCK
R.C.E. No. 86160 EXP. 12/31/24

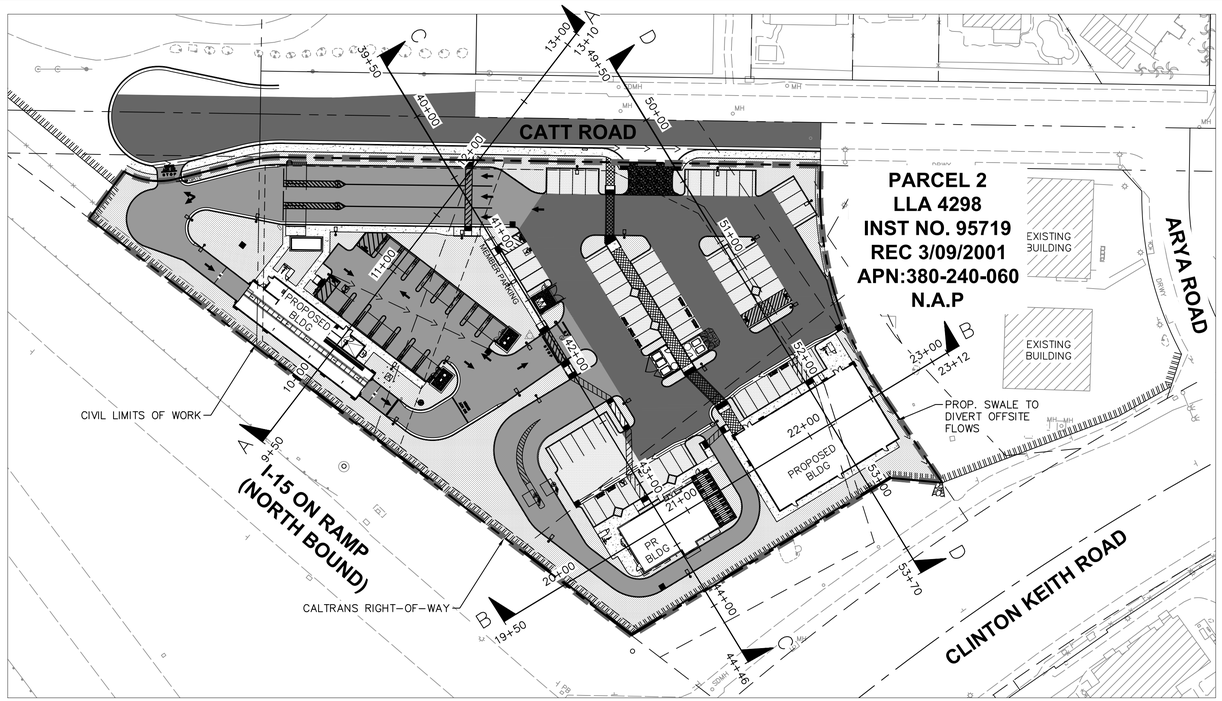
BENCHMARK:
Elevation = 1217.635
Datum = NAVD88
BENCHMARK: T-58-81
DESCRIPTION: SEE SHEET 1.

AERIAL FLIGHT DATED 12/22/21 BY INLAND AERIAL GROUND. TOPOGRAPHY WAS CONDUCTED BY KWC FIELD SURVEY ON 12/28/21.

CUP XX-XXXX — PROJECT NUMBER _____

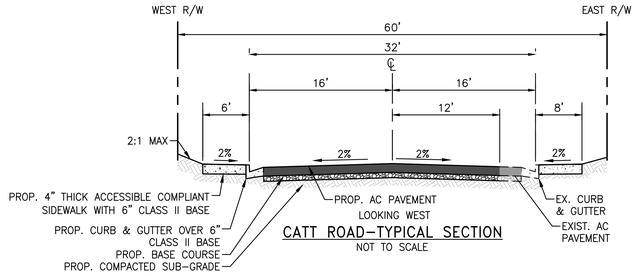
CITY OF WILDOMAR
23825 CATT ROAD WILDOMAR, CA 92595
CATT CROSSING
PRELIMINARY GRADING PLAN

SHEET NO. 2 OF 8 SHTS



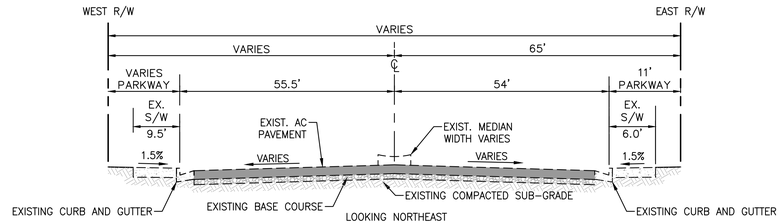
SECTION MAP

1"=50'



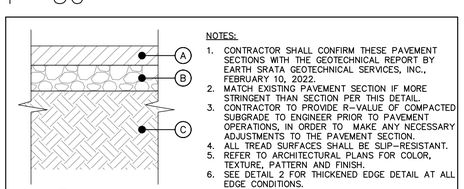
CATT ROAD-TYPICAL SECTION

NOT TO SCALE



CLINTON KEITH- TYPICAL SECTION

NOT TO SCALE



NOTES:

1. CONTRACTOR SHALL CONFIRM THESE PAVEMENT SECTIONS WITH THE GEOTECHNICAL REPORT BY EARTH SRATA GEOTECHNICAL SERVICES, INC., FEBRUARY 10, 2022.
2. MATCH EXISTING PAVEMENT SECTION IF MORE STRINGENT THAN SECTION PER THIS DETAIL.
3. CONTRACTOR TO PROVIDE R-VALUE OF COMPACTED SUBGRADE TO ENGINEER PRIOR TO PAVEMENT OPERATIONS, IN ORDER TO MAKE ANY NECESSARY ADJUSTMENTS TO THE PAVEMENT SECTION.
4. ALL TREAD SURFACES SHALL BE SLIP-RESISTANT.
5. REFER TO ARCHITECTURAL PLANS FOR COLOR, TEXTURE, PATTERN AND FINISH.
6. SEE DETAIL 2 FOR THICKENED EDGE DETAIL AT ALL EDGE CONDITIONS.

(A) C2-PG64-10 ASPHALTIC PAVEMENT, 3,500 PSI HEAVY DUTY PORTLAND CEMENT CONCRETE OR 2,500 PSI STANDARD DUTY TYPE 1 PORTLAND CEMENT CONCRETE.

(B) CLASS II CRUSHED MISCELLANEOUS BASE COMPACTED TO 95% MAXIMUM DRY DENSITY BASED ON ASTM D1557-07 TEST METHOD OR CLASS 2 AGGREGATE BASE COMPACTED TO 95% OF THE MATERIAL'S ASTM D-1557 MAXIMUM DRY DENSITY.

(C) SUBGRADE SCARIFIED AND RECOMPACTED TO 95% MAXIMUM DRY DENSITY BASED ON ASTM D1557-07 TEST METHOD

	HEAVY DUTY ASPHALT CONCRETE PAVEMENT	STANDARD DUTY SIDEWALK CONCRETE	HEAVY DUTY CONCRETE PAVEMENT
(A)	0'-3"	0'-4"	0'-6"
(B)	0'-8"	0'-0"	0'-4"
(C)	0'-10"	0'-10"	0'-10"

PAVEMENT SECTIONS

N.T.S.

1

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TOLL FREE 1-800-227-2600

A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

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ENGINEER — CITY

CITY OF WILDOMAR

ACCEPTED BY:

DANIEL A YORK, CITY ENGINEER

ACCEPTANCE AS TO CONFORMANCE WITH APPLICABLE CITY STANDARDS AND PRACTICES

REGISTERED PROFESSIONAL ENGINEER — JOHN A. POLLOCK — No. 86160 — CIVIL — STATE OF CALIFORNIA — NOT FOR CONSTRUCTION

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3801 UNIVERSITY AVE, STE. 300
RIVERSIDE, CA 92501
Phone: 951-543-9868

PREPARED BY: JOHN POLLOCK

R.C.E. No. 86160 EXP. 12/31/24

BENCHMARK:

Elevation = 1217.635
Datum = NAVD88
BENCHMARK: T-58-81
DESCRIPTION: SEE SHEET 1.

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CUP XX-XXXX

PROJECT NUMBER_____

CITY OF WILDOMAR

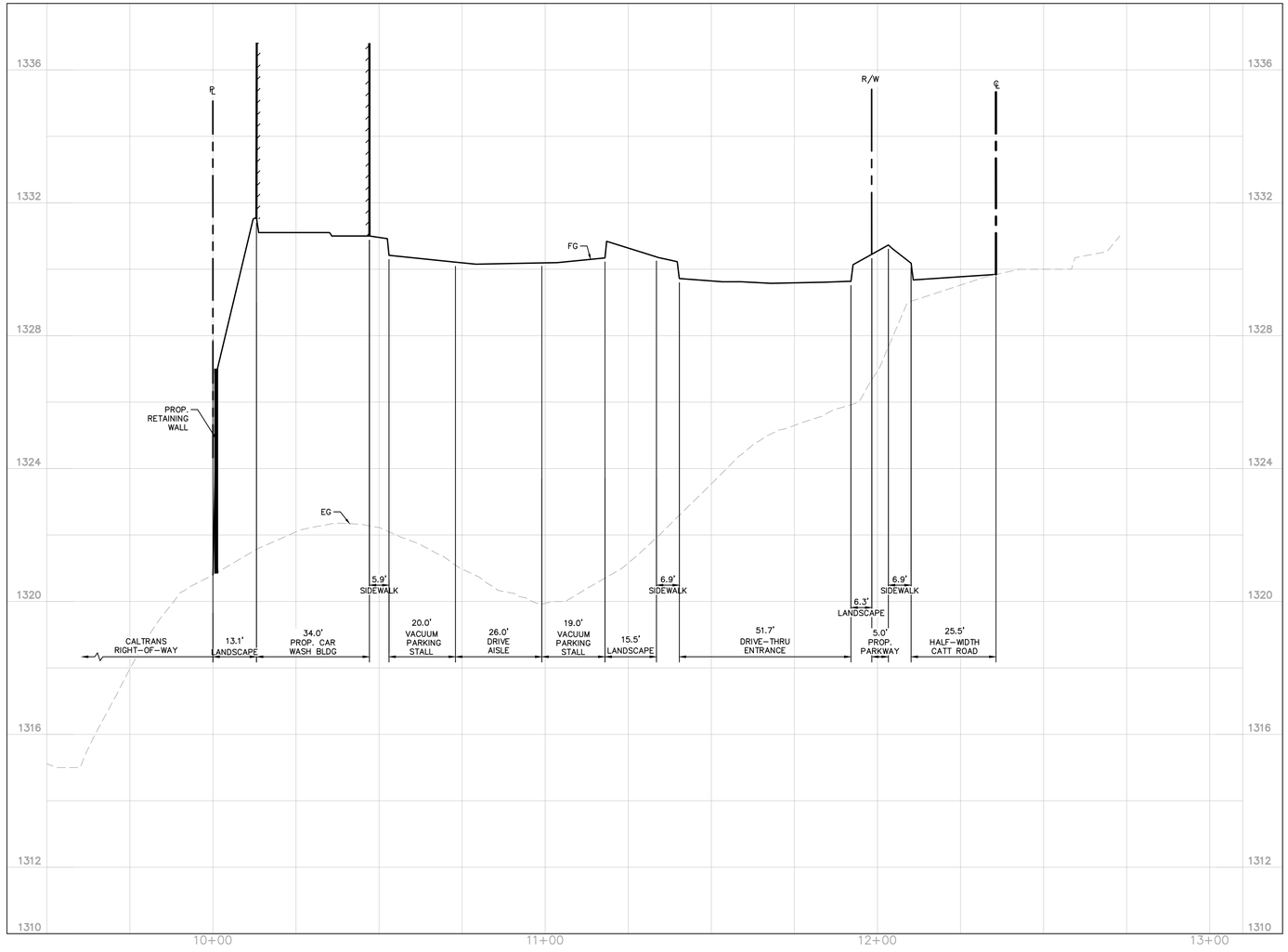
23825 CATT ROAD WILDOMAR, CA 92595

CATT CROSSING

CROSS SECTIONS

SHEET NO. 3

OF 8 SHTS



SECTION A-A
HORIZONTAL SCALE 1"=20'
VERTICAL SCALE 1"=2'

INDEX OF SHEETS:

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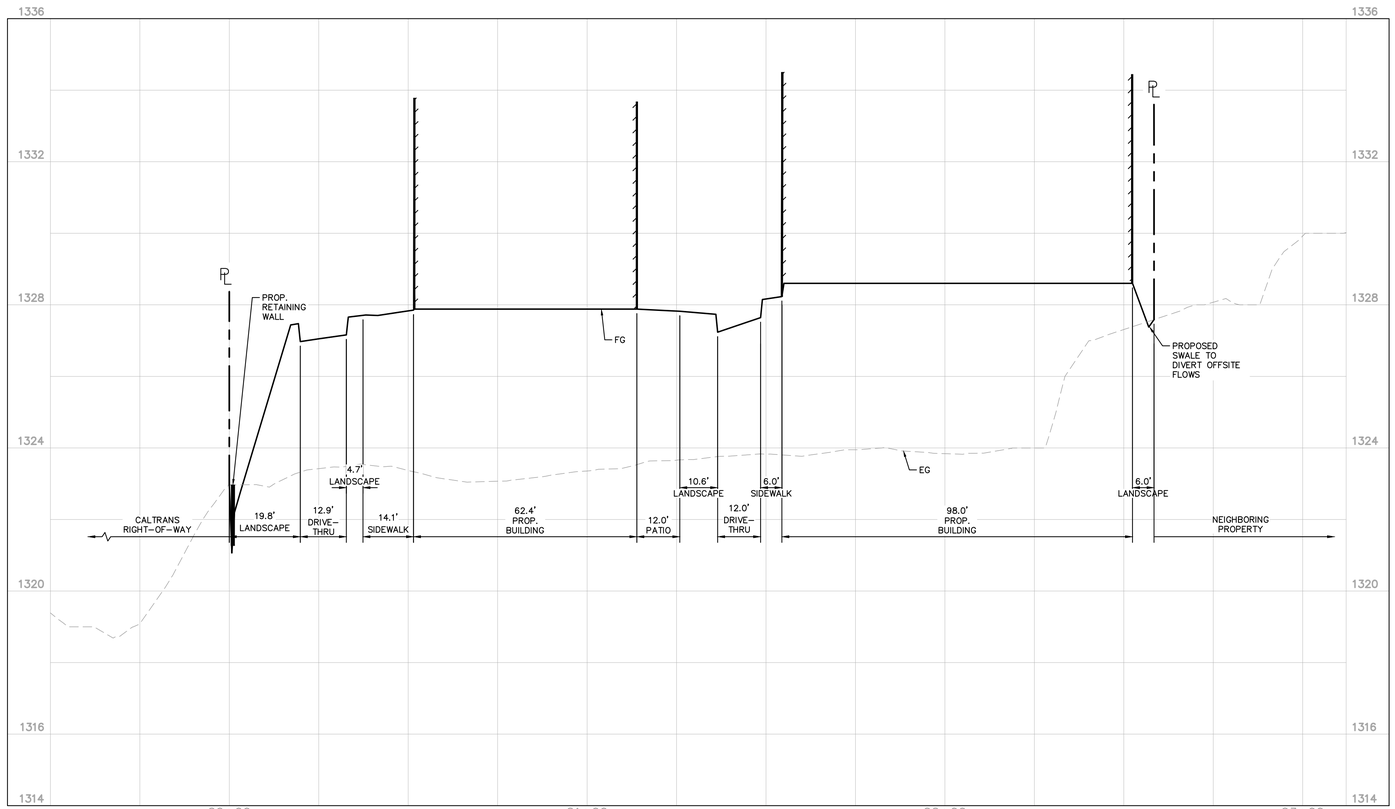
BENCHMARK:
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Datum = NAVD88
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DESCRIPTION: SEE SHEET 1.

AERIAL FLIGHT DATED 12/22/21 BY INLAND AERIAL. GROUND TOPOGRAPHY WAS CONDUCTED BY KWC FIELD SURVEY ON 12/28/21.

CUP XX-XXXX
PROJECT NUMBER_____

CITY OF WILDOMAR
23825 CATT ROAD WILDOMAR, CA 92595
CATT CROSSING
CROSS SECTIONS

SHEET NO. 4
OF 8 SHTS



SECTION B-B
HORIZONTAL SCALE 1"=20'
VERTICAL SCALE 1"=2'

INDEX OF SHEETS:

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1	COVER SHEET
2	PRELIMINARY GRADING PLAN
3-7	CROSS SECTIONS
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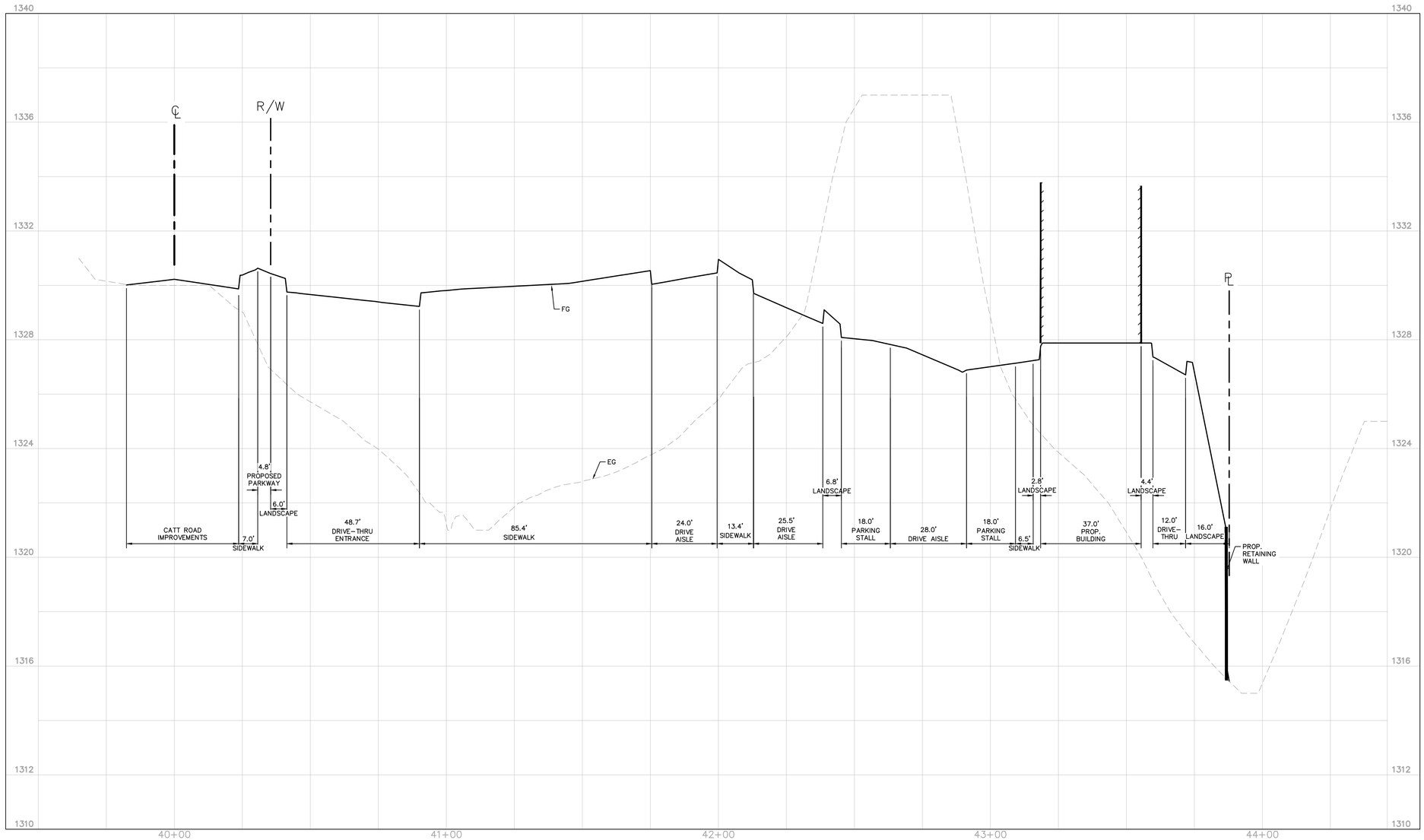
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CUP XX-XXXX PROJECT NUMBER_____

CITY OF WILDOMAR
23825 CATT ROAD WILDOMAR, CA 92595
CATT CROSSING
CROSS SECTIONS

SHEET NO. 5
OF 8 SHTS



SECTION C-C
HORIZONTAL SCALE 1"=20'
VERTICAL SCALE 1"=2'

INDEX OF SHEETS:

SHEET No.	DESCRIPTION
1	COVER SHEET
2	PRELIMINARY GRADING PLAN
3-7	CROSS SECTIONS
8	PRELIMINARY UTILITY PLAN

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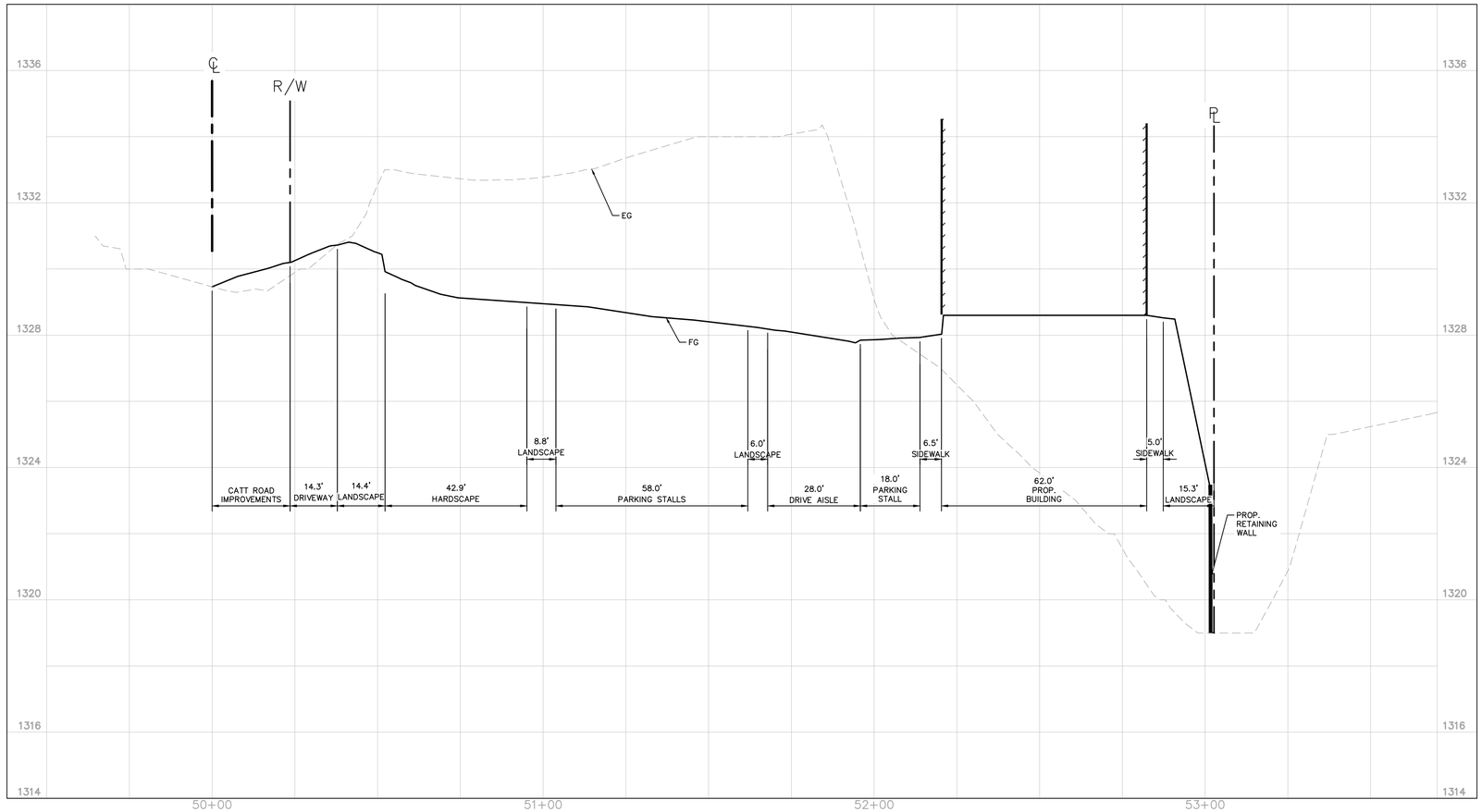
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Datum = NAVD88
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CUP XX-XXXX PROJECT NUMBER

CITY OF WILDOMAR
23825 CATT ROAD WILDOMAR, CA 92595
CATT CROSSING
CROSS SECTIONS

SHEET NO. 6
OF 8 SHTS



SECTION D–D
HORIZONTAL SCALE 1"=20'
VERTICAL SCALE 1"=2'

INDEX OF SHEETS:

SHEET No.	DESCRIPTION
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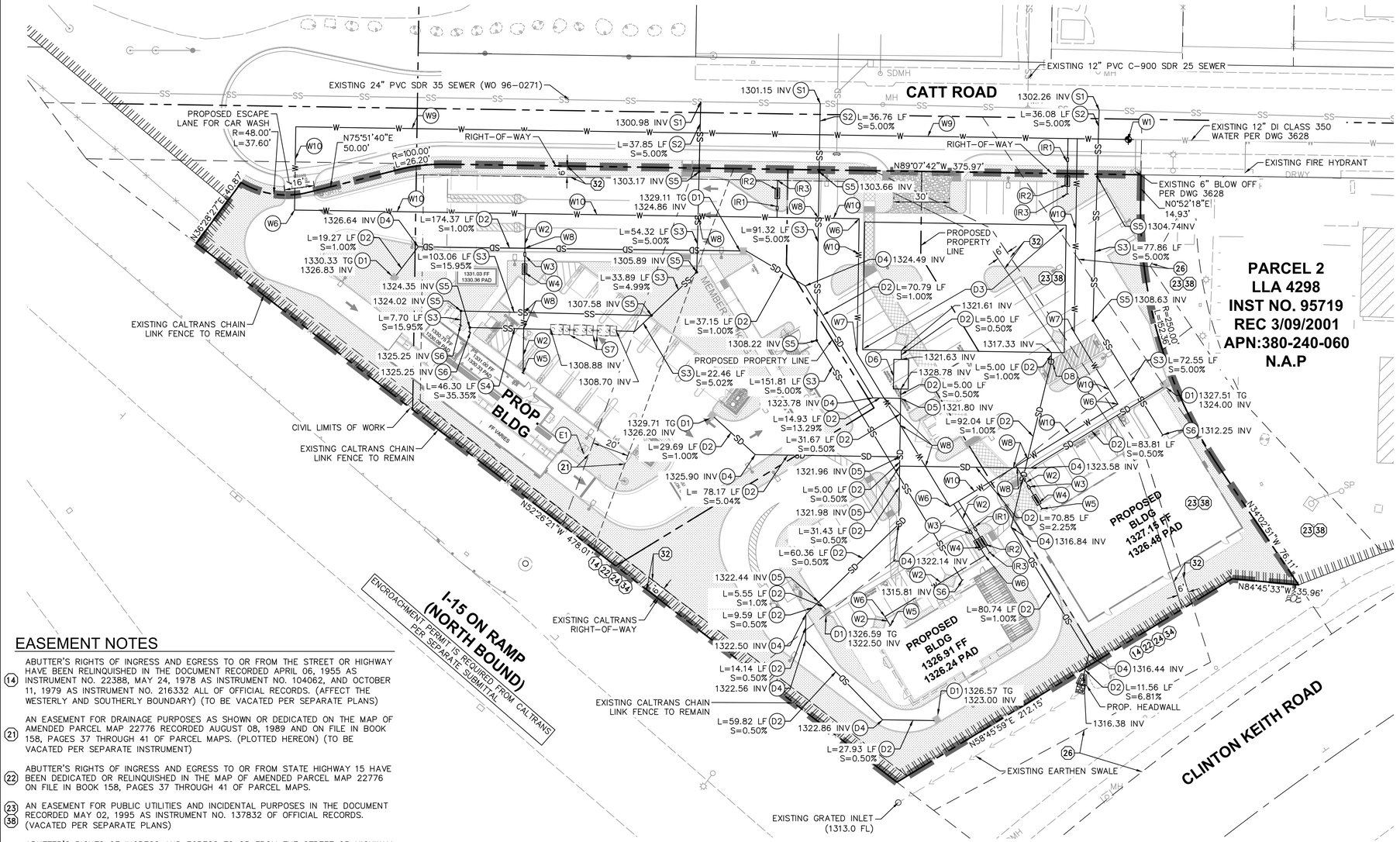
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PROJECT NUMBER_____

CITY OF WILDOMAR
23825 CATT ROAD WILDOMAR, CA 92595
CATT CROSSING
CROSS SECTIONS

SHEET NO. 7
OF 8 SHTS



LEGEND

- PROPERTY LINE
- CIVIL LIMITS OF WORK
- EASEMENT
- SS — PROPOSED SANITARY SEWER PIPE
- W — PROPOSED DOMESTIC WATER PIPE
- SD — PROPOSED STORM DRAIN PIPE
- POINT OF CONNECTION (@ BLDG)
- POINT OF CONNECTION (TO EXISTING)
- W — EXISTING DOMESTIC WATER PIPE
- SS — EXISTING SANITARY SEWER PIPE
- SD — EXISTING STORM DRAIN PIPE

NOTES

1. STUB POINT OF CONNECTION 5' FROM BUILDING. REFER TO MEP PLANS FOR CONTINUATION OF BUILDING.
2. DOMESTIC WATER TO HAVE A MINIMUM 3' COVER.
3. ALL UTILITY CROSSINGS SHOULD HAVE A MINIMUM OF 1' SEPARATION. REFER TO DETAIL 1, HEREON
4. PRIOR TO ANY WORK PERFORMED IN THE RIGHT-OF-WAY, A PERMIT FROM THE CITY OF WILDOMAR IS REQUIRED.
5. ALL EXISTING OVERHEAD UTILITIES ALONG THE FRONTAGE ROADS SHALL BE UNDERGROUNDED DURING CONSTRUCTION.

DOMESTIC WATER

- (W1) CONNECT TO EXISTING 12" WATER MAIN. COORDINATE CONNECTION WITH EASTERN MUNICIPAL WATER DISTRICT.
- (W2) PROPOSED 2" PVC SCH. 80 DOMESTIC WATER PIPE.
- (W3) PROPOSED 1– ¾" WATER METER.
- (W4) PROPOSED 2" BACKFLOW ASSEMBLY DOMESTIC FEBCO (OR APPROVED EQUAL) WITH GUARDSHACK COVER.
- (W5) BUILDING POINT OF CONNECTION (5–FT FROM BUILDING FACE). REFER TO PLUMBING PLANS FOR CONTINUATION.
- (W6) PROPOSED 90° DOMESTIC WATER BEND.
- (W7) PROPOSED 45° DOMESTIC WATER BEND.
- (W8) PROPOSED UTILITY CROSSING. MAINTAIN 1 FOOT CLEARANCE BETWEEN UTILITIES. SUPPORT UTILITY DURING TRENCHING REFERENCE SPPWC SPECIFICATIONS. SEE DETAIL 1, HEREON.
- (W9) PROPOSED 12" ZONE 1650 WATER MAIN. COORDINATE EASTERN MUNICIPAL WATER DISTRICT PRIOR TO INSTALLATION.
- (W10) PROPOSED 8" ZONE 1650 WATER MAIN. COORDINATE EASTERN MUNICIPAL WATER DISTRICT PRIOR TO INSTALLATION.

IRRIGATION WATER

- (IR1) PROPOSED 1" IRRIGATION METER
- (IR2) PROPOSED 1" IRRIGATION WATER BACKFLOW ASSEMBLY FEBCO (OR APPROVED EQUAL) WITH GUARDSHACK COVER.
- (IR3) PROPOSED 1.5' PVC SCH40 IRRIGATION WATER PIPE. REFER TO IRRIGATION PLANS FOR CONTINUATION.

SANITARY SEWER

- (S1) PROPOSED CONNECTION TO EXISTING SEWER MAIN. CONTRACTOR TO POTHOLE AND VERIFY LOCATION OF EXISTING SEWER MAIN PRIOR TO TRENCHING AND SEWER INSTALLATION. IF DISCREPANCIES ARE FOUND, NOTIFY ENGINEER FOR FURTHER DIRECTION.
- (S2) PROPOSED 6" VCP SEWER AT MINIMUM 2.0% SLOPE. TRENCH AND BACKFILL PER EASTERN MUNICIPAL WATER DISTRICT STANDARDS.
- (S3) PROPOSED 6" SDR–35 PVC SEWER AT MINIMUM 1.0% SLOPE. TRENCH AND BACKFILL PER EASTERN MUNICIPAL WATER DISTRICT STANDARDS.
- (S4) PROPOSED 8" SDR–35 PVC SEWER AT MINIMUM 1.0% SLOPE. TRENCH AND BACKFILL PER EASTERN MUNICIPAL WATER DISTRICT STANDARDS.
- (S5) PROPOSED SEWER CLEANOUT
- (S6) PROPOSED BUILDING POINT OF CONNECTION. REFER TO PLUMBING PLANS FOR CONTINUATION.
- (S7) PROPOSED CLARIFIER. REFER TO MEP PLANS FOR MORE INFORMATION.

DRAINAGE

- (D1) PROPOSED 36" BY 36" JENSEN CATCH BASIN WITH FLEXSTORM INSERTS AND NO DUMPING STENCIL
- (D2) PROPOSED 12" HDPE STORM DRAIN PIPE.
- (D3) PROPOSED UNDERGROUND STORM DRAIN SYSTEM.
- (D4) PROPOSED 12'" HDPE 45° BEND.
- (D5) PROPOSED 12" HDPE TEE.
- (D6) PROPOSED MODULAR WETLAND SYSTEM (MWS–L–8–16–V)
- (D7) PROPOSED OVERFLOW HDPE PIPE.
- (D8) PROPOSED OVERFLOW STRUCTURE.

ELECTRICAL

- (E1) ELECTRICAL TRANSFORMER.

EASEMENT NOTES

(14) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM THE STREET OR HIGHWAY HAVE BEEN RELINQUISHED IN THE DOCUMENT RECORDED APRIL 06, 1955 AS INSTRUMENT NO. 22388, MAY 24, 1978 AS INSTRUMENT NO. 104062, AND OCTOBER 11, 1979 AS INSTRUMENT NO. 216332 ALL OF OFFICIAL RECORDS. (AFFECT THE WESTERLY AND SOUTHERLY BOUNDARY) (TO BE VACATED PER SEPARATE PLANS)

(21) AN EASEMENT FOR DRAINAGE PURPOSES AS SHOWN OR DEDICATED ON THE MAP OF AMENDED PARCEL MAP 22776 RECORDED AUGUST 08, 1989 AND ON FILE IN BOOK 158, PAGES 37 THROUGH 41 OF PARCEL MAPS. (PLOTTED HEREON) (TO BE VACATED PER SEPARATE INSTRUMENT)

(22) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM STATE HIGHWAY 15 HAVE BEEN DEDICATED OR RELINQUISHED IN THE MAP OF AMENDED PARCEL MAP 22776 ON FILE IN BOOK 158, PAGES 37 THROUGH 41 OF PARCEL MAPS.

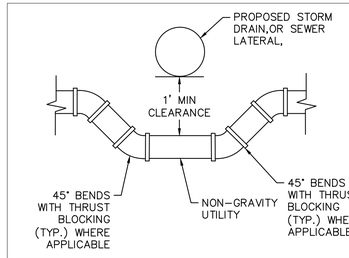
(23) (38) AN EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES IN THE DOCUMENT RECORDED MAY 02, 1995 AS INSTRUMENT NO. 137832 OF OFFICIAL RECORDS. (VACATED PER SEPARATE PLANS)

(24) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM THE STREET OR HIGHWAY HAVE BEEN RELINQUISHED IN THE DOCUMENT RECORDED DECEMBER 14, 2010 AS INSTRUMENT NO. 2010–0598558 OF OFFICIAL RECORDS. (AFFECTS PARCEL 3) THE ABOVE DOCUMENT WAS RE–RECORDED MAY 09, 2011 AS INSTRUMENT NO. 2011–0204321 OF OFFICIAL RECORDS.

(26) TRANSFER OF TITLE OF PARCELS 0264–005C, 0264–005D & 0264–005E PER DEED EXECUTED BY COUNTY OF RIVERSIDE, A POLITICAL SUBDIVISION OF THE STATE OF CALIFORNIA TO CITY OF WILDOMAR, A MUNICIPALITY OF THE STATE OF CALIFORNIA, RECORDED JUNE 13, 2013 AS INSTRUMENT NO. 2013–0282059 OF OFFICIAL RECORDS. (GRANTEE OF QUIT CLAIM DOES NOT APPEAR TO BE ENTITY CAPABLE OF ACQUIRING TITLE TO REAL PROPERTY ON PARCEL No. PCL 0264–005C) (PLOTTED HEREON)

(32) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RECORDED DECEMBER 13, 1978 AS INSTRUMENT NO. 261602 OF OFFICIAL RECORDS. (PLOTTED HEREON)

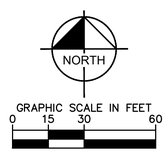
(34) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM STATE HIGHWAY 15 AND CLINTON KEITH ROAD EXCEPT THE GENERAL EASEMENT OF TRAVEL HAVE BEEN DEDICATED OR RELINQUISHED IN THE MAP OF AMENDED PARCEL MAP 22776 ON FILE IN BOOK 158, PAGES 37 THROUGH 41 OF PARCEL MAPS. (PLOTTED HEREON)



NOTE: CONTRACTOR MAY AT HIS/HER OPTION ROPE THE WATER MAIN IN PLACE OF VERTICAL BENDS TO MAINTAIN 1' MIN CLEARANCE. ROPING SHALL NOT EXCEED MAXIMUM RADIUS OF CURVATURE PER MANUFACTURERS RECOMMENDATIONS.

WATER CROSSING DETAIL

N.T.S. — 1



INDEX OF SHEETS:

SHEET No.	DESCRIPTION
1	COVER SHEET
2	PRELIMINARY GRADING PLAN
3–7	CROSS SECTIONS
8	PRELIMINARY UTILITY PLAN

DIGALERT — DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG — TOLL FREE 1-800-227-2600 — A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER CITY ACCEPTANCE OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR ACCEPTANCE BY THE CITY.

MARK	BY	DATE	REVISIONS	APPR.	DATE
ENGINEER				CITY	

CITY OF WILDOMAR
ACCEPTED BY:
DANIEL A YORK, CITY ENGINEER
ACCEPTANCE AS TO CONFORMANCE WITH APPLICABLE CITY STANDARDS AND PRACTICES

REGISTERED PROFESSIONAL ENGINEER — JOHN A. POLLOCK — No. 86160 — CIVIL — STATE OF CALIFORNIA — NOT FOR CONSTRUCTION

Kimley»Horn
© 2022 KIMLEY–HORN AND ASSOCIATES, INC.
Phone: 951–543–9868
3801 UNIVERSITY AVE, STE. 300
RIVERSIDE, CA 92501
PREPARED BY: JOHN POLLOCK
R.C.E. No. 86160 EXP. 12/31/24

BENCHMARK:
Elevation = 1217.635
Datum = NAVD88
BENCHMARK: T–58–81
DESCRIPTION: SEE SHEET 1.

AERIAL FLIGHT DATED 12/22/21 BY INLAND AERIAL GROUND. TOPOGRAPHY WAS CONDUCTED BY KWC FIELD SURVEY ON 12/28/21.

CUP XX–XXXX — PROJECT NUMBER _____

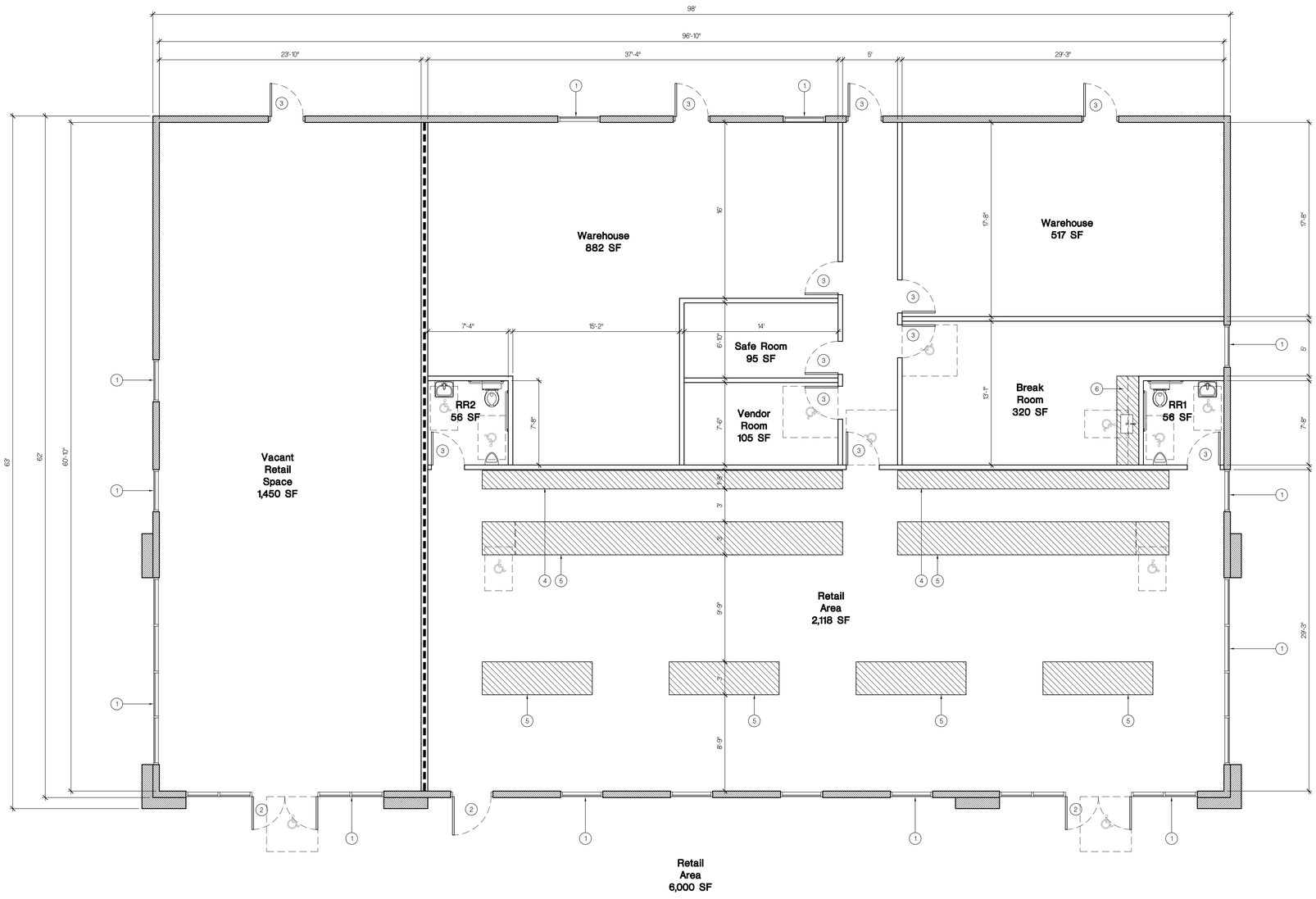
CITY OF WILDOMAR

23825 CATT ROAD WILDOMAR, CA 92595

CATT CROSSING

PRELIMINARY UTILITY PLAN

SHEET NO. 5 OF 8 SHTS



Legend:

- EXTERIOR STUCCO WALL, TYP.
- DEMISING WALL, TYP.
- INTERIOR NON-BEARING WALL, TYP.

1. STOREFRONT SYSTEM, TYP.
2. 3X7' STOREFRONT DOOR - PUSH PULL HARDWARE
3. 3X7 METAL DOOR AND FRAME - LEVER HARDWARE
4. NEW WALL DISPLAY, TYP.
5. NEW SALES COUNTER, TYP.
6. NEW CABINETRY WITH SINK

Proposed Floor Plan | 1/4"=1'-0" | 1

FRANK MARTINEZ
750 EAST GREEN STREET #308
PASADENA, CA 91101
626-407-6427
WWW.MARTINEZHOSTETTLER.COM
FRANK@MARTINEZFM.COM

New Commercial Building
Clinton Keith Road
Wildomar, CA. 92595

Issued For	Date
Design Review Set	09-21-2022

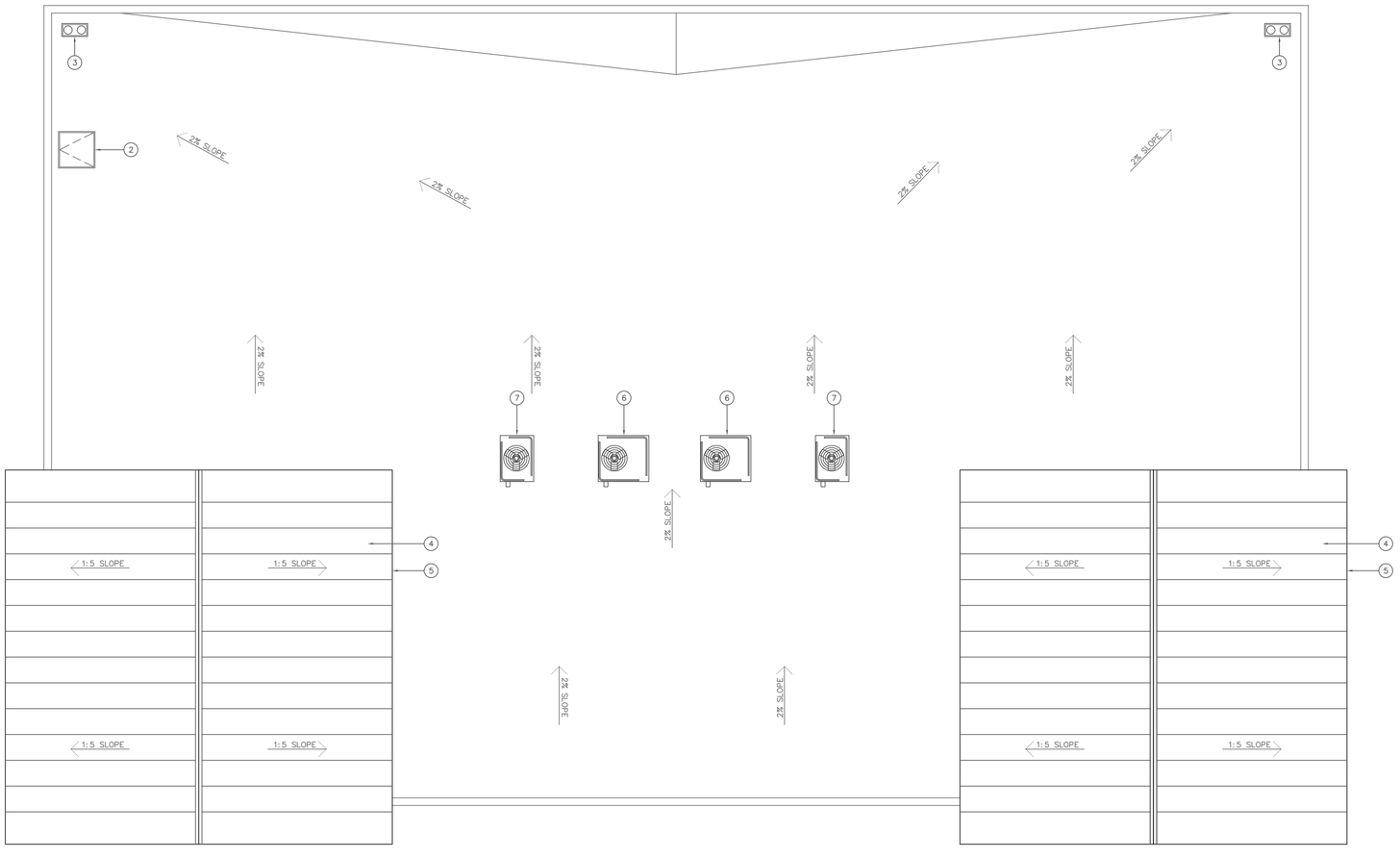
These drawings are the property of Frank Martinez.
All design ideas and information on these drawings are the property of Frank Martinez and can not be copied or disclosed without written permission from Frank Martinez.

File No:	A-2.1
Job No:	2213A
Drawn By:	Staff
Date:	06-17-2022
Scale:	As Shown

PROPOSED FLOOR PLAN

A-2.1

2015 FRANK MARTINEZ



Legend:

PARAPET WALL, TYP.

2% SLOPE ROOF SLOPE, TYP.

1. CLASS 'A' TORCH DOWN ROOF, TYP.
2. ROOF HATCH
3. ROOF DRAIN WITH OVERFLOW
4. METAL ROOF, TYP.
5. METAL ROOF GUTTER WITH DOWNSPOUT, TYP.
6. ROOF TOP HVAC PACKAGE UNIT
7. HVAC SPLIT SYSTEM COMPRESSOR

FRANK MARTINEZ
750 EAST GREEN STREET
SUITE 308
PASADENA, CA. 91101
FRANK@MARTINEZFM.COM

New Commercial Building
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Wildomar, CA. 92595

Issued For	Date
Client Review Set	09-21-2022

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File No.:	A-6.1
Job No.:	2213A
Drawn By:	Staff
Date:	06-17-2022
Scale:	As Shown

PROPOSED
ROOF PLAN

A-5.1

2022 FRANK MARTINEZ

Proposed Roof Plan | 3/16"=1'-0" | 1



Proposed West Elevation | 1/8"=1'-0" | 8



Proposed South Elevation | 1/8"=1'-0" | 2



Proposed East Elevation | 1/8"=1'-0" | 7



Proposed North Elevation | 1/8"=1'-0" | 1

FRANK MARTINEZ
750 EAST GREEN STREET
SUITE 308
PASADENA, CA. 91101
FRANK@MARTINEZFM.COM

New Commercial Building
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Issued For	Date
Client Review Set	09-21-2022

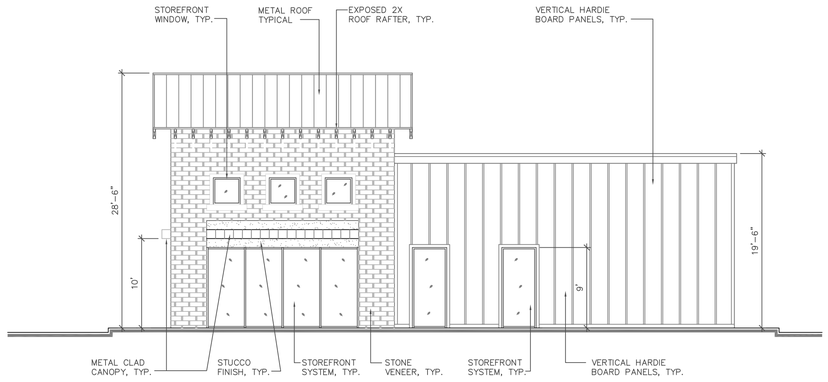
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File No.:	A-6.1
Job No.:	2213A
Drawn By:	Staff
Date:	06-17-2022
Scale:	As Shown

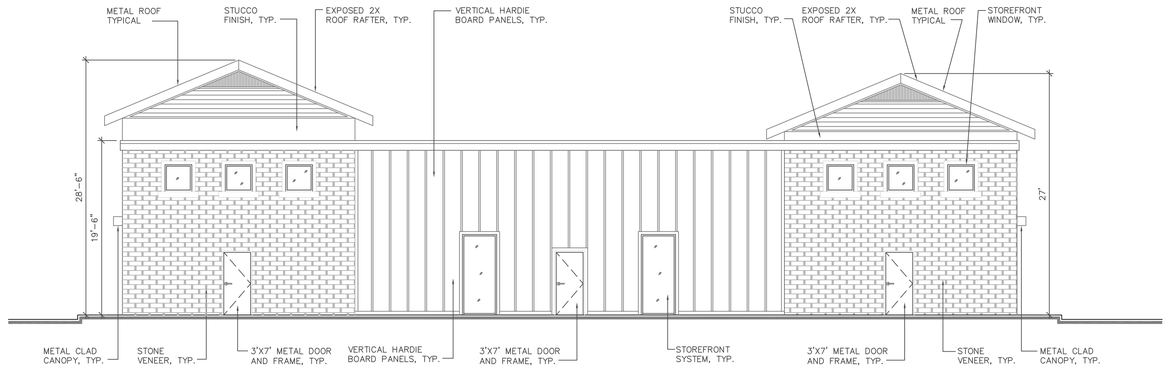
PROPOSED
EXTERIOR ELEVATIONS

A-6.1

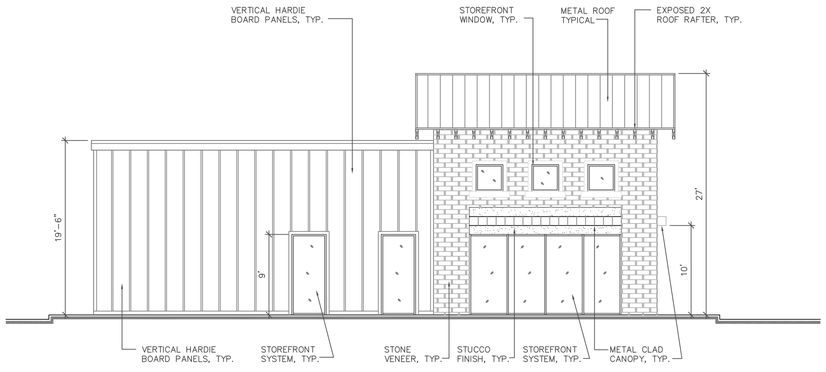
2022 FRANK MARTINEZ



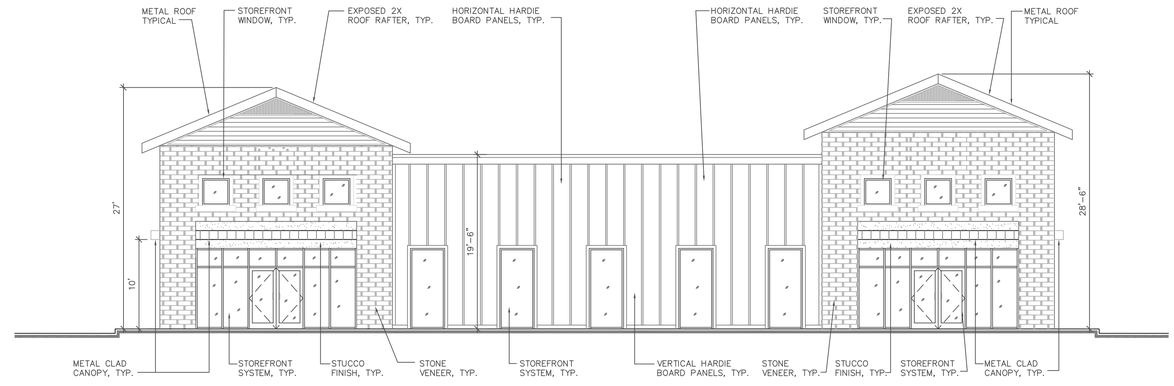
Proposed West Elevation | 1/8"=1'-0" | 8



Proposed South Elevation | 1/8"=1'-0" | 2



Proposed East Elevation | 1/8"=1'-0" | 7



Proposed North Elevation | 1/8"=1'-0" | 1

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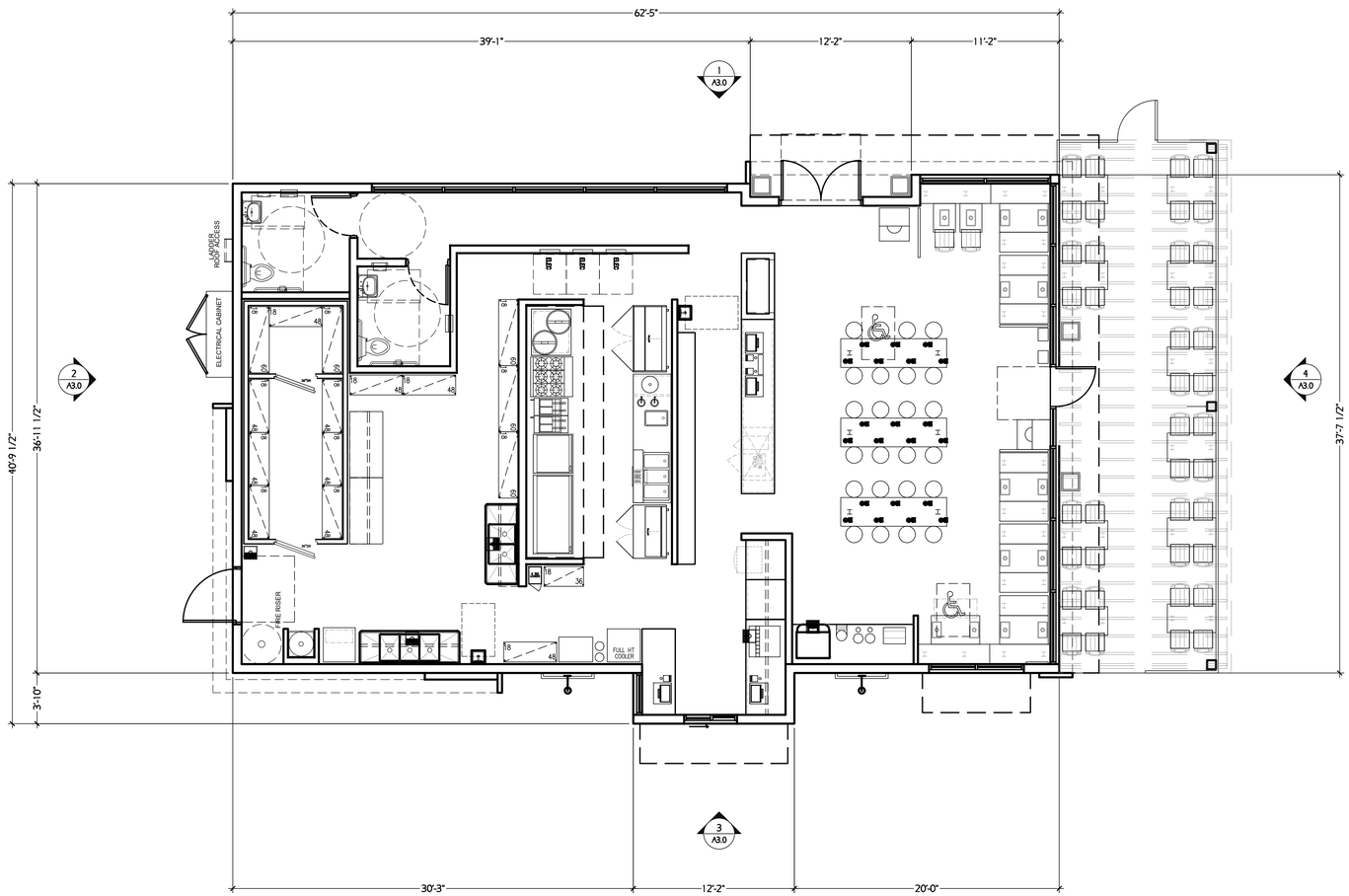
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Job No.:	2213A
Drawn By:	Staff
Date:	06-17-2022
Scale:	As Shown

PROPOSED
EXTERIOR ELEVATIONS

A-6.1

2022 FRANK MARTINEZ



0 30" 5 10 15 20

SCALE: 3/16"=1'-0"

NORTH

FLOOR PLAN - FAST FOOD RESTAURANT

3/16" = 1'-0" | 1

PM DESIGN
Architectural Solutions Group

38 EXECUTIVE PARK
SUITE 310
IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
PHONE: (949) 430-7051
EMAIL: jliederman@pmdginc.COM

JEFF LIEDERMAN, ARCHITECT

SEAL:

CONSULTANT:

CATALYST COMMERCIAL GROUP

CATT CROSSING RETAIL CENTER

NEC INTERSTATE HWY 15
& CLINTON KEITH RD.
WILDOMAR, CA

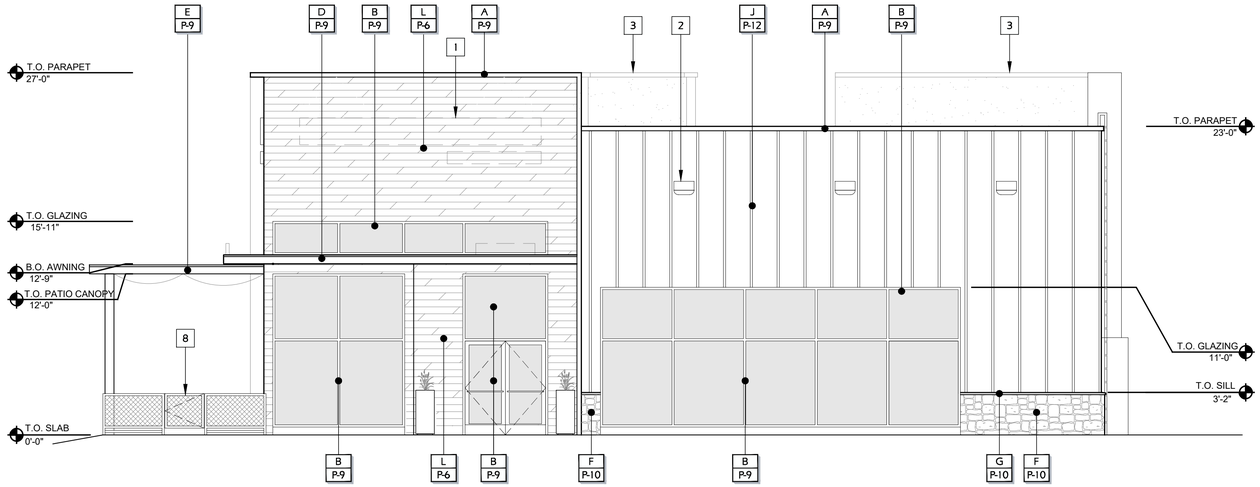
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2	12.09.22	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

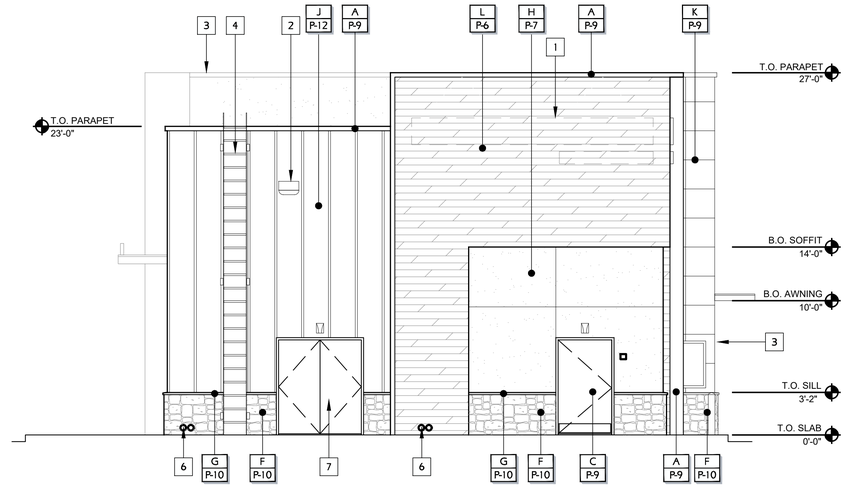
ARCH. PROJECT NO.:
CCG21001.0

SHEET NAME:
FLOOR PLAN
FAST FOOD

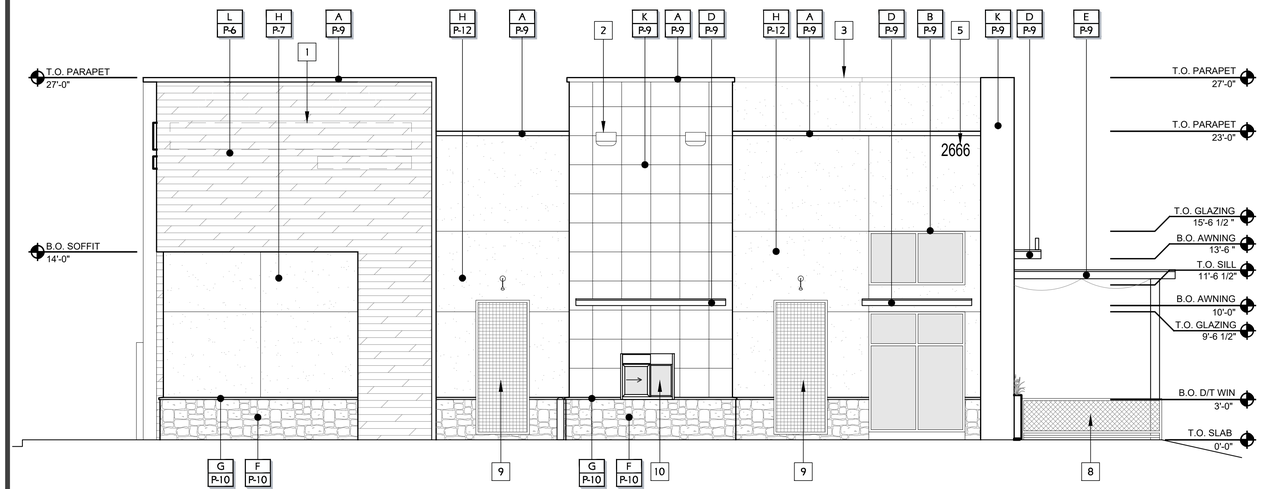
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A2.0



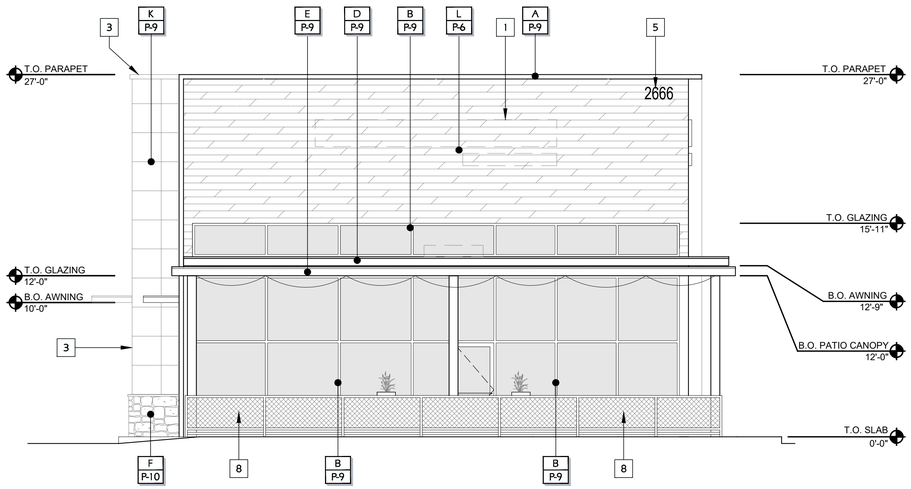
1 EXTERIOR NORTH ELEVATION (FACING PARKING LOT)
A4.0 1/4" = 1'-0"



4 EXTERIOR WEST ELEVATION
A4.0 1/4" = 1'-0"



2 EXTERIOR SOUTH ELEVATION (FACING STREET)
A4.0 1/4" = 1'-0"



3 EXTERIOR EAST ELEVATION
A4.0 1/4" = 1'-0"

#	KEYNOTE DESCRIPTION
1.	SIGNAGE
2.	LED EXTERIOR LIGHT FIXTURE
3.	OUTLINE OF BLDG. ELEMENT BEYOND.
4.	ROOF ACCESS LADDER.
5.	BUILDING ADDRESS.
6.	ROOF DRAIN & OVERFLOW TO DAYLIGHT AT WALL.
7.	ELECTRICAL SWITCH GEAR, PAINT TO MATCH DARK BRONZE.
8.	PATIO FENCE & GATE.
9.	GREEN TRELLIS & LIGHTING.
10.	DRIVE-THRU WINDOW.

EXTERIOR ELEVATION KEYNOTES

EXTERIOR FINISH SCHEDULE

	MATERIAL		COLOR / FINISH
A	METAL TRIM/ CAP	P-1	PANTONE 349 C - 'GREEN'
B	STOREFRONT ALUMINUM DOOR/ WINDOW	P-2	SW 6902 'DECISIVE YELLOW' SHERWIN WILLIAMS
C	HOLLOW METAL DOORS / FRAMES PAINT TO MATCH ADJ. SURFACE	P-3	SW 7004 'SNOWBOUND' SHERWIN WILLIAMS
D	METAL AWNING	P-4	SW 7658 'GRAY CLOUDS' SHERWIN WILLIAMS
E	METAL CANOPY	P-5	SW 7025 'BACKDROP' SHERWIN WILLIAMS
F	STONE VENEER WAINSCOT	P-6	RECLAIMED WOOD OF THE WORLD - "SNOW DRIFT"
G	STONE SILL	P-7	SW6769 'MAXI TEAL' SHERWIN WILLIAMS
H	PLASTER FINISH	P-8	NATURAL GRAY
J	HARDI VERTICAL WALL SIDING W/ BATTEN BOARD TRIM	P-9	DARK BRONZE OR MATCH DARK BRONZE
K	ATAS INTERNATIONAL MCM WALL PANELS - OMAWALL PL SIZE: 26"x26"	P-10	COUNTRY RUBBLE - ASPEN
L	WOOD SIDING	P-11	MONTEREY TAUPE
M	CMU - SPLIT FACE 8 x 8 x 16 MANUF: ANGELUS BLOCK	P-12	ARCTIC WHITE

EXTERIOR ELEVATIONS

3/16" = 1'-0"

1

PM DESIGN
Architectural Solutions Group
38 EXECUTIVE PARK
SUITE 310
IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
PHONE: (949) 430-7051
EMAIL: jliederman@pmdginc.COM
JEFF LIEDERMAN, ARCHITECT

SEAL:

CONSULTANT:

CATALYST COMMERCIAL GROUP

CATT CROSSING RETAIL CENTER

NEC INTERSTATE HWY 15
& CLINTON KEITH RD.
WILDOMAR, CA

REV	DATE	DESCRIPTION
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1	12.09.22	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

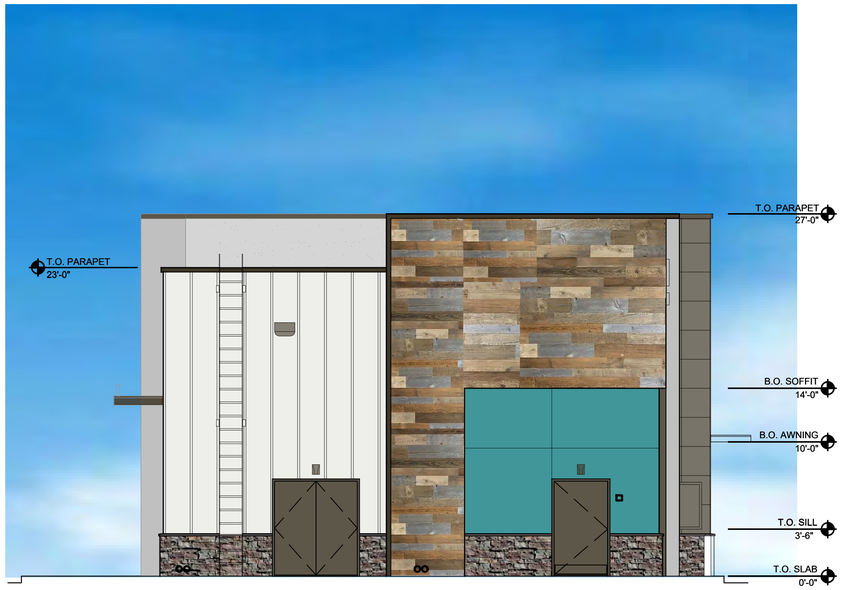
ARCH. PROJECT NO.:
CCG21001.0

SHEET NAME:
EXTERIOR ELEVATIONS PAD 2

SHEET NUMBER:
A3.0



1 A4.0 EXTERIOR NORTH ELEVATION
1/4" = 1'-0"



4 A4.0 EXTERIOR WEST ELEVATION
1/4" = 1'-0"



2 A4.0 EXTERIOR SOUTH ELEVATION
1/4" = 1'-0"



3 A4.0 EXTERIOR EAST ELEVATION
1/4" = 1'-0"

Disclaimer : Please note this illustration is only a representation. Due to variations in computer software and printers , these illustrations cannot be considered an exact color nor material match.

EXTERIOR ELEVATIONS

3/16" = 1'-0" | 1

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2	12.06.22	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

ARCH. PROJECT NO.:
CCG21001.0

SHEET NAME:
EXTERIOR ELEVATIONS
PAD 2

SHEET NUMBER:
A3.1

NEW CAR WASH FACILITY

SWC OF CLINTON KEITH ROAD & CATT ROAD
WILDOMAR, CA 92595
APN: 380240064, 380240052, 380240001
QUICK QUACK SITE I.D. #44-299

SHEET INDEX LIST:

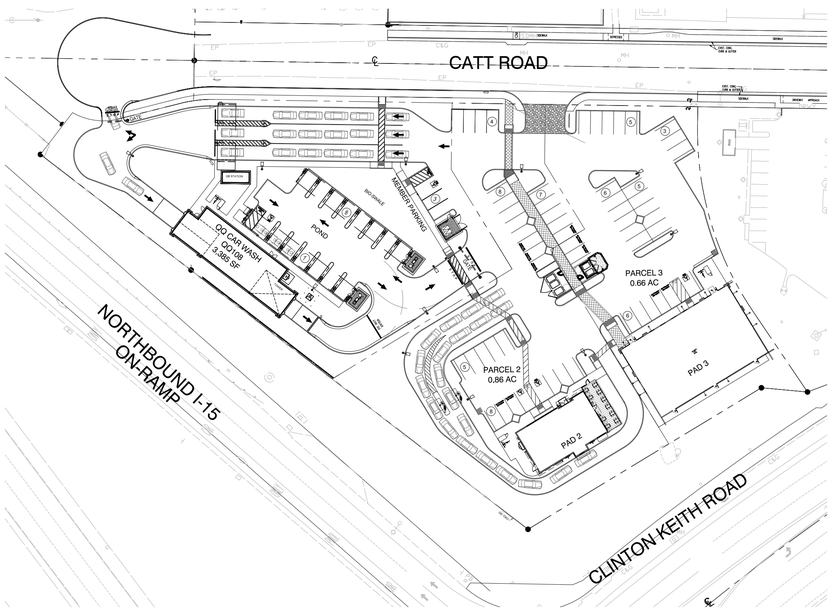
G000	COVER SHEET
A100	SITE PLAN
A200	FLOOR PLAN
A203	ROOF PLAN
A300	EXTERIOR ELEVATIONS
A301	EXTERIOR ELEVATIONS
A302	EXTERIOR ELEVATIONS - REMOTE QB
A701	EQUIPMENT SCHEDULE
1	COLORED EXTERIOR ELEVATIONS
2	COLORED EXTERIOR ELEVATIONS
3	COLORED EXTERIOR ELEVATIONS
ES1.1	ELECTRICAL SITE LIGHTING PLAN
ES1.2	BUILDING EXTERIOR LIGHTING PLAN
ES1.3	LIGHT FIXTURE SELECTIONS
ES1.4	LIGHT FIXTURE SELECTIONS

PROJECT DIRECTORY

PROJECT MANAGER
QUICK QUACK CAR WASH
1380 LEAD HILL BLVD., SUITE 260
ROSEVILLE, CA. 95661
CONTACT: DOUG LIVINGSTON, AIA
ARCHITECTURAL DIRECTOR
MOBILE: (425) 420-0642
EMAIL: DLIVINGSTON@DONTDRIVEDIRTY.COM

ARCHITECT
STANTEC ARCHITECTURE, INC.
3133 WEST FRYE ROAD, SUITE 300
CHANDLER, AZ 85226
PHONE: (630) 750-9625
CONTACT: ROBERT CHANDLER, PROJECT MANAGER
EMAIL: ROBERT.CHANDLER@STANTEC.COM

ELECTRICAL ENGINEER
SACRAMENTO ENGINEERING CONSULTANTS
10555 OLD PLACERVILLE ROAD
SACRAMENTO, CA. 95827
PHONE: (916) 368-4468
CONTACT: CHRIS GILLAND
EMAIL: CGILLAND@SACENG.CO



OVERALL SITE PLAN



VICINITY MAP

PROJECT INFORMATION:

ADDRESS:

STATE SITE CODE:	QQ #44-299
STREET ADDRESS:	SWC OF CLINTON KEITH RD & CATT RD
CITY:	WILDOMAR, CA 92595
COUNTY:	RIVERSIDE COUNTY
STATE:	CALIFORNIA

SITE:

PROJECT SITE AREA:	47,217 S.F. (1.08 ACRES)
ZONED:	CG - GENERAL COMMERCIAL
A.P.N.:	380240064, 380240052, 380240001

CITY APPLICATION TYPE:

CONDITIONAL USE PERMIT
DESIGN PERMIT

REQUIRED SETBACKS

FRONT:	0'* *NO YARD REQUIREMENTS FOR
SIDES:	0'* BUILDINGS WHICH DO NOT EXCEED
REAR:	0'* 35 FEET IN HEIGHT
NEW LANDSCAPING AREA:	14,364 SF
LANDSCAPING %	30%

QUICK QUACK PARKING

VACUUM STALL PARKING	14' x 19'
MEMBER PARKING	9' x 18'
ADA PARKING	12' x 19'
	12' x 18'

BUILDING CODE:

BUILDING CODE EDITION:	2019 CALIFORNIA BUILDING CODE
PLUMBING CODE EDITION:	2019 CALIFORNIA PLUMBING CODE
MECHANICAL CODE EDITION:	2019 CALIFORNIA MECHANICAL CODE
ELECTRICAL CODE EDITION:	2019 CALIFORNIA ELECTRICAL CODE
FIRE CODE EDITION:	2019 CALIFORNIA FIRE CODE
ACCESSIBILITY CODE:	2019 CALIFORNIA BUILDING CODE, CHAPTER 11B

CALIFORNIA CODE REGULATIONS TITLE 24 FOR DISABLED ACCESS, ENERGY CONSERVATION & NOISE ATTENUATION

GREEN BUILDING CODE:	2019 CALIFORNIA GREEN BUILDING CODE
ENERGY CODE:	2019 CALIFORNIA ENERGY CODE

BUILDING DATA:

CAR WASH BLDG.:	3,385 S.F.
OCCUPANCY:	B
CONSTRUCTION TYPE:	VB (NON- SPRINKLED)
NUMBER OF STORIES:	1
BUILDING HEIGHT:	29'-0" (MAIN BLDG. PARAPET)

CANOPIES

WEST VACUUM CANOPY:	1,553 S.F.
OCCUPANCY:	B
CONSTRUCTION TYPE:	VB (NON- SPRINKLED)
NUMBER OF STORIES:	1
BUILDING HEIGHT:	9'-9"
EAST VACUUM CANOPY:	1,241 S.F.
OCCUPANCY:	B
CONSTRUCTION TYPE:	VB (NON- SPRINKLED)
NUMBER OF STORIES:	1
BUILDING HEIGHT:	9'-9"
QUEING CANOPY:	725 S.F.
OCCUPANCY:	B
CONSTRUCTION TYPE:	VB (NON- SPRINKLED)
NUMBER OF STORIES:	1
BUILDING HEIGHT:	9'-9"
TOTA CANOPIES:	3,519 S.F.

SCOPE OF WORK:

CONSTRUCTING A NEW QUICK QUACK WASH FACILITY ON AN UNDEVELOPED SITE. NEW BUILDING CONSTRUCTED ALONG WITH DRIVE LANES FOR PAYING AND VACUUM STALLS.

Stantec
Architecture Inc.
3133 West Frye Road, Suite 300
Chandler, AZ 85226-3310
TEL 480.867.6100
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Revision	Issued	By	Appd.	YY.MM.DD
	PLANNING RESUBMITTAL			22.12.13
	PLANNING SUBMITTAL			22.10.12

Quick Quack CAR WASH

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Permit-Seal

Title
COVERSHEET

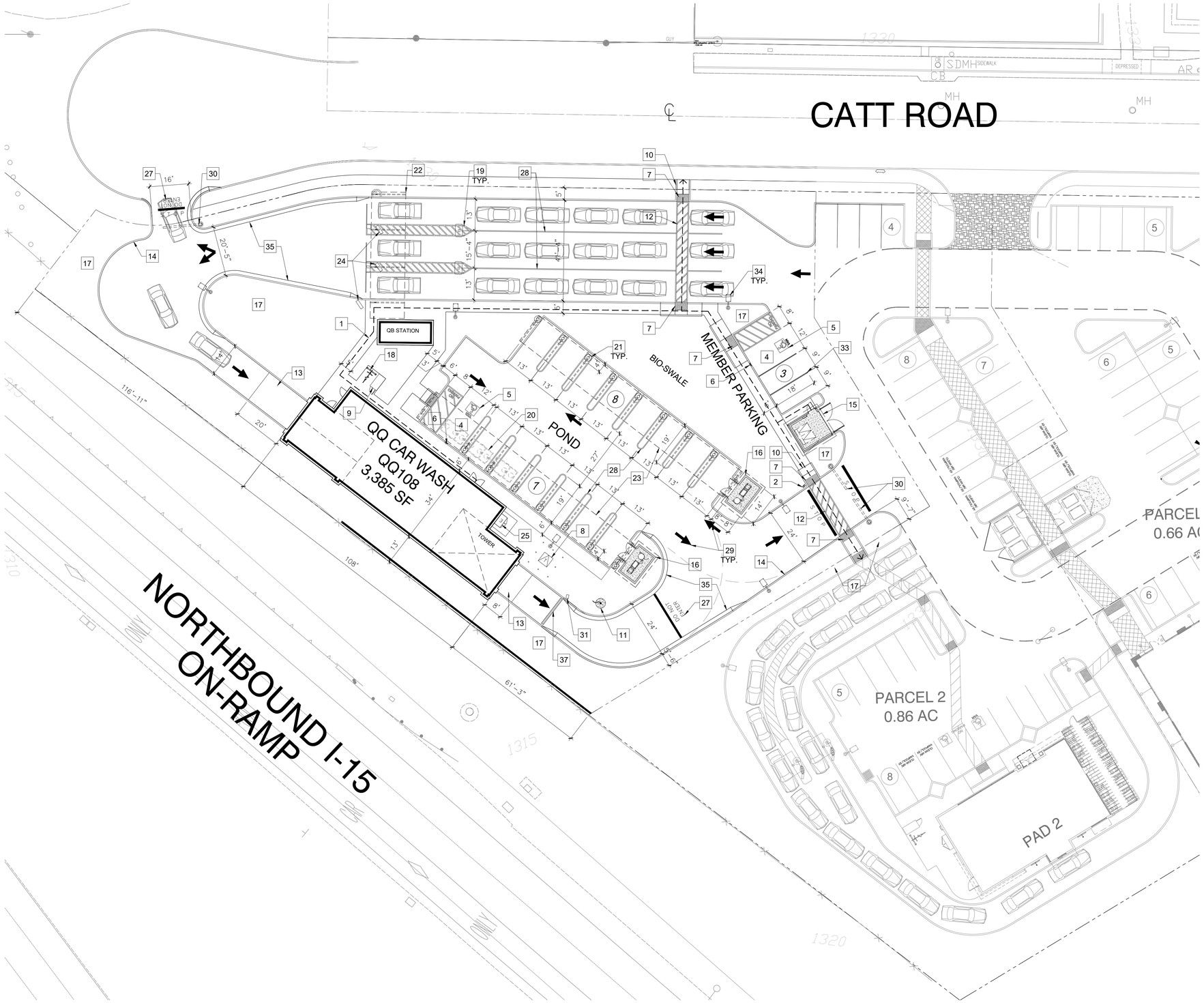
Project Number: 2007130215
File Name:

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ORIGINAL SHEET - ARCH D



1 - SITE PLAN

1" = 20'-0"

KEYNOTES

1. ADA PATH OF TRAVEL SHOWN DASHED.
2. NEW POLE MOUNTED INTERNATIONAL SYMBOL OF ACCESSIBILITY AT ACCESSIBLE PATH OF TRAVEL. FINAL LOCATION OF PATH OF TRAVEL LOCATION TO BE COORDINATED WITH SHOPPING CENTER DRAWINGS
3. NOT USED
4. NEW VAN ACCESSIBLE PARKING STALL - PAINT ACCESSIBLE LOADING ZONE WITH 4" WIDE STRIPING WITH TWO COATS OF HIGHWAY BLUE PAVEMENT MARKING PAINT. PAINT THE WORDS "NO PARKING" IN 12" HIGH LETTERS WITHIN THE LOADING ZONE.
5. NEW INTERNATIONAL SYMBOL AT PARKING STALL (TYP. 2 PLACES)
6. NEW ACCESSIBLE PARKING SIGN. (TYPICAL 2 PLACES)
7. NEW TRUNCATED DOMES (TYPICAL 6 PLACES)
8. ELECTRICAL TRANSFORMER. SITE TO BE DETERMINED WITH ELECTRIC COMPANY
9. NEW LONG TERM BIKE LOCKER
10. NEW FLUSH SURFACE AT TRANSITION (TYPICAL)
11. 30 FOOT FLAG POLE. FOR REFERENCE ONLY UNDER SEPARATE PERMIT
12. NEW CONCRETE WALK, MEDIUM BROOM FINISH PERPENDICULAR TO PATH OF TRAVEL. SLOPE NOT TO EXCEED 5% IN DIRECTION OF TRAVEL. CROSS SLOPE NOT TO EXCEED 2%. SEE CIVIL PLANS
13. NEW CONCRETE DRIVE SLAB, SEE CIVIL DRAWINGS.
14. NEW 6" CONCRETE CURB (TYPICAL)
15. NEW TRASH ENCLOSURE BY LANDLORD.
16. NEW VACUUM EQUIPMENT ENCLOSURE. SEE DRAWING A8.02
17. NEW LANDSCAPING - SEE LANDSCAPE DRAWINGS
18. NEW BICYCLE RACK
19. NEW 4" CONCRETE FILLED PIPE BOLLARD (TYPICAL 4 PLACES) PROVIDE 4" AT STACKING LANES
20. NEW UNDERGROUND GREASE INTERCEPTOR
21. NEW TRASH RECEPTACLES (TYPICAL 15 PLACES)
22. NEW PAY CANOPY, SEE SHEET A105.
23. NEW VACUUM CANOPY, SEE SHEET A106.
24. NEW MENU BOARD, SEE SHEETS A104, A105.
25. ELECT. SWITCH-GEAR CABINET, SEE ELECTRICAL DRAWINGS.
26. EXISTING SIDEWALK
27. NEW HIGHWAY PAINT WHITE 18" "DO NOT ENTER" (TYPICAL 2 PLACES)
28. NEW HIGHWAY PAINT YELLOW 4" STRIPING
29. NEW HIGHWAY PAINT WHITE PAVEMENT MARKINGS (TYPICAL)
30. NEW EXIT GATE
31. NEW WAIT/GO SIGN - REFERENCE ONLY (UNDER SEPARATE PERMIT) VERIFY LOCATION WITH QUICK QUACK REPRESENTATIVE
32. NOT USED
33. NEW PARKING STRIPING PER CITY STANDARDS
34. NEW 20' HIGH LED SITE LIGHTS (TYPICAL 4 PLACES)
35. 24" ROLLED CONCRETE CURB AT ENTRANCE AND EXIT
36. NOT USED.
37. NEW TRENCH DRAIN - SEE CIVIL DRAWINGS

BUILDING INFORMATION

CLIENT :	QUICK QUACK CAR WASH
JURISDICTION :	WILDOMAR, CA
APN :	380-240-001, 380-240-052
SITE AREA :	+/- 1.08 AC (47,045 SF)
SITE NUMBER :	44-299
BUILDING :	QQ108
STACKING LANES :	(3) LANES
STACKING WIDTH :	41'-4"
VACUUM STALLS :	(14) 14' x 19'
VACUUM PRODUCER:	(2) 40 HP
ADA PARKING :	(1) 12' x 18' (VAN STALL) (1) 12' x 19' (VAN STALL)
PARKING STALLS :	(2) 9' X 18'
BUILDING AREA :	+/- 3,385 SF
BUILDING SPRINKLERED :	NO
QB STATION ATTACHED :	NO
BUILDING LENGTH :	108'-0"
SHOWROOM LENGTH:	106'-8"
CONVEYOR TRENCH LENGTH :	106'-8"
CONVEYOR LENGTH :	105'-10"
CONVEYOR TYPE :	REAR WHEEL PUSH

PARKING ANALYSIS

NEW 9'-0" X 18'-0" STANDARD STALL	2 STALLS
NEW 12'-0" X 18'-0" ADA STALL (VAN)	1 STALLS
NEW 12'-0" X 19'-0" ADA STALL (VAN)	1 STALLS
NEW 14'-0" X 19'-0" VACUUM STALLS	14 STALLS
NEW TOTAL PARKING STALLS	18 STALLS
NEW BIKE PARKING SPACES	1 SPACE
NEW LONG TERM BIKE PARKING SPACES	1 SPACES

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Quick Quack CAR WASH

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Title
SITE PLAN

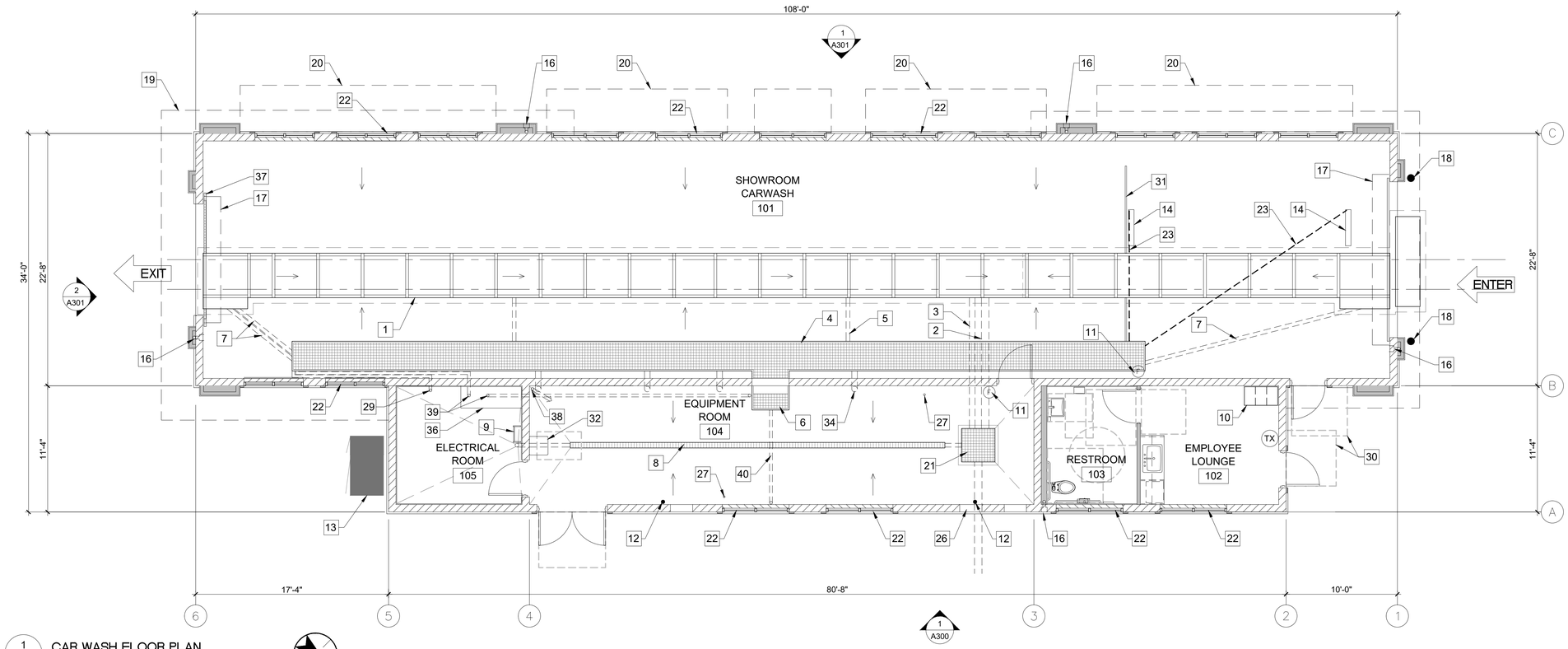
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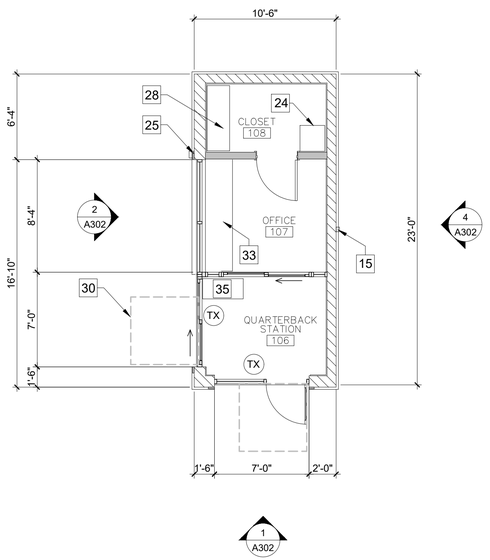
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ORIGINAL SHEET - ARCH D



1 / - CAR WASH FLOOR PLAN
SCALE: 3/16" = 1'-0"



2 / - QUARTERBACK STATION FLOOR PLAN
SCALE: 3/16" = 1'-0"

GENERAL NOTES

1. DO NOT SCALE DRAWINGS
2. SEE DRAWING A201 FOR DIMENSIONS.
3. SEE DRAWING A201 FOR WALL TYPES
4. SEE SITE PLAN FOR ACCESSIBLE PATH OF TRAVEL
5. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE.
6. GC TO COORDINATE ALL REQUIRED BLOCKING FOR WALL HUNG EQUIPMENT, SHELVES, ETC. FOR PROPER INSTALLATION HEIGHTS.
7. TACTILE EXIT SIGNS SHALL BE REQUIRED AT THE FOLLOWING LOCATIONS:
   A. WHEREVER BASIC CBC PROVISIONS REQUIRE EXIT SIGNS FROM A ROOM OR AREA TO A CORRIDOR OR HALLWAY. THE TACTILE EXIT SIGN SHALL HAVE THE WORDS, "EXIT ROUTE."
   B. EACH GRADE-LEVEL EXIT DOOR. THE TACTILE EXIT SIGN SHALL HAVE THE WORD, "EXIT."
8. NO HAZARDOUS MATERIALS ARE STORED ON SITE. ONLY SOAPS AND WAXES ARE BEING STORED.
9. THIS PROJECT IS IN A VERY HIGH FIRE HAZARD SEVERITY ZONE. ANY BUILDING CONSTRUCTED WITHIN THIS PROJECT SHALL COMPLY WITH THE SPECIAL CONSTRUCTION PROVISIONS CONTAINED IN THE CITY OF WILDOMAR MUNICIPAL CODE AND THE CALIFORNIA BUILDING CODE.

KEYNOTES

1. CONVEYOR TRENCH. SLOPE AT ¼" PER FOOT TO DRAIN.
2. 8" CONVEYOR TRENCH DRAIN PIPE. SEE PLUMBING DRAWINGS
3. 6" CONVEYOR TRENCH OVERFLOW. SEE PLUMBING DRAWINGS
4. UTILITY TRENCH. SLOPE BOTTOM TO DRAIN.
5. 4" FLOOR DRAIN FROM UTILITY TRENCH TO THE CONVEYOR TRENCH (TYPICAL 2 PLACES) - SEE PLUMBING DRAWINGS
6. 3'-4" WIDE X 2'-2" DEEP OPEN FOR ACCESS TO UTILITY TRENCH. CONTRACTOR TO PROVIDE COVER - MATCH UTILITY TRENCH
7. 4" PIPE CHASE FROM UTILITY TRENCH TO CONVEYOR TRENCH. (TYPICAL 3 PLACES)
8. TRENCH DRAIN. SEE PLUMBING DRAWINGS PROVIDE 2 AT THE EXIT - EXTEND PAST WALL 1'-0" BEYOND OPENING
9. ROOF ACCESS LADDER.
10. EMPLOYEE LOCKERS. (TOTAL OF 3 - 1 ADA ACCESSIBLE) SEE DETAIL #4/A602 - CONTRACTOR SUPPLIED AND INSTALLED
11. WALL MOUNTED ENCLOSED FIRE EXTINGUISHER. - 2A-10BC (TYPICAL 2 PLACES)
12. ROOF DRAIN LEADER. SEE PLUMBING DRAWINGS (TYPICAL 2 PLACES)
13. ELECTRICAL SERVICE SWITCHGEAR. SEE ELECTRICAL DRAWINGS
14. 3/4" RECESS IN SLAB FOR TIRE SENSOR SWITCH. (TYPICAL 2 PLACES)
15. COLLECTOR AND DOWNSPOUT - SEE EXTERIOR ELEVATIONS
16. HOSE BIB IN RECESS BOX. PROVIDE WITH LOCKABLE DOOR AT EXTERIOR LOCATIONS. SEE PLUMBING DRAWINGS (TYPICAL 4 PLACES)
17. COILING ROLL-UP DOOR. (TYPICAL 2 PLACES)
18. 6" CONCRETE FILLED PIPE BOLLARD AT ENTRANCE. (TYPICAL 2 PLACES)
19. LINE OF ROOF ABOVE.
20. WALL MOUNTED TRELLIS ABOVE. (TYPICAL 4 PLACES). ON NORTH SIDE OF BUILDING PROVIDE 2" X 8" METAL TRELLIS FASCIA
21. 3'-0" X 3'-0" RECLAIM CLEAN-OUT.
22. FAUX WINDOW - SEE EXTERIOR ELEVATIONS
23. 1/2" CONDUIT TO TIRE SWITCH TERMINATE AT END OF RECESS. CONDUIT TO GO UNDER CONVEYOR TRENCH (TYPICAL 2 PLACES)
24. WALL MOUNTED IT CABINET - SEE ELECTRICAL DRAWINGS
25. KNOX BOX - 2 PLACES SHOWN. CONTRACTOR TO COORDINATE WITH LOCAL FIRE DEPARTMENT FOR TYPE, SIZE AND PREFERRED LOCATION
26. 24" WIDE X 16" HIGH AIR VENT - SEE EXTERIOR ELEVATIONS (TYP. 3 PLACES)
27. 4" DRAIN PIPE STUBBED UP 12" AFF. SEE PLUMBING DRAWINGS. (TYPICAL 2 PLACES)
28. CONTRACTOR FURNISHED AND INSTALLED 20" X 54" X 84" TALL STORAGE CABINET WITH ADJUSTABLE SHELVING AND WHITE MELAMINE FINISH ON THE INSIDE AND GRAY OUTSIDE. SEE DETAIL #6/A602
29. 3" CHASE TO UTILITY TRENCH TERMINATE AT CONTROLLER
30. LEVEL LANDING PER CBC 11B-404.2.4 AND TABLE 11B404.2.4.1 (TYP) - 24" MIN STRIKE EDGE CLEARANCE FOR THE EXTERIOR DOOR LANDING
31. 3/4" x 1 1/2" WIDE RECESS IN SLAB FOR DRAINAGE (TYPICAL 4 PLACES)
32. CONTRACTOR SUPPLIED AND INSTALLED EYE WASH STATION - SEE PLUMBING DRAWINGS
33. 24" DEEP X 30" TALL A.F.F. COUNTER TOP. SEE DETAIL #7/A602
34. 6" SWEEPS FROM UTILITY TRENCH TO EQUIPMENT ROOM (TYPICAL 4 PLACES) VERIFY WITH OWNER FOR EXACT LOCATIONS)
35. CONTRACTOR FURNISHED AND INSTALLED 18" X 36" X 40" TALL POS CABINET SEE DETAIL #12/A602
36. 2'-0" X 5'-6" X 4" TALL CONCRETE "HOUSE CLEANING PAD" FOR MCC PANEL SEE STRUCTURAL DRAWINGS
37. 3/4" x 2 1/2" WIDE RECESS IN SLAB FOR DRAINAGE (TYPICAL 2 PLACES) EXTEND PAST EXIT OPENING 1'-0" MINIMUM
38. 1" PVC CHASE TO BUG JUICE CONTROL PANEL. SWEEPS ONLY, NO 90 DEGREES.
39. 2 - 3" CHASE AT CENTER OF MCC PANEL "HOUSE KEEPING PAD". RUN ONE CHASE TO EQUIPMENT TRENCH AND ONE NEXT TO ACCESS OPENING
40. 3" CHASE FROM ACCESS OPENING TO FACE OF WALL

FIRE NOTES

1. PROVIDE SIGNS ABOVE ALL EXIT DOORS READING: "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED" 2019 CBC
2. PROVIDE MEANS OF EGRESS ILLUMINATION PER CBC SECTION 1008.
3. ALL PORTIONS OF THE BUILDING SHALL BE WITHIN 75 FEET OF A FIRE EXTINGUISHER. THE MINIMUM SIZE OF THE FIRE EXTINGUISHER SHALL BE 2-A:10-BC. COORDINATE LOCATION WITH LOCAL FIRE DEPARTMENT
4. INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH CBC CHAPTER 8
5. PROVIDE A SIGN STATING "MAXIMUM OCCUPANT LOAD____" 2019 CBC SECTION 1004.3. COORDINATE WORDING AND SIGN LOCATION WITH LOCAL FIRE DEPARTMENT.
6. BUILDINGS 3,600 SQUARE FEET IN AREA AND LARGER REQUIRE A FIRE SPRINKLER SYSTEM PER WILDOMAR MUNICIPAL CODE AND CALIFORNIA FIRE CODE. THE CAR WASH BUILDING IS 3,385 SQUARE FEET AND DOES NOT REQUIRE A SPRINKLER SYSTEM.

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Quick Quack CAR WASH

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Permit-Seal

Title
FLOOR PLANS

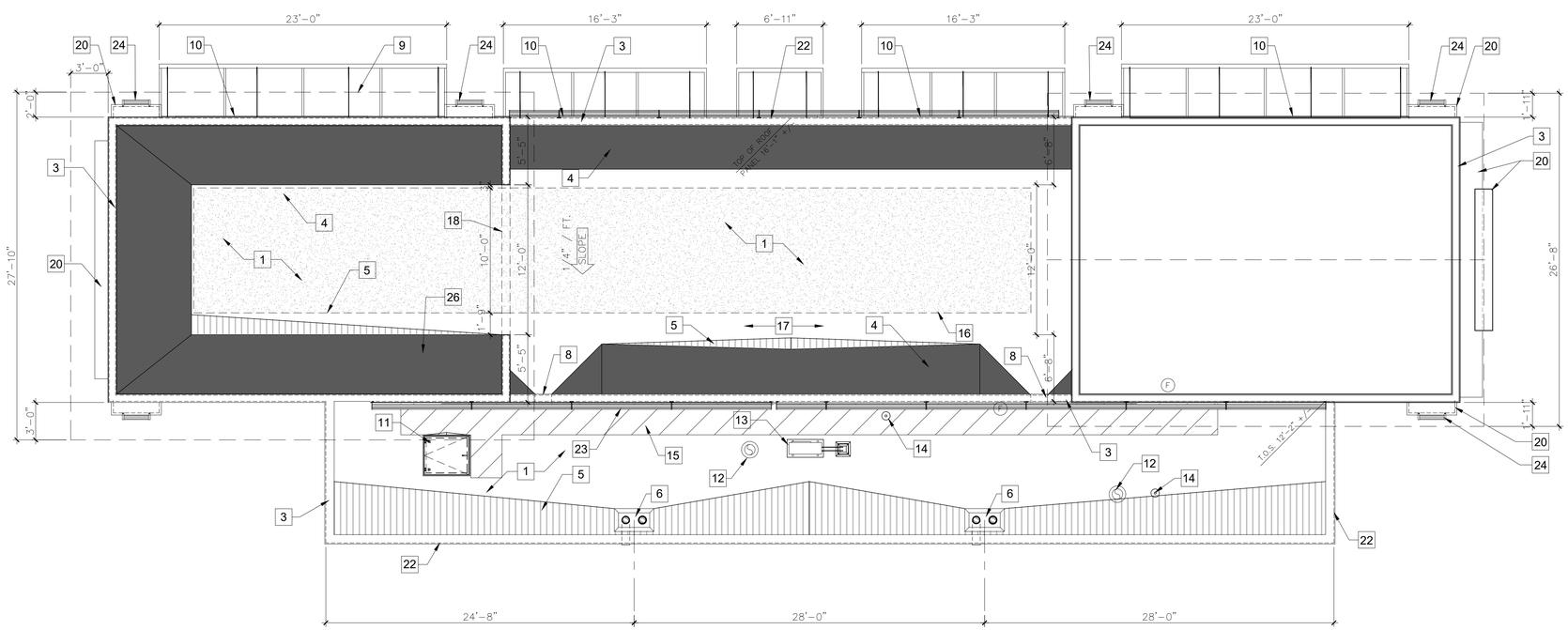
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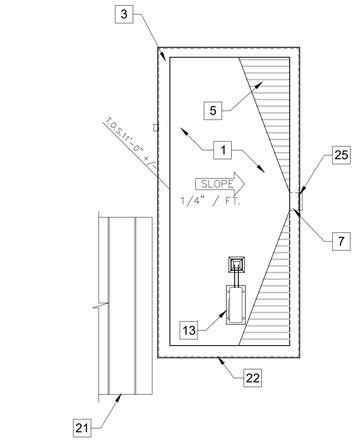
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ORIGINAL SHEET – ARCH D



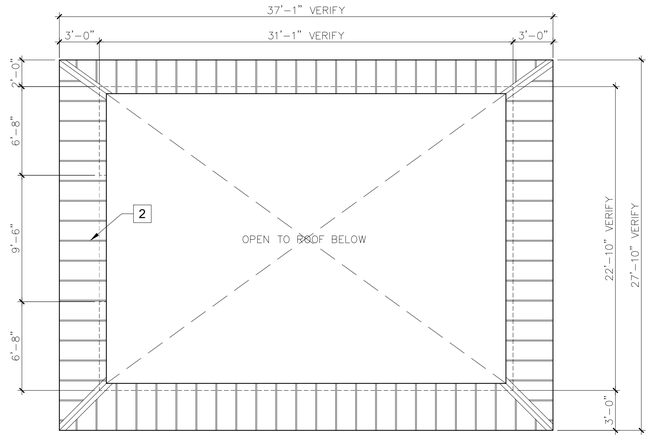
1 — ROOF PLAN
SCALE: 3/16" = 1'-0"

KEYNOTES

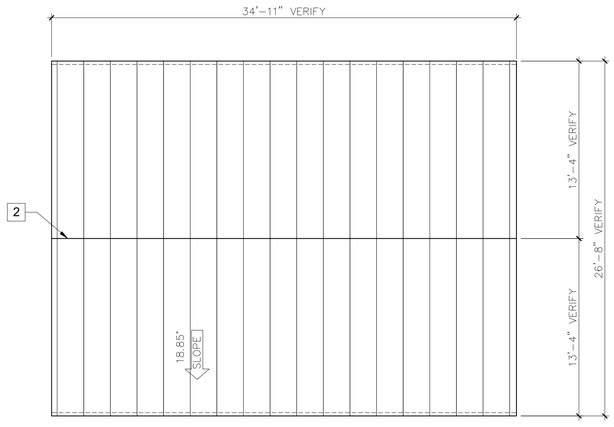
1. TPO MEMBRANE ROOFING. SEE DETAIL:
2. STANDING SEAM METAL ROOFING.
3. PRE-FINISHED METAL COPING AT TOP OF PARAPET WALL.
4. ROOF CRICKET. ½" ROOF SHEATHING OVER METAL STUD DIAGONAL BRACING SLOPE AT ONE TO ONE.
5. TAPERED RIGID INSULATION CRICKET WITH ¼" ISOLATION BOARD (TYP).
6. ROOF DRAIN IN RECESS. SEE PLUMBING DRAWINGS.
7. THROUGH WALL OVERFLOW SCUPPER.
8. THROUGH WALL SCUPPER. SPILL TO ROOF BELOW.
9. OUTLINE OF UPPER ROOF AT ENTRY TOWER. SEE UPPER ROOF PLAN
10. 2" X 8" METAL FASCIA – SEE EXTERIOR ELEVATIONS
11. ROOF ACCESS LADDER HATCH.
12. EXHAUST FAN UNIT. SEE MECHANICAL DRAWINGS.
13. MECHANICAL UNIT TO BE CONCEALED FROM VIEW BY PARAPET. SEE MECHANICAL DRAWINGS.
14. PLUMBING VENT. SEE PLUMBING DRAWINGS.
15. ROOF WALK PATH OVERLAY.
16. ROOF AREA DEDICATED TO POSSIBLE FUTURE SOLAR PANEL INSTALLATION.
17. ROOF AREA DEDICATED TO MAINTENANCE ACCESS TO POSSIBLE FUTURE SOLAR INSTALLATION.
18. OPENING IN WALL BETWEEN CRICKETS.
19. WALL MOUNTED METAL CANOPY BELOW (TYP).
20. CEMENT PLASTER FINISH AT TOP OF FURRED WALL FEATURE (TYP).
21. FREE STANDING METAL PAY STATION CANOPY BELOW.
22. WALL BELOW SHOWN DASHED.
23. LINEAR DOWN LIGHTING – SEE ELECTRICAL PLANS
24. PILASTER DOWN LIGHTING – SEE ELECTRICAL PLANS
25. COLLECTOR AND DOWNSPOUT – SEE EXTERIOR ELEVATIONS



2 — QUARTERBACK STATION ROOF PLAN
SCALE: 3/16" = 1'-0"



2 — UPPER ROOF AT EXIT TOWER
SCALE: 3/16" = 1'-0"



2 — UPPER ROOF AT ENTRY TOWER
SCALE: 3/16" = 1'-0"

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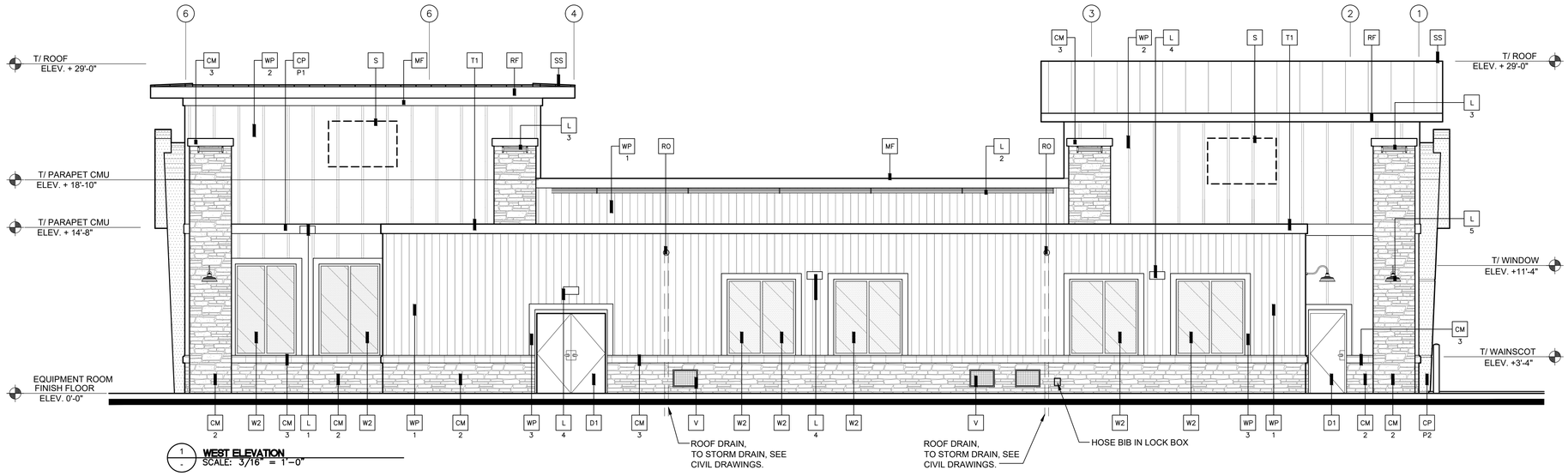
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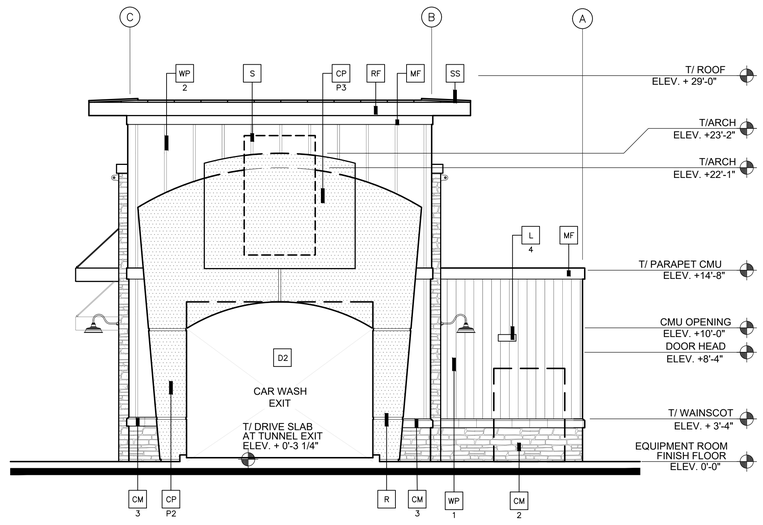
ORIGINAL SHEET – ARCH D



1 - **WEST ELEVATION**
SCALE: 3/16" = 1'-0"

EXTERIOR ELEVATION NOTES:
ALL ROOF EQUIPMENT SHALL NOT EXCEED THE HEIGHT OF ALL PARAPETS. CONTRACTOR TO VERIFY PRIOR TO SETTING TRUSSES.
ALL EQUIPMENT SHALL BE SCREENED TO THE SATISFACTION OF THE PLANNING DEPARTMENT

TOP OF EQUIPMENT ROOM METAL FLASHING, TOP OF METAL TRELLIS ABOVE WINDOWS ON NORTH ELEVATION AND PLASTER BAND AROUND BUILDING SHALL ALIGN WITH EACH OTHER.



2 - **NORTH ELEVATION**
SCALE: 3/16" = 1'-0"

KEY NOTES:

- CM 1 — BASALITE SMOOTH HONED FACE CONCRETE MASONRY UNITS INTEGRAL COLOR STANDARD #225 LIGHT GRAY WITH INTEGRAL FACTORY "RAINBLOC" WATER REPELLENT ADMIXTURE. MORTAR TO HAVE "RAINBLOC" FOR MORTAR ADMIXTURE. MORTAR COLOR TO MATCH.
- CM 2 — STONE VENEER WAINSCOT, CORONADO STONE - COUNTRY RUBBLE "ASPEN"
- CM 3 — STONE VENEER SILL TO MATCH CORONADO STONE - COUNTRY RUBBLE "ASPEN"
- CP — ACRYLIC PLASTER COLOR COAT
  - P — COLOR DESIGNATION:
    - P1 = MATCH SHERWIN WILLIAMS "QUICK QUACK GREEN"
    - P2 = MATCH SHERWIN WILLIAMS #6902 "DECISIVE YELLOW"
    - P3 = MATCH SHERWIN WILLIAMS #7004 "SNOWBOUND"
    - P4 = MATCH SHERWIN WILLIAMS #7658 "GRAY CLOUDS"

    PLASTER COLOR COAT TO BE SAND FINISH
- D1 — HOLLOW METAL DOOR - PAINT TO TO MATCH SHERWIN WILLIAMS #7025 "BACKDROP"
- D2 — OVERHEAD METAL DOOR - PAINT TO TO MATCH SHERWIN WILLIAMS #7025 "BACKDROP"
- D3 — CLEAR ANODIZED ALUMINUM COMMERCIAL SLIDING GLASS DOOR
- DS — 8" x 16" THROUGH WALL SCUPPER, COLLECTOR AND DOWNSPOUT. PAINT TO MATCH ADJACENT SURFACE
- EJ — 1/4" DEEP REVEAL EXPANSION JOINT
- L — LIGHT FIXTURE
  - TYPE:

    L1 = LED RADIAL WALL SCONCE (DOWN ONLY)
    L2 = LINEAR FACADE WALL LIGHT (DOWN ONLY)
    L3 = 2 FOOT LED PILASTER LIGHT (DOWN ONLY)
    L4 = WALL PACK (DOWN ONLY)
    L5 = SURFACE-MOUNTED GOOSENECK LIGHT

    CONTACT STEVE FRIEDMAN 1.262.504.5479 WITH CREE LIGHTING FOR ORDERING LIGHTING. (NO EXCEPTIONS)
- MF — METAL FASCIA - FINISH TO MATCH AEP SPAN "DARK BRONZE"
- P — 6" PIPE BOLLARD FILLED WITH CONCRETE - MATCH SHERWIN WILLIAMS #6902 "DECISIVE" (YELLOW). ALL BOLLARDS TO MATCH ADJACENT WALL COLOR.
- R — 2" WIDE X 1/4" DEEP CLEAR ANODIZED ALUMINUM PLASTER REVEAL
- RF — METAL ROOF FASCIA - FINISH TO MATCH AEP SPAN "DARK BRONZE"
- RO — 3" DIA. PVC ROOF OVERFLOW SCUPPER WITH COWS TONGUE - PAINT TO MATCH ADJACENT.
- S — SIGNAGE BY OTHERS SHOWN DASHED- FOR REFERENCE ONLY UNDER SEPARATE PERMIT. GENERAL CONTRACTOR TO COORDINATE WITH SIGN COMPANY.
- SS — STANDING SEAM METAL ROOF
  AEP SPAN WIDE BATTEN - "DARK BRONZE"
- SV — BORAL PRO-FIT LEDGESTONE "BLACK RUMBLE"
- T1 — METAL WALL CANOPY SYSTEM - COLOR TO MATCH SHERWIN WILLIAMS "QUICK QUACK GREEN"
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- V — 24" WIDE X 16" HIGH VENT - PAINT TO MATCH ADJACENT FINISH
- W1 — EXTERIOR WINDOW ASSEMBLY - TEMPERED GLASS CLEAR ANODIZED ALUMINUM STOREFRONT
- W2 — EXTERIOR FAUX WINDOW ASSEMBLY - WITH BLACK CERAMIC FRIT TEMPERED SPANDREL GLASS CLEAR ANODIZED ALUMINUM STOREFRONT
- WP — HARDIE PLANK SIDING
  - TYPE:

    1 = JH SIERRA 8 VERTICAL PANEL SIDING, PAINT SW "BACKDROP"
    2 = JH VERTICAL PANEL SIDING "ARCTIC WHITE"
    3 = JH 4/4 NT3 SMOOTH TRIM, FINISH TO MATCH ADJACENT PANELS

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Revision	Issued	By	Appd.	YY.MM.DD
	PLANNING RESUBMITTAL			22.12.13
	PLANNING SUBMITTAL			22.10.12

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Permit-Seal

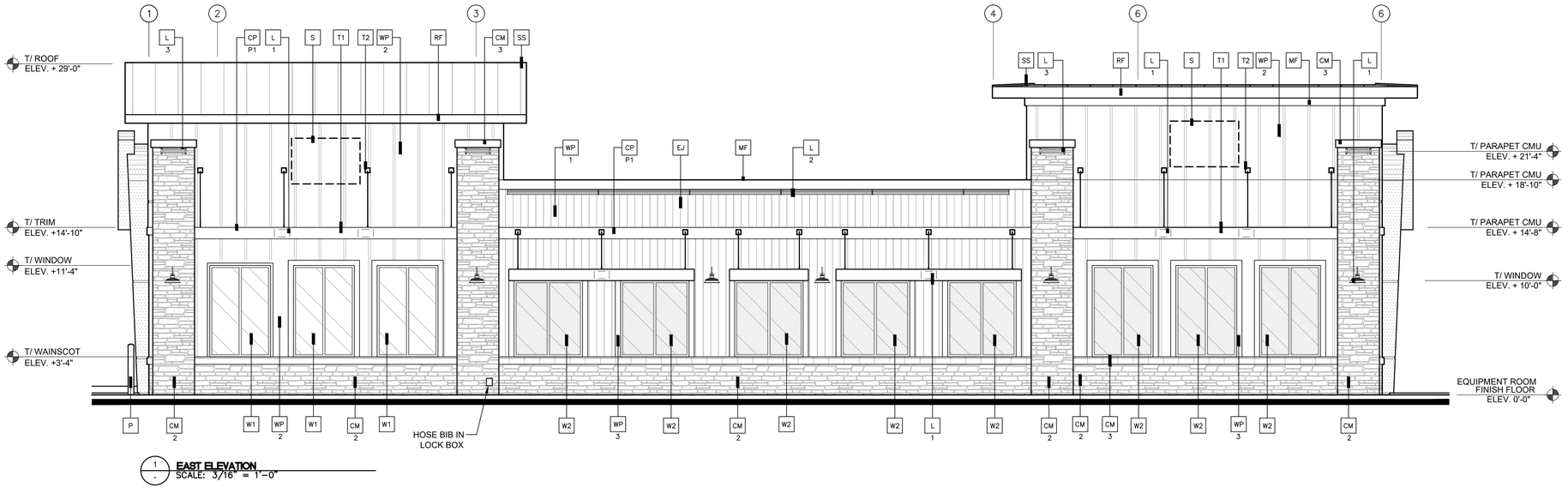
Title
EXTERIOR ELEVATIONS

Project Number: 2007130215
File Name:

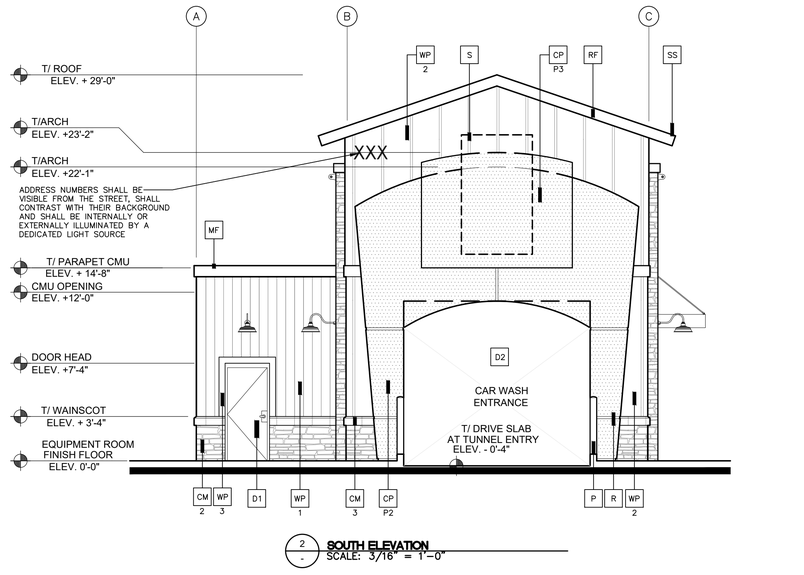
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Drawing No.
Revision
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Mar 06, 2013 - 11:12am, Plotted by: Stephen Hoke
ORIGINAL SHEET – ARCH D



1 / - **EAST ELEVATION**
SCALE: 3/16" = 1'-0"



2 / - **SOUTH ELEVATION**
SCALE: 3/16" = 1'-0"

EXTERIOR ELEVATION NOTES:
ALL ROOF EQUIPMENT SHALL NOT EXCEED THE HEIGHT OF ALL PARAPETS. CONTRACTOR TO VERIFY PRIOR TO SETTING TRUSSES.
ALL EQUIPMENT SHALL BE SCREENED TO THE SATISFACTION OF THE PLANNING DEPARTMENT

TOP OF EQUIPMENT ROOM METAL FLASHING, TOP OF METAL TRELLIS ABOVE WINDOWS ON NORTH ELEVATION AND PLASTER BAND AROUND BUILDING SHALL ALIGN WITH EACH OTHER.

KEY NOTES:

- CM 1 — BASALITE SMOOTH HONED FACE CONCRETE MASONRY UNITS INTEGRAL COLOR STANDARD #225 LIGHT GRAY WITH INTEGRAL FACTORY "RAINBLOC" WATER REPELLENT ADMIXTURE. MORTAR TO HAVE "RAINBLOC" FOR MORTAR ADMIXTURE. MORTAR COLOR TO MATCH.
- CM 2 — STONE VENEER WAINSCOT, CORONADO STONE - COUNTRY RUBBLE "ASPEN"
- CM 3 — STONE VENEER SILL TO MATCH CORONADO STONE - COUNTRY RUBBLE "ASPEN"
- CP P — ACRYLIC PLASTER COLOR COAT
  COLOR DESIGNATION:
  P1 = MATCH SHERWIN WILLIAMS "QUICK QUACK GREEN"
  P2 = MATCH SHERWIN WILLIAMS #6902 "DECISIVE YELLOW"
  P3 = MATCH SHERWIN WILLIAMS #7004 "SNOWBOUND"
  P4 = MATCH SHERWIN WILLIAMS #7658 "GRAY CLOUDS"
  PLASTER COLOR COAT TO BE SAND FINISH
- D1 — HOLLOW METAL DOOR - PAINT TO TO MATCH SHERWIN WILLIAMS #7025 "BACKDROP"
- D2 — OVERHEAD METAL DOOR - PAINT TO TO MATCH SHERWIN WILLIAMS #7025 "BACKDROP"
- D3 — CLEAR ANODIZED ALUMINUM COMMERCIAL SLIDING GLASS DOOR
- DS — 8" x 16" THROUGH WALL SCUPPER, COLLECTOR AND DOWNSPOUT. PAINT TO MATCH ADJACENT SURFACE
- EJ — 1/4" DEEP REVEAL EXPANSION JOINT
- L 1 — LIGHT FIXTURE
  TYPE:
  L1 = LED RADIAL WALL SCONCE (DOWN ONLY)
  L2 = LINEAR FACADE WALL LIGHT (DOWN ONLY)
  L3 = 2 FOOT LED PILASTER LIGHT (DOWN ONLY)
  L4 = WALL PACK (DOWN ONLY)
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  CONTACT STEVE FRIEDMAN 1.262.504.5479 WITH CREE LIGHTING FOR ORDERING LIGHTING. (NO EXCEPTIONS)
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Revision

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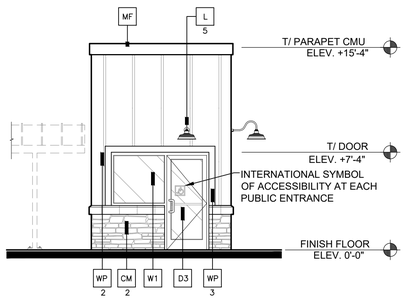
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EXTERIOR ELEVATIONS

Project Number: 2007130215
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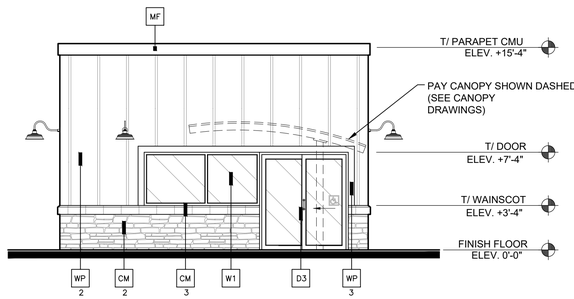
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Drawing No.
Revision
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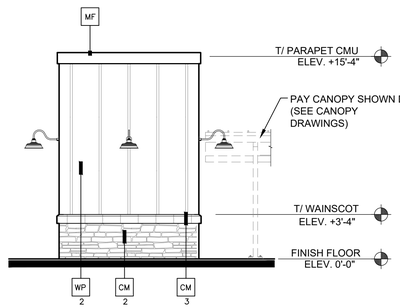
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ORIGINAL SHEET - ARCH D



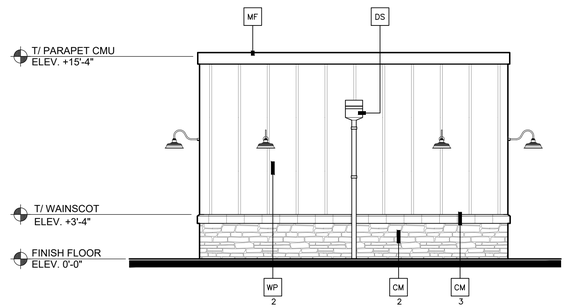
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SCALE: 3/16" = 1'-0"



2 - **WEST ELEVATION**
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3 - **NORTH ELEVATION**
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Issued			

Quick Quack CAR WASH

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Permit-Seal

Title
REMOTE QB EXT. ELEVATION

Dsn.	Chkd.	Dsgn.	YY.MM.DD

Project Number: 2007130215
File Name:

Drawing No.
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ORIGINAL SHEET - ARCH D

SHOWROOM KEYNOTES

ID	EQUIPMENT	FURNISHED	MANAFACTURER	MODEL	WEIGHT	HYDRAULIC	WATER	VOLTS	HP	AMPS	CONNECTION	NOTES
A1	TIRE SWITCH	OFOI	–	–	–	–	–	–	–	–	–	RECESSED INTO SLAB – LOW VOLTAGE. GC TO PROVIDE ½" CONDUIT FROM OUTSIDE EDGE TO UTILITY TRENCH
A2	BUG JUICE	OFOI	–	–	–	–	–	–	–	–	–	GC TO PROVIDE 1½" CONDUIT UNDERGROUND TO EQUIPMENT ROOM (DOSITRON)
A3	PUSH BUTTON TOUCH SCREEN	OFOI	–	–	–	–	–	–	–	–	–	LOW VOLTAGE – GC TO SUPPLY 3/4 " CONDUIT FROM I.T. ROOM
A4	ENTRY ARCH	OFOI	–	–	–	–	–	–	–	–	–	
A5	FLEX WRAPS	OFOI	–	–	–	PROVIDE	–	–	–	–	–	
A6	TOP BRUSH I	OFOI	–	–	–	PROVIDE	–	–	–	–	–	
A7	TOP BRUSH/FLEX WRAP COMBO	OFOI	–	–	–	PROVIDE	–	–	–	–	–	
A8	WHEEL BLASTER	OFOI	–	–	–	–	–	–	–	–	–	
A9	RECLAIM RINSE	OFOI	–	–	–	–	–	–	–	–	–	
A10	BUBBLEIZER – NOT USED											
A11	TOP BRUSH II	OFOI	–	–	–	–	–	–	–	–	–	
A12	RAIN REPEL	OFOI	–	–	–	–	–	–	–	–	–	
A13	APPLICATION ARCH I	OFOI	–	–	–	–	–	–	–	–	–	
A14	APPLICATION ARCH II	OFOI	–	–	–	–	–	–	–	–	–	
A15	APPLICATION ARCH III	OFOI	–	–	–	–	–	–	–	–	–	
A16	TIRE SHINE SIGN	OFOI	–	–	–	–	–	–	–	–	–	
A17	TIRE SHINE I	OFOI	–	–	–	PROVIDE	–	–	–	–	–	
A18	TIRE SHINE II	OFOI	–	–	–	PROVIDE	–	–	–	–	–	
A19	BLOWER ARCHES	OFOI	–	–	–	–	–	480	15	17.7	HARD WIRED	SEE NOTE #1 – PROVIDE 12 – 30 AMP DISCONNECTS (VERIFY NUMBER OF BLOWERS) ON ADJACENT WALL.
A20	ANTI–COLLISION PAD	OFOI	–	–	–	–	–	–	–	–	–	
A21	TOP MITTER – NOT USED	OFOI	SONNY'S	SFM807	–	–	–	480	–	2	–	NARROW FRAME WITH SIDE WASHERS – SEE NOTE #1. 20 AMP DISCONNECT

EQUIPMENT ROOM KEYNOTES

ID	EQUIPMENT	FURNISHED	MANAFACTURER	MODEL	WEIGHT	HYDRAULIC	WATER	VOLTS	HP	AMPS	CONNECTION	NOTES
B1	PRESSURE WASHER	OFOI	–	–	–	–	1" SUPPLY	480	7.5	11	HARD WIRED	SEE NOTE #1 – 15 AMP DISCONNECT
B2	WHEEL BLASTER	OFOI	–	–	–	–	–	480	–	–	–	SEE NOTE #1 – 25 AMP DISCONNECT
B3	CONVEYOR HYDRAULIC UNIT	OFOI	–	–	–	–	–	480	25	34	HARD WIRED	SEE NOTE #1 – 50 AMP DISCONNECT
B4	CONVEYOR CHAIN TENSION UNIT	OFOI	–	–	–	–	–	–	–	–	–	SEE NOTE #1 – LOW VOLTAGE
B5	HYDRO POWER PACK	OFOI	–	–	–	–	–	480	–	5	–	SEE NOTE #1 – 20 AMP DISCONNECT
B6	CHILLER/COOLER	OFOI	–	–	–	–	–	–	–	–	–	
B7	HYDRO COOLER	OFOI	–	–	–	–	–	–	–	–	–	
B8	AIR TREE	OFOI	–	–	–	–	–	–	–	–	–	
B9	JUNCTION BOX	OFOI	–	–	–	–	–	480	–	7	–	SEE NOTE #1 – 20 AMP DISCONNECT
B10	SOAP CONTROL BOX	OFOI	–	–	–	–	–	480	–	1.5	–	SEE NOTE #1 – 20 AMP DISCONNECT
B11	SOAP BOARD 1	OFOI	–	–	–	–	–	–	–	–	–	SEE NOTE #2 (SELF CONTAINED DISCONNECT)
B12	HYDRA FLEX PUMPS	OFOI	–	–	–	–	–	–	–	–	–	TOTAL OF THREE
B13	SOAP BOARD 2	OFOI	–	–	–	–	–	–	–	–	–	
B14	TIRE SHINE UNIT	OFOI	–	–	–	–	–	–	–	–	–	
B15	NOT USED	–	–	–	–	–	–	–	–	–	–	
B16	DOSITRON	OFOI	–	–	–	–	–	–	–	–	–	
B17	WATER MANIFOLD	OFOI	–	–	–	–	–	–	–	–	–	
B18	RECLAIM UNIT	OFOI	–	–	–	–	1 1/2"	480	5	7.6	HARD WIRED	SEE NOTE #2 (SELF CONTAINED DISCONNECT) – 480 FROM MDP AND 120 VOLT – 25 AMP DISCONNECT
B19	BOOSTER PUMP	OFOI	–	–	–	–	–	480	5	7.6	–	SEE NOTE #1 – 10 AMP – 15 AMP DISCONNECT
B20	MUDDY DUCK – NOT USED	OFOI	–	–	–	–	–	–	–	–	–	SEE NOTE #1
B21	RO UNIT	OFOI	–	–	–	–	1 1/2"	480	5	7.6	–	SEE NOTE #2 – 480V FROM MDP – 20 AMP DISCONNECT
B22	750 GALLON TANK	OFOI	–	–	–	–	750	–	–	–	–	
B23	AIR COMPRESSOR	OFOI	–	–	–	–	–	480	7.5	11.0	HARD WIRED	SEE NOTE #2 (1 UNIT – 2 MOTORS) – 15 AMP DISCONNECT, PLUS 2 – 120V, 1 AMP RECEPTACLES (1 FOR EACH)
B24	AIR MANIFOLD	OFOI	–	–	–	–	–	–	–	–	–	
B25	WATER SOFTNER – NOT USED	OFOI	–	–	–	–	–	–	–	–	–	IN MARKETS WHERE NEEDED

ELECTRICAL ROOM KEYNOTES

ID	EQUIPMENT	FURNISHED	MANAFACTURER	MODEL	WEIGHT	HYDRAULIC	WATER	VOLTS	HP	HP	CONNECTION	NOTES
C1	MAIN DISTRIBUTION PANEL	CFCI	–	–	–	N/A	N/A	277/480	–	800	–	800 AMP SERVICE
C2	TELEPHONE BACKBOARD	CFCI	–	–	–	N/A	N/A	–	–	–	–	¾" X 4' X 8' FIRE RETARDANT TREATED PLYWOOD
C3	MCC PANEL	OFCI	–	–	–	N/A	N/A	480	–	400	–	
C4	CONTROL PANEL	OFOI	–	–	–	N/A	N/A	120	–	5	–	
C5	ELECTRICAL PANEL "L1"	CFCI	–	–	–	N/A	N/A	120/208	–	400	–	400 AMPS
C6	TRANSFORMER	CFCI	–	–	–	N/A	N/A	480	–	–	–	
C7	ELECTRICAL PANEL "L2"	CFCI	–	–	–	N/A	N/A	120/208	–	125	–	125 AMPS
C8	ELECTRICAL PANEL "L3"	CFCI	–	–	–	N/A	N/A	120/208	–	100	–	100 AMPS
C9	NOT USED	–	–	–	–	–	–	–	–	–	–	

CONTRACTOR TO VERIFY COMPLETE EQUIPMENT LIST WITH QUICK QUACK REPRESENTATIVE PRIOR TO START OF CONSTRUCTION

N/A NOT APPLICABLE
OF OWNER FURNISHED
CF CONTRACTOR FURNISHED
OI OWNER INSTALLED
CI CONTRACTOR INSTALLED

NOTES:
1. PROVIDE DISCONNECT – FROM MCC PANEL
2. PROVIDE DISCONNECT – FROM MDP

GENERAL NOTES

1. THE INFORMATION CONTAINED ON THIS SHEET IS FOR EQUIPMENT LOCATION REFERENCE. VERIFY LOCATION OF ALL ELECTRICAL, CONDUIT, & PIPING REPRESENTED IN THESE DOCUMENTS W/ OWNER PRIOR TO INSTALLATION. PERFORM AN ON–SITE MEETING W/ THE OWNER'S REPRESENTATIVE, GC, AND SUBCONTRACTORS TO REVIEW THE EXTENT OF THE EQUIPMENT MATRIX & FINALIZE MATERIALS NECESSARY TO INSTALL ALL INFRASTRUCTURE FOR A COMPLETE OPERATION OF THE EQUIPMENT.
2. ALL NECESSARY COORDINATION SINGLE LINE DRAWING OR DIAGRAMS FOR THE SYSTEM OPERATION SHALL BE PROVIDED BY THE VENDOR OR SUBCONTRACTOR & FULLY VETTED BY THE GENERAL CONTRACTOR AND OWNER.
3. THE TUNNEL FLOOR SLOPES FROM ONE END TO THE OTHER AT 1" PER 15 FEET.
4. REFER TO SHEET A200 FOR ADDITIONAL INFORMATION SUCH AS DIMENSIONS, WALL TYPES, SECTION CUTS, ETC
5. TRENCH GRATES, UNLESS OTHERWISE NOTED, WILL BE PROVIDED BY THE OWNER.
6. ELECTRICAL CONTRACTOR TO SUPPLY & INSTALL CONDUITS AND WIRE FROM MCC AND MAIN DISTRIBUTION PANEL TO EQUIPMENT IN SHOWROOM REQUIRING ELECTRICAL SERVICE, INCLUSIVE OF ALL DISCONNECTS
7. ALL ELECTRICAL CONDUIT TO BE RUN IN CMU WALLS OR UNDER SLAB
8. GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR TO PROVIDE CONDUITS, WIRES AND MAKE ALL FINAL CONNECTIONS
9. GENERAL CONTRACTOR TO INCORPORATE 5 WEEK INSTALL SCHEDULE INTO OVERALL SCHEDULE
10. ELECTRICAL CONTRACTOR TO INSTALL DISCONNECTS THE WEEK AFTER QUICK QUACK STANDUP CREW
11. ALL DISCONNECTS, BOXES AND SWITCHES TO BE NEMA 4X RATED
12. ABSOLUTELY NO WIRE NUTS ON ANY CONNECTIONS TO MOTORS OVER 5HP. SPLIT BOLTS ARE REQUIRED
13. NO 90 DEGREE ELBOWS ON ANY CHASES, MUST USE 90 SWEEPS.
14. THE WATER SOFTENER IS AN OWNER FURNISHED CONTRACTOR INSTALLED ITEM. AT GROUND BREAK, GC SHALL TEST THE LOCAL WATER SOURCE FOR HARDNESS AND TDS AND REPORT THAT INFORMATION BACK TO QUICK QUACK FOR ORDERING. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING THE DELIVERY AND INSTALLATION OF THE WATER SOFTENER AT EACH LOCATION AS NEEDED.

Stantec
Architecture Inc.
3133 West Frye Road, Suite 300
Chandler, AZ 85226-6110
TEL 480.497.6100
www.stantec.com

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No.	Revision	YY.MM.DD	Appvd.	By
1	PLANNING RESUBMITTAL	22.10.12		
2	PLANNING RESUBMITTAL	22.12.13		

Quick Quack CAR WASH

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Permit-Seal

Title
EQUIPMENT SCHEDULE

Project Number: 2007130215
File Name:

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No.
Revision Sheet
A701 of

\\vancouver\Projects\2007\2007130215\d_working_files\04_architecture\02_cad\44-299_wildomar_A701 Equipment Schedules.dwg
2022/12/12 12:30:17 PM By: Hodgson, Ashley

ORIGINAL SHEET – ARCH D



West Elevation



North Elevation

Color Legend:

Sherwin Williams #7004
"Snowbound"

Sherwin Williams #7658
"Gray Clouds"

Sherwin Williams
"Quick Quack Green"

Sherwin Williams #6902
"Decisive Yellow"

Sherwin Williams #7025
"Backdrop"

Hardie Panel Vertical Siding
"Arctic White"

Hardie Panel Vertical Siding
SW #7025 "Backdrop"

AEP Span Wide Batten
"Dark Bronze"

Coronado Stone Veneer -
County Rubble "Aspen"

Non-Standard with Remote Quarterback - Design Visualization
Version 12-9-22

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Quick Quack CAR WASH
Dont Drive Dirty.com

Quick Quack Carwash
Site# 44-299
23825 Catt Road
Wildomar, CA



East Elevation



South Elevation

Color Legend:

Sherwin Williams #7004
"Snowbound"

Sherwin Williams #7658
"Gray Clouds"

Sherwin Williams
"Quick Quack Green"

Sherwin Williams #6902
"Decisive Yellow"

Sherwin Williams #7025
"Backdrop"

Hardie Panel Vertical Siding
"Arctic White"

Hardie Panel Vertical Siding
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AEP Span Wide Batten
"Dark Bronze"

Coronado Stone Veneer -
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Non-Standard with Remote Quarterback - Design Visualization
Version 12-9-22

Quick Quack CAR WASH
Dont Drive Dirty.com

Quick Quack Carwash
Site# 44-299
23825 Catt Road
Wildomar, CA

Stantec



South Elevation



West Elevation



North Elevation



East Elevation

Color Legend:

Sherwin Williams #7004
"Snowbound"

Sherwin Williams #7658
"Gray Clouds"

Sherwin Williams
"Quick Quack Green"

Sherwin Williams #6902
"Decisive Yellow"

Sherwin Williams #7025
"Backdrop"

Hardie Panel Vertical Siding
"Arctic White"

Hardie Panel Vertical Siding
SW #7025 "Backdrop"

AEP Span Wide Batten
"Dark Bronze"

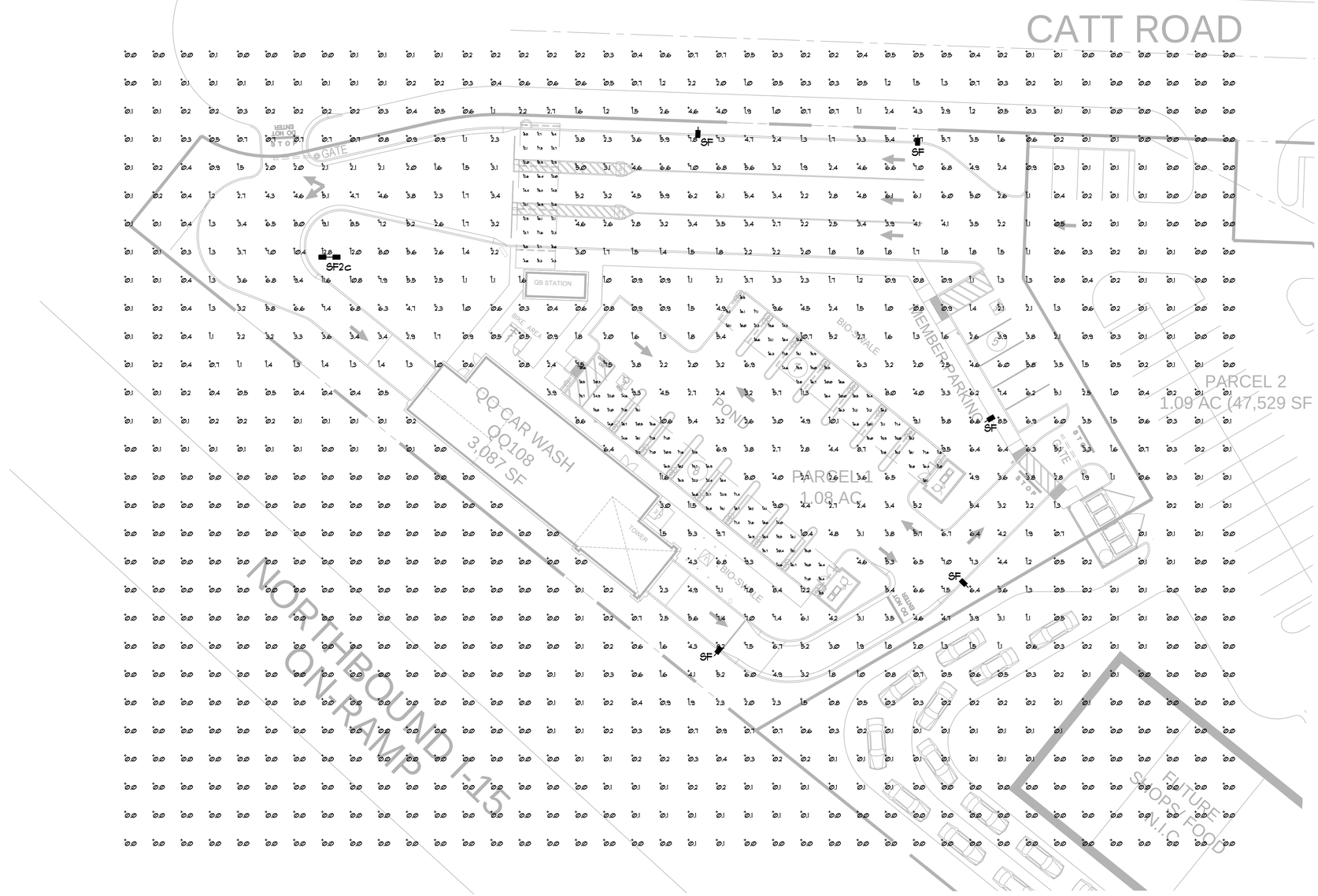
Coronado Stone Veneer -
County Rubble "Aspen"

Non-Standard with Remote Quarterback - Design Visualization
Version 12-9-22

Quick Quack CAR WASH
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Quick Quack Carwash
Site# 44-299
23825 Catt Road
Wildomar, CA

Stantec



ELECTRICAL SITE LIGHTING PLAN

SCALE: 1"-20'-0"

A
ES1.1

LIGHTING PROPOSAL LO-156675

QUICK QUACK #44-299
23825 CATT ROAD
WILDOMAR,CA

BY: BAM | DATE: 9/20/22 | REV: | SHEET 1 OF 1

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Quick Quack CAR WASH

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Title
ELECTRICAL SITE LIGHTING PLAN

Permit-Seal

SACRAMENTO ENGINEERING CONSULTANTS
10555 Old Placerville Road
Sacramento, CA 95827-2503
Phone: (916) 368-4468
Fax: (916)368-4490
www.saceng.com

Job No. 22609

Date Signed: 12/2/2022

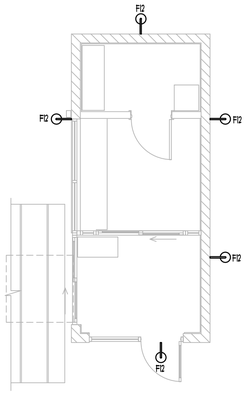
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File Name:

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No.
Revision
Sheet
ES1.1 of

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ORIGINAL SHEET - ARCH D



QUARTERBACK STATION
EXTERIOR LIGHTING PLAN

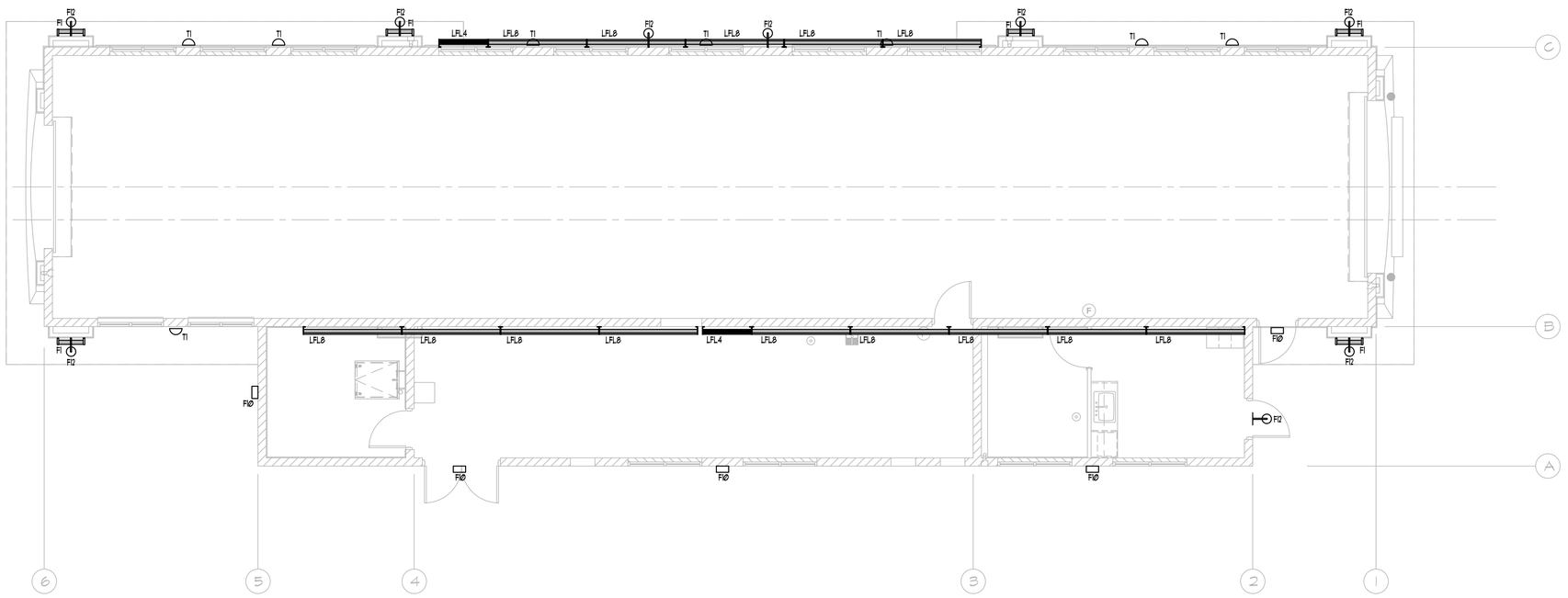
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B
ES1.2

LIGHTING FIXTURE SCHEDULE

SYMBOL OR TAG LETTER	MANUF.	CATALOG NUMBER	LAMP DATA NO.	LAMP DATA TYPE	WATTS	MOUNTING	DESCRIPTION
F1	SECURITY LTG	SLED-HE-24-DO-U-PS-5K	LED	LED	10	BRACKET ON WALL	2' LINEAR FLOOD, WALLWASH FLOODLIGHT WITH MOUNTING ARM, BRONZE FINISH. MOUNT AT TOP OF PIER COLUMN AIMED DOWN, BRONZE FINISH.
F10	CREE	XSPW-B-LM-3ME-2L-5TK-UL-XX*	LED	LED	19	WALL	WALL PACK, 8' MTG HT. BZ- BRONZE, 120-277V
F11	CREE	VT312M4UNV50K	LED	LED	43	SURFACE	4' WET LOCATION LINEAR W/ STAINLESS LATCHES. PAY CANOPY, VACUUM CANOPY, 6700 LUMEN
F12	ABOLITE	WAR-616-ITL-UNV 50-PGG6-XXX-LDS96UL/ GN-A-3-XXX (XXX = color finish TBD)	LED	LED	72.8	WALL	RLM DOME WITH GOOSENECK, VERIFY FINISH. 120-277V
LFL4	SECURITY LTG	SLED-HE-48-DO-U-PS-5K	LED	LED	71	SURFACE	4' LINEAR FACADE LIGHT, DOWNLIGHT ONLY, SILVER FINISH. REFER TO EXTERIOR ELEVATIONS FOR MOUNTING HEIGHT
LFL8	SECURITY LTG	SLED-HE-96-DO-U-PS-5K	LED	LED	34	SURFACE	8' LINEAR FACADE LIGHT, DOWNLIGHT ONLY, SILVER FINISH. REFER TO EXTERIOR ELEVATIONS FOR MOUNTING HEIGHT
SF	LSI	MRS-LED-18L-SIL-FT-50-70CRI-SINGLE-16'POLE, 24" BASE	LED	LED	135	POLE	SINGLE POLE LIGHT FIXTURE, DIRECT ARM MOUNT. BRONZE FINISH
SF2c	LSI	MRS-LED-18L-SIL-FT-50-70CRI-D180-16'POLE, 24" BASE	LED	LED	270	POLE	(2) HEAD POLE LIGHT FIXTURE, DIRECT ARM MOUNT. BRONZE FINISH
T1	LSI	XWS-LED-2L-FTW-UNV-DIM-50-80CRI-MSV	LED	LED	15	WALL	RADIAL SCONCE, DOWNLIGHT ONLY, (WINDOW CANOPY/TRELLIS) 120-277V.

ALL EXTERIOR LIGHT FIXTURES TO HAVE A BRONZE FINISH



BUILDING EXTERIOR LIGHTING PLAN

SCALE: 3/16"=1'-0"

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Quick Quack CAR WASH

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Title
BUILDING EXTERIOR LIGHTING PLAN

Permit-Seal

REGISTERED PROFESSIONAL ENGINEER — Jason C. Hale — No. E-10629 — Exp. 6-30-2023 — ELECTRICAL — STATE OF CALIFORNIA

SACRAMENTO ENGINEERING CONSULTANTS
10555 Old Placerville Road
Sacramento, CA 95827-2503
Phone: (916) 368-4468
Fax: (916)368-4490
www.ascenp.com

Job No. 22609

Date Signed: 12/2/2022

Project Number: 2007130215
File Name:

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Drawing No.

Revision Sheet

ES1.2 of

106

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ORIGINAL SHEET - ARCH D

SECURITY LIGHTING

SLED

HIGH EFFICIENCY LINEAR LED FACADE FIXTURE

DATE: LOCATION:

TYPE: SLED2/F1 PROJECT: Quick Quack

CATALOG #: SLED-HE-24-DO-U-PS-5K

FEATURES

- The SLED Linear LED Lighting System offers a discrete and minimalist design to maximize the lighting effect for marketing your building as your brand while keeping energy usage and maintenance to a minimum.
- Thanks to its intuitive "plug and play" mounting design with integral driver system, installation is quick and simple and only requires that power be brought to one fixture in each continuous row.
- The unique fixture design and the long life Mid-Power LED source minimizes maintenance to only an occasional cleaning of outer lens surfaces.
- This successful system is truly a "set it and forget it" solution that is only offered from Security Lighting



SPECIFICATIONS

CONSTRUCTION
- Powder-coated mounting brackets that conceal power cables
- Fixture to fixture connections are made external to the fixture

OPTICS
- 5000K color temp standard
- Tempered glass lens
- Down only full cut off

INSTALLATION
- Each order ships with a formed drilling template for accurate and quick installation
- All subsequent fixtures quickly plug together in series
- Fixtures are not opened during the installation process
- Complete instructions for fixture installation posted on web site at www.securitylighting.com

ELECTRICAL
- Fully integrated driver for completely self-contained lighting system
- Power feed required only at beginning of each continuous row or stand alone fixture

WARRANTY
- 5 year warranty
- See HLI Standard Warranty for additional information

ORDERING GUIDE

Example: S-LED-XX-DO-U-XX-XX

CATALOG # SLED-HE-24-DO-U-PS-5K

S	LED	HE	24	DO	U	PS	5K
Series	**Source**	**Type**	**Size**	**Distribution**	**Voltage**	**Finish**	**Options**
S Linear Facade Fixture	LED Mid-Powered	HE High Efficiency	48 4-foot 36 3-foot 24 2-foot 96 8-foot	DO Downlight Only (8.5 Watts per foot)	U Universal 120 to 277 Volt	PS Platinum Silver DB Dark Bronze WH White BK Black IO Iron Ore RL RAL Color [1,4]	3K 3000K color temp[3] 4K 4000K color temp[3]

Notes:
1. Must Provide RAL color number and powder coat manufacture name at time of quote request
2. Color paint chip would need to be provided at time of quote request
3. Must only use factory supplied whip kit to maintain water tight integrity and product warranty
4. Made to order, 4 to 8 weeks lead time
5. 5000K color temperature standard Optional 3000K and 4000K color temp, built to order

✓

KEY DATA	
Lumens	834 / 1211
Wattage	30
Efficacy (LPW)	83.6 / 82.9
Reported Life (Hours)	L70 >120,000
Input Current Range (Amps)	.036 - 0.12

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2100 Golf Road, Suite 460 • Rolling Meadows, IL 60008-4704 / Tel 1800.LIGHT IT, 1.800.544.4848
Fax 847.279.0642 Website www.securitylighting.com

HUBBELL Lighting

SECURITY LIGHTING

SLED

HIGH EFFICIENCY LINEAR LED FACADE FIXTURE

DATE: LOCATION:

TYPE: SLED8/LFL8 SLED4/LFL4 PROJECT: Quick Quack

CATALOG #: SLED-HE-48-DO-U-PS-5K

FEATURES

- The SLED Linear LED Lighting System offers a discrete and minimalist design to maximize the lighting effect for marketing your building as your brand while keeping energy usage and maintenance to a minimum.
- Thanks to its intuitive "plug and play" mounting design with integral driver system, installation is quick and simple and only requires that power be brought to one fixture in each continuous row.
- The unique fixture design and the long life Mid-Power LED source minimizes maintenance to only an occasional cleaning of outer lens surfaces.
- This successful system is truly a "set it and forget it" solution that is only offered from Security Lighting



SPECIFICATIONS

CONSTRUCTION
- Powder-coated mounting brackets that conceal power cables
- Fixture to fixture connections are made external to the fixture

OPTICS
- 5000K color temp standard
- Tempered glass lens
- Down only full cut off

INSTALLATION
- Each order ships with a formed drilling template for accurate and quick installation
- All subsequent fixtures quickly plug together in series
- Fixtures are not opened during the installation process
- Complete instructions for fixture installation posted on web site at www.securitylighting.com

ELECTRICAL
- Fully integrated driver for completely self-contained lighting system
- Power feed required only at beginning of each continuous row or stand alone fixture

WARRANTY
- 5 year warranty
- See HLI Standard Warranty for additional information

ORDERING GUIDE

Example: S-LED-XX-DO-U-XX-XX

CATALOG # SLED-HE-48-DO-U-PS-5K

S	LED	HE	48	DO	U	PS	5K
Series	**Source**	**Type**	**Size**	**Distribution**	**Voltage**	**Finish**	**Options**
S Linear Facade Fixture	LED Mid-Powered	HE High Efficiency	48 4-foot 36 3-foot 24 2-foot 96 8-foot	DO Downlight Only (8.5 Watts per foot)	U Universal 120 to 277 Volt	PS Platinum Silver DB Dark Bronze WH White BK Black IO Iron Ore RL RAL Color [1,4]	3K 3000K color temp[3] 4K 4000K color temp[3]

Notes:
1. Must Provide RAL color number and powder coat manufacture name at time of quote request
2. Color paint chip would need to be provided at time of quote request
3. Must only use factory supplied whip kit to maintain water tight integrity and product warranty
4. Made to order, 4 to 8 weeks lead time
5. 5000K color temperature standard Optional 3000K and 4000K color temp, built to order

Accessories (Order Separately)

☑ **93073538** Hirrf - LED Whip Kit/ power feed assembly.
One required per stand alone fixture or linear run for use with SLED HE [2]

KEY DATA	
Lumens	834 / 1211
Wattage	30
Efficacy (LPW)	83.6 / 82.9
Reported Life (Hours)	L70 >120,000
Input Current Range (Amps)	.036 - 0.12

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Fax 847.279.0642 Website www.securitylighting.com

HUBBELL Lighting

Catalog #: XWS LED 2L FTW UNV DIM 50 80CRI MSV Project: Quick Quack

Prepared By: Date: Type: F10

Mirada Small Wall Sconce (XWS)

Outdoor LED Wall Light

IP65 IK10



OVERVIEW	
Lumen Output Range	2,000 - 6,000
Wattage Range	15 - 52
Efficacy Range (LPW)	119 - 151
Luminaire Weight lbs (kg)	8 (3.6)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction
- Rugged die-cast aluminum housing.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Extended housing available with 1/2" threaded hubs for surface conduit and rated wire.
- Standard luminaire shipping weight: 10 lbs in carton.
- Max luminaire shipping weight (with back housing): 20 lbs in carton.

Optical System
- Choice of acrylic lens or high impact resistant polycarbonate lens
- The lens is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire
- Reflector system with recessed light engine reduces glare and brightness.
- Forward Throw Wide and Medium distributions available.
- Optional diffused lens for reduced LED pixilation over the lens and maximum visual comfort.
- Zero uplight.
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377.
- Minimum CRI of 80

Electrical
- High-performance driver features over-voltage under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >60k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F).
- Power factor: >.90
- Input power stays constant over life.
- Optional 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance. Driver complies with FCC standards. Accessible driver and electrical components.
- Optional Dual Drivers/Circuit/Power Feeds.
- Optional battery backup provides 90-minutes of constant power to the LED system, ensuring code compliance. A test switch/ indicator button is installed on the housing for ease of maintenance. Standard battery rated for 0° to 50° with cold weather battery rated for -20°C to 50°. 120-277V Only.

Controls
- Optional integral passive infrared Bluetooth™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation
- Universal wall mounting plate mounts directly to vertical surface or 4" junction box (octagonal or square).
- Luminaire hinges to the top of the mounting plate and is secured via two flush mount screws that help to conceal the hardware and prevent over tightening during installation.

Warranty
- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings
- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 2700K or 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP65 rated luminaire per IEC 60598-1.
- IK10 rated luminaire per IEC 66262 mechanical impact code with clear polycarbonate lens (MTP).
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product are DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Catalog #: MRS LED 18L SIL FT UNV DIM 50 70CRI MSV Project: Quick Quack

Prepared By: Date: Type: SF

Mirada Small Area (MRS)

Outdoor LED Area Light

IP66



OVERVIEW	
Lumen Package	6,000 - 24,000
Wattage Range	41 - 196
Efficacy Range (LPW)	112 - 156
Fixture Weight lbs (kg)	20 (9.1)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction
- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 27 lbs in carton.

Optical System
- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in distribution types 2, 3, 5W, and FT.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93%.
- Zero uplight.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377
- Minimum CRI of 70.
- Integral louver (IL) and house-side shield (IH) options available for improved backlight control without sacrificing street side performance. See page 3 for more details.

Electrical
- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >60k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F).
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls
- Optional integral passive infrared Bluetooth™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation
- Designed to mount to square or round poles.
- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block accepts up to 12 ga. wire.
- Utilizes LSI's traditional B3 drill pattern.

Warranty
- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings
- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications are qualified.
- DesignLights Consortium® Listings in progress.

Specifications and dimensions subject to change without notice.

VT3-20

LED Vaportite

Product Description

The VT3-20 LED Linear Vaportite is designed to give long lasting, energy efficient light in demanding locations. This IP65 rated fixture is dust and water tight and replaces legacy fluorescent strip lights in car wash operations, garages, maintenance facilities, canopies, locker rooms and stairwells.

Construction
- Fully gasketed polycarbonate housing
- Ten captive stainless steel latches ensure a water tight seal
- Eight drill through knockouts available (6 on back, 1 on each end)

Optical System
- UV stabilized, frosted polycarbonate diffuser
- Wrapped lens provides 5% uplight
- 80+ CRI

Electrical
- High efficacy using latest generation mid-power LED's
- Universal input 120-277VAC, THD <20%, power factor >0.9
- Dimmable to 10% via 0-10VDC dimming
- TM-21 Projected L70(9k) life >100,000 hours
- LM-79, LM-80 testing performed in accordance with IESNA standards

Finish
- Light grey, gloss polycarbonate body with frosted lens

Installation
- Toolless surface mount installation via spring steel clips
- Clips contain mounting hook for cable suspension
- Can be surface mounted to walls and ceilings for application variability
- Operating temperature rating of -40°F to 104°F (-40°C to 40°C)
- For installations where power suge may be possible, NICOR recommends installing additional surge protection at the electrical distribution panel

Warranty
- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)

Project

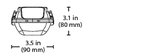
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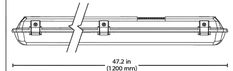
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Date







CLASSIC SERIES

PARAFLEX Fast Flexible Focused Lighting

DCSHM

ROUND LED WALLPACK LUMINAIRE

PROJECT Quick Quack DATE TYPE T1

NOTES

REV: 06 2021

AVAILABLE IN QUICKSHIP



When Specifying Options, Please Check with Factory for Availability and Lead-Time. Any finish other than Paraflex bronze color is non-cancelable and non-returnable. Any modified product, any selected options added to standard products, Users order non-cancelable and non-returnable. All RMA, Return Material Authorization, must be factory approved.

FULL CUTOFF, HEAVY-DUTY HOUSING
The DCSHM is an 18" Half-Moon Wallpack with a Die Cast Aluminum Body and Impact Resistant Glass Lens

WET LOCATION, IP-65 RATED
Engineered and Constructed for Exterior Environments

EASY TO INSTALL MOUNTING
4" x 4" Gasketed Wall Plate allows the Installer to Quickly Mount and Wire the Fixture without Opening the Housing

120-277V STANDARD **TYPE VS DISTRIBUTION**

OPERATING TEMPERATURE -20C TO 40C
0C - 40C with EM Pack Option

PRODUCT APPLICATIONS

Building Entrances
Walkways
Tunnels
Loading Docks
Bridges
Catwalks
Stairwells

ORDERING GUIDE

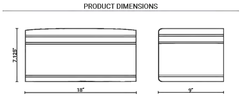
Sample Part # DCSHM-24W-40K-BZ-D1

MODEL	WATTAGE	COLOR TEMPERATURE (CCT)	HOUSING COLOR	OPTIONS & ACCESSORIES
DCSHM	24W	50K	SL	
	12W 12 WATTS	27K 2700K - WARM WHITE	BZ BRONZE (STANDARD)	MS MOTION SENSOR
	24W 24 WATTS	30K 3000K - WARM WHITE	WH WHITE	MS-D2 MOTION SENSOR WITH BILEVEL DIMMING
	36W 36 WATTS	35K 3500K - NEUTRAL WHITE	BL BLACK	D1 0-10V DIMMING
	48W 48 WATTS	40K 4000K - NEUTRAL WHITE	SL SILVER	D2 STEP DIMMING
	60W 60 WATTS	50K 5000K - COOL WHITE	CC CUSTOM COLOR	EM EMERGENCY BATTERY PACK
		57K 5700K - DAYLIGHT		V1* 480/347V INPUT (120-277V STANDARD)
				*NOT AVAILABLE WITH EM OR MOTION SENSOR

PRODUCT SPECIFICATIONS

NOMINAL WATTAGE	SYSTEM WATTAGE	CCT	LUMENS	EFFICACY	DLC V5.0 LISTING
12W	12.65	3000K	1,530.00	120.95	PREMIUM
12W	12.65	4000K	1,616.50	127.80	PREMIUM
12W	12.65	5000K	1,686.83	133.35	PREMIUM
24W	23.68	3000K	2,802.90	118.36	PREMIUM
24W	23.68	4000K	2,962.31	125.09	PREMIUM
24W	23.68	5000K	3,083.71	130.46	PREMIUM
36W	34.27	3000K	4,093.93	122.64	PREMIUM
36W	34.27	4000K	4,413.15	128.78	PREMIUM
36W	34.27	5000K	4,593.81	135.21	PREMIUM
48W	46.60	3000K	5,604.00	120.26	PREMIUM
48W	46.60	4000K	5,884.20	126.27	PREMIUM
48W	46.60	5000K	6,178.41	132.58	PREMIUM
60W	56.83	3000K	7,089.00	123.26	PREMIUM
60W	56.83	4000K	7,355.25	129.43	PREMIUM
60W	56.83	5000K	7,723.01	135.90	PREMIUM

PRODUCT DIMENSIONS



POWER

POWER FACTOR >0.90 - THD <20

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Revision	Issued	Appd.	By	YY.MM.DD

Quick Quack CAR WASH

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Title
LIGHT FIXTURE SELECTIONS

Permit-Seal

Date Signed: 12/2/2022

SACRAMENTO ENGINEERING CONSULTANTS
10555 Old Placerville Road
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Job No. 22609

Project Number: 2007130215

File Name:

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No.

Revision Sheet

ES1.3 of 107

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2022/12/02 3:57 PM By: Chris Gilland

ORIGINAL SHEET – ARCH D

Catalog #: GN-A-3-XXX (XXX = color finish TBD) Project:

Prepared By: Date: Type: F12 - gooseneck

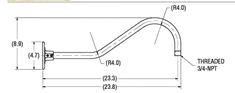
LSI Abolite Gooseneck and Wall Brackets

3/4" Single Reflector Gooseneck Wall Bracket. Features rigid conduit and cast wall plate which fits 4" octagonal box (by other). Brackets are finished in gloss white powder, additional colors are available.

NOTE: Brackets feature 3/4" stems which slip fit into wall plate (wall end is unthreaded). Conduit may be cut down (in the field by other) to shorten bracket length. CAS wall plate included with all goosenecks.

All dimensions displayed in inches.

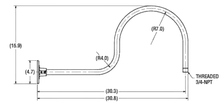
GB A 3 GWT



GB B 3 GWT

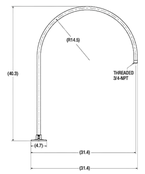


GB C 3 GWT

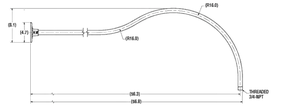


GB E 3 GWT

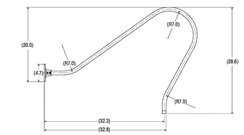
3/4" Single Reflector Gooseneck Wall Bracket. Features rigid conduit and cast wall plate which fits 4" octagonal box (by other). The bracket is designed to be mounted to a horizontal surface, but could also be mounted to a wall. The bracket features a gloss white powder finish, additional colors available.



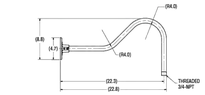
GB F 3 GWT



GB G 3 GWT



GB H 3 GWT



Catalog #: WAR -616-17L-UNV 50-PGG6-TBD-LDS96WL Project:

Prepared By: Date: Type: F12

Warwick (WAR)

LSI Abolite® LED Warwick

wet location



OVERVIEW	
Lumen Range	1,250 - 1,700
CCT	27/30/35/40/50K
Wattage Range	9.3 - 12.8

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Heavy gauge spun aluminum with a thermally cured high quality polyester powder coat finish.
- Integrated power supply built into the fixture allowing the RLM to be connected directly to line voltage.
- Manufactured in the USA

Optical System

- Available in 5000K, 4000K, 3500K, 3000K, and 2700K color temperatures
- Minimum CRI of 80

Electrical

- Standard Universal Voltage (120-277 Vac) Input 50/60Hz
- 0-10V dimming, 5% standard
- Operating Temperature -30°C to +50°C (-22°F to +122°F)

Installation

- Fixture can be top or side mounted using a 3/4" gooseneck or stem.
- Pre-wired with 96" leads standard.
- Fixed hub tapped for 3/4" NPT conduit.
- Glass globe is required.
- Not designed for uplight applications.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- UL Listed
- Suitable for wet locations

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Quick Quack CAR WASH

Client/Project
QUICK QUACK CARWASH #44-299
23825 CATT ROAD
WILDOMAR, CA

Title
LIGHT FIXTURE SELECTIONS

Permit-Seal

REGISTERED PROFESSIONAL ENGINEER — CHRISTOPHER C. GILLAND — No. E-10629 — Exp. 6-30-2023 — CIVIL — STATE OF CALIFORNIA

SACRAMENTO ENGINEERING CONSULTANTS
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Job No. 22609

Date Signed: 12/2/2022

Project Number: 2007130215

File Name:

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No.

Revision Sheet

ES1.4 of

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2022/12/02 3:57 PM By: Chris Gilland

ORIGINAL SHEET – ARCH D

Attach D - Project Specifics Maps-Tables

Location Map/Aerial Photo Exhibit:



Surrounding Land Uses:

The project site encompasses approximately 2.62 +/- acres and is located at the NEC of Clinton Keith Road and I-15 Freeway. The project site is comprised of five (5) legal parcels zoned C-P-S (Scenic Highway Commercial) and is currently vacant. The Applicant is processing a Lot Line Adjustment (LLA) to accommodate the proposed development. The Chevron gas station is located immediately east of the site, Hartford Park community is northeast of the site and the approved Westpark Promenade project (not yet built) is located directly north. The table below summarizes the current uses, land use and zoning designations related to the project site and surrounding properties. T

ADJACENT LAND USE, GENERAL PLAN AND ZONING			
Location	**Current Land Use**	**Current GP Land Use Designation**	**Current Zoning Designation**
Subject Property	Vacant	Commercial Retail (CR)	C-P-S (Scenic Highway Commercial)
North	Vacant / Westpark Promenade	Commercial Retail (CR)	C-P-S (Scenic Highway Commercial)
South	Shell Gas Station	Commercial Retail (CR)	C-P-S (Scenic Highway Commercial)
East	Chevron Gas Station	Commercial Retail (CR)	C-P-S (Scenic Highway Commercial)
West	I-15 Freeway	N/A	N/A

Plot Plan No. 22-0181 Building Breakdown Table:

Building Number	Proposed Tenant User	Building Size (s.f.)
1 (Parcel 1)	Quick-Quack Express Car Wash	3,385 s.f.
2 (Parcel 2)	Drive-Through Restaurant	2,356 s.f.
3 (Parcel 3)	Retail Building (1-Story) (possible cannabis retail store)	6,076 s.f.
Total Building Size		**11,817 s.f.**

C-P-S Zone Development Standards Table

Development Standards	Minimum Dev. Standard	Proposed Project	Meets Requirements
Minimum Lot Area	No minimum standard	0.66 – 1.08 ac.	Yes
Building Height	50 feet (maximum)	28 (tallest point)	Yes
Required Setbacks			
Front/Rear Yard Setbacks	0-foot setback distance for buildings less than 35 feet in height.	• Bld. #1 = 150’ +/- min.	Yes
		• Bld. #2 = 28’ min.	Yes
		• Bld. #3 = 20’ min.	Yes
Side Yard Setback	0-foot setback distance for buildings less than 35 feet in height.	• Bld. #1 = 15’ min.	Yes
		• Bld. #2 = 30’ min.	Yes
		• Bld. #3 = 7’ min.	Yes

Parking/Landscaping Standards Table (17.188)

Parking Standards	Minimum Parking Requirement Standard	Proposed Project	Meets/Exceeds Requirements
Commercial Retail Buildings (11,817 s.f.)	6.0 spaces / 1,000 s.f. = 71 spaces	73 spaces	Yes
Parking Stall Size (open)	9' x 18' 11' x 18' (end stalls)	9' x 18' 11' x 18' (end stalls)	Yes Yes
On-site Drive Aisles	24 feet	25 – 30 feet minimum	Yes
Open Parking Area Shading	50%	50%	Yes
Interior Parking Area Landscaping	11%	27%	Yes

Attachment to Notice of Exemption
PA 22-0181 Catt Crossing Retail Center Project

CITY OF WILDOMAR

The project applicant proposes to construct a new 11,991-square-foot retail center on a 2.78-acre parcel. This supplemental information provides justification for the Categorical Exemption pursuant to the California Environmental Quality Act (CEQA) Guidelines under California Code of Regulations, Title 14, § 15332.

1. EXISTING CONDITIONS

PROJECT LOCATION

The project site is an undeveloped 2.78-acre parcel (Assessor's Parcel Numbers [APN] 380-240-001, -052, -062, -063, and -064) located on the northeast corner of Interstate 15 (I-15) freeway and Catt Road within the City of Wildomar, Riverside County. The project site is bound by Catt Road to the north, Clinton Keith Road to the south, and I-15 to the west. Figure 1, *Project Location and Local Vicinity*, shows the project site in the context of the regional and local vicinity.

EXISTING CONDITIONS AND SURROUNDING USES

The project site currently undeveloped as shown in Figure 2, *Aerial Photograph*. The project site is surrounded by commercial uses to the south and east, vacant and residential uses to the north, and I-15 to the west.

GENERAL PLAN LAND USE DESIGNATION AND ZONING DESIGNATION

The project site is designated CR (Commercial Retail) and zoned C-P-S (Scenic Highway Commercial Zone). The C-P-S zoning designation permits gas service stations, restaurants, and offices, and with a conditional use permit, car washes and cannabis retailers are allowed, according to Chapter 17.76, C-P-S Scenic Highway Commercial Zone, of the Wildomar Municipal Code.

2. PROJECT DESCRIPTION

The proposed project will result in the construction of an 11,991-square-foot retail center, which will include a 3,385-square-foot Quick Quack express car wash; a 2,350-square-foot fast food/drive-through restaurant (with a 400-square-foot outdoor dining patio); a 6,256-square-foot, two-story building to accommodate a 3,128-square-foot future cannabis retail business on the first floor and a 3,128-square-foot office space on the second flood; and related on- and off-site improvements. Figure 3, *Conceptual Project Site Plan,* shows the location and layout of the proposed uses.

Vehicular Access and Parking

Main access to the project site will be provided via the eastern driveway off Catt Road, and the driveway at the northwest corner of the site, off Catt Road, will be used as an exit only/escape lane from the car wash queuing lane.

The total number of required parking stalls have been calculated as a retail shopping center at rate of 6 spaces per 1,000 square feet, which will require 39 spaces; however, the proposed project will provide 91 vehicular spaces. Additionally, the proposed project will include 12 bicycle parking spaces.

CONSTRUCTION

Construction of the proposed project will consist of site preparation, on-site grading, building, paving, and architectural coating. As required by the City of Wildomar Municipal Code Sections 9.48.020 and 15.04.01, all construction and general maintenance activities shall be limited to the hours 7 AM and 6 PM from October through May (Monday-Saturday), and between 6:30 AM and 6 PM (Monday-Saturday) from June through September. The project applicant would coordinate with the City to provide updates regarding construction activities, location, and schedule.

3. REASONS WHY THE PROJECT IS EXEMPT

The proposed project is exempt from further environmental review under the requirements of the California Environmental Quality Act (Cal. Code Regs. Tit. 14 § 15332) because it is consistent with Class 32, In-Fill Development Projects, as explained below.

Class 32, In-Fill Development Projects (CEQA Guidelines § 15332) Class 32 consist of projects characterized as in-fill development meeting the following conditions:

a) The project consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
c) The project site has no value as habitat for endangered, rare or threatened species.
d) Approval of the project would not result in any significant effects to traffic, noise, air quality or water quality.
e) The site can be adequately served by all required utilities and public services

EXEMPTION CONDITIONS UNDER SECTION 15332

Exemption Condition A: General Plan and Zoning Consistency

The project site has a land use designation of Commercial Retail and is zoned C-P-S (Scenic Highway Commercial Zone) (Wildomar 2022a; 2022b). According to the Wildomar General Plan, the Commercial Retail designation permits the development of commercial retail uses at a neighborhood, community, and regional level (Wildomar 2022a). Additionally, according to Chapter 17.76, C-P-S Scenic Highway Commercial Zone, of the Wildomar Municipal Code, the CPS Zone allows restaurants and other eating establishments (Section 17.76.010(A)). Car washes and cannabis retailers are permitted in the CPS zone with a Conditional Use Permit (Section 17.76.010(B)) (Wildomar 2022b). The proposed project would construct a commercial retail center with a car wash, fast food/drive-through restaurant, retail cannabis business, and office space and is located within an urbanized area surrounded by various uses. The proposed project does not include or require any amendments to the Wildomar General Plan or zoning regulations, nor would the proposed project result in any inconsistencies with the general plan or zoning standards. Therefore, project implementation would not conflict with the Wildomar General Plan or Wildomar Municipal Code.

Condition B: Project Location and Size

The project site is 2.48 acres (less than 5 acres) and is surrounded by residential uses to the north, commercial uses to the east and south, and I-15 to the west (see Figure 1 and Figure 2). The project site is within the city limits of the City of Wildomar. Therefore, the proposed project meets Condition B.

Condition C: Biological Value

According to the City of Wildomar's Multiple Species Habitat Conservation Plan (MSHCP), the project site is not located within a criterial cell (Wildomar 2017). Furthermore, the project site is in an urbanized area surrounded by commercial, residential, and vacant uses. The project site is unlikely to have value as habitat for endangered, rare, or threatened biological resources. According to the National Wetlands Inventory, the project site is 0.1-mile north of a riverine habitat (USFWS 2023). However, project construction would occur within the footprint of the project site and would not impact the riverine habitat. Therefore, the proposed project meets Condition C.

Condition D: Result in Significant Effects

Air Quality

Project construction- and operational-source emissions would not exceed applicable regional thresholds of significance and applicable Localized Significance Thresholds (LST) established by the South Coast Air Quality Management District (SCAQMD). The proposed project would also comply with the Basin Air Quality Management Plan (AQMP), California Ambient Air Quality Standards (CAAQS), National Ambient Air Quality Standards (NAAQS), West Riverside Council of Governments (WRCOG) Subregional Climate Action Plan (CAP), California Air Resources Board (CARB) Scoping Plan, AB 32, and SB 32.

Additionally, project-related traffic would not cause or result in carbon monoxide (CO) concentrations exceeding applicable state and/or federal standards (CO "hotspots"). Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the proposed project. Project-related GHG emissions meet the SCAQMD draft screening threshold of 3,000 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year and are also considered to be less than significant (MD Acoustics 2022a).

Finally, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people; and the proposed project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Therefore, potential construction- and operational-source odor impacts would be considered less than significant.

Noise

According to the Noise Analysis study that was prepared for the proposed project, the project would not result in significant impacts from construction and operational noise or vibration. Ambient noise data taken indicated that daytime levels are 56 to 62 Leq(h), and the predominant source of noise impacting the existing uses is traffic noise from Clinton Keith Road and existing commercial uses (MD Acoustics 2022b). Ambient operational noise levels are anticipated to range from 56 dBA Leq to 59 dBA Leq at the adjacent residential and commercial uses. Therefore, potential operational noise impacts would be considered less than significant.

Traffic and Transportation

Intersections surrounding the project site are projected to operate at an acceptable level of service (LOS) during the AM and PM peak hours for Opening Year 2024 and Cumulative Year With Project conditions.

Where necessary, roadways adjacent to the project site and site access points will be constructed in compliance with recommended roadway classifications and respective cross-sections in the Wildomar General Plan or as directed by the City Engineer. Sight distance at each project access point would be reviewed with respect to standard Caltrans and City sight distance standards at the time of final grading, landscaping and street improvement plans.

Additionally, in accordance with the City of Wildomar Vehicle Miles Travelled (VMT) CEQA Threshold Policy Guidelines, the project is screened from a VMT analysis as the proposed project is a local-serving retail center under 50,000 square feet. Therefore, impacts would be less than significant impact (TJW Engineering 2022).

Water Quality

According to the Preliminary Hydrology Report prepared for this project, the project site is in Zone X per the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM). Flood Zone X is defined by FEMA as the area determined to be outside the 100-year flood. No portion of the project site is located within the special flood hazard area inundated by the 100-year flood (Kimley-Horn 2022).

The proposed project site will predominantly drain southwest to maintain the existing flow pattern to the maximum extent possible. Resulting post-development flows would exceed existing flows in a 100-year storm. However,

through the proposed underground detention system, the proposed project is not expected to cause a significant impact to downstream systems.

Additionally, the proposed project would comply with the Wildomar Municipal Code Section 13.12.050, which requires development to comply with a Municipal Separate Storm Sewer System (MS4) Permit from the San Diego Regional Water Quality Control Board, would reduce impacts to water quality. Section F.1 of the MS4 permit specifies requirements for new developments, and Section F.1.D details the requirements for standard stormwater mitigation plans (also known as water quality management plans). The MS4 permit imposes pollution prevention requirements on planned developments, construction sites, commercial and industrial businesses, municipal facilities and activities, and residential activities.

Therefore, the development of the project site would not cause a significant impact to downstream systems for storms up to the 100-year condition.

Condition E: Adequate Utilities and Public Services

The proposed project would extend and connect to existing water and sewer lines along Catt Road. The Elsinore Valley Municipal Water District (EVMWD) confirmed it would provide water and sewer services to the project site, and the proposed project would comply with the list of general and project-specific requirements provided by EVMWD. Therefore, service providers and utilities have determined that the site can be properly serviced.

4. REVIEW OF EXCEPTIONS TO THE CATEGORICAL EXEMPTION

The proposed project has been reviewed under CEQA conditions described in Section 15332 of Title 14 of the California Code of Regulation that might invalidate findings that the proposed project is exempt from CEQA. Each condition is listed below followed by an assessment of whether that exception applies to the proposed project.

(a) Location. Classes 3,4,5,6 and 11 are qualified by consideration of where the project would be located—a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law by federal, state, or local agencies.

The project site is undeveloped and surrounded by residential uses and vacant land to the north, commercial uses to the east and south, and I-15 to the west. The proposed project would develop the vacant land with an 11,991-square-foot retail center which would include a Quick Quack express car wash, a fast food/drive-through restaurant (with outdoor dining patio), and a two-story building to accommodate a future retail cannabis business (1st floor) and an office space (2nd floor), as well as related on-site/off-site improvements. According to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the project site is not located within a criteria cell and is located within an urbanized area surrounded by various uses; no impacts to species of concern within the MSHCP, special status biological resources, and other protected biological resources no impacts are expected to occur. The project site does not have any drainage features and does not support or lie adjacent to riparian/riverine areas.

According to the Preliminary Geotechnical Report, the project site is considered suitable for the proposed development, provided the conclusions and recommendations from the Geotechnical Report are incorporated into the plans and are implemented during construction (Earth Strata Geotechnical Services 2022a). Recommendations include compliance with the latest California Building Code and the report's General Earthwork and Grading Specifications, clearing operations, removal of unsuitable materials, general grading operations for fill areas (ground preparation, compacted fill placement), and post-grading considerations including slope landscaping and maintenance, site drainage, and utility trenches. City public works ensures that geotechnical requirements are included in both the improvement plans before approval and the building permit prior to issuance. The project site

has not been identified as a hazardous materials site and would not create a hazard to the public. Although the Phase I Environmental Site Assessment indicated that import soils should be investigated for any Recognized Environmental Conditions (RECs), it determined there is no evidence of RECs, Controlled RECs (CREC), Historical REC (HREC), or de minimis conditions on the project site (Earth Strata Geotechnical Services 2022b). Therefore, this exception does not apply to the proposed project.

(b) Cumulative Impacts. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

There are several development projects within the City of Wildomar that are pending approval, approved, and under construction. The proposed project consists of the construction of a new retail center. The proposed project would not combine with other activities or development projects in the area that would result in cumulative impacts. The issues relevant to the proposed project are temporary, localized, and confined to the immediate vicinity of the project site.

The proposed project will not result in any significant environmental impacts, as indicated above. Therefore, due to the size of the project site and the nature of the proposed project, no significant cumulatively considerable impacts are anticipated. This exception does not apply.

(c) Significant Effects. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity would have a significant effect on the environment due to unusual circumstances.

The project site is currently vacant and surrounded by residential and vacant uses to the north, commercial uses to the east and south, and I-15 to the west. There is no reasonable possibility that the proposed project would have a significant effect on the environment due to unusual circumstances. The proposed project would be consistent with the existing general plan and the zoning designations. The construction manager would ensure compliance with local, state, and federal laws, regulations, would implement construction Best Management Practices (BMPs), and follow local standards and guidelines. Therefore, this exception does not apply to the proposed project.

(d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings or similar resources, within a highway officially designated as a state scenic highway.

According to the California Department of Transportation's (Caltrans) Scenic Highway System Map, there are no state designated highways within the City of Wildomar. The project site is adjacent to I-15, which is a state-eligible scenic highway (Caltrans 2022). However, the proposed project would occur within the project site boundaries except for utility connections and other related improvements. Additionally, new development onsite would not be visible from any scenic corridors due to intervening development (e.g., buildings, structures, mature trees). Therefore, the project implementation would not obstruct views of any scenic resources, and project development would not result in a substantial adverse effect on a scenic vista within or near the project site. Based on the preceding, project implementation would not result in damage to scenic resources or highways, and this exception would not apply.

(e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Government Code § 65962.5.

California Government Code Section 65962.5 requires the compiling of lists of the following types of hazardous materials sites: hazardous waste facilities subject to corrective action; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated.

According to the Phase I Environmental Site Assessment Report, there appears to be some imported soils onsite; the report recommends investigating these soils for any RECs. The Phase I Environmental Site Assessment Report indicated that there are no sites with Aboveground Storage Tanks (ASTs), Underground Storage Tanks (USTs), Leaking Underground Storage Tanks (LUSTs), hazardous waste generation, or hazardous material releases identified within 0.25-mile of the project site. In addition, there were no RECs, CRECs, HRECs or de minimis conditions identified. Therefore, the project site has not been identified as a hazardous materials site pursuant to Government Code Section 65962.5. The proposed project would not create a hazard to the public. This exception does not apply to the proposed project.

(f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of historical resources. Under Public Resource Code § 21084.1, a historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources. Additionally, historical resources included in a local register of historical resources are presumed to be historically or culturally significant, and a lead agency can determine whether the resource may be an historical resource.

CEQA Guidelines Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally, a resource is considered to be "historically significant" if it meets one of the following criteria:

i. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

ii. Is associated with the lives of persons important in our past;

iii. Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

iv. Has yielded, or may be likely to yield, information important in prehistory or history.

The project site is vacant and undeveloped; therefore, no historic resources exist onsite (NPS 2022, OHP 2022). As such, implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource, and this exception would not apply.

5. CONCLUSION

The proposed project is exempt from further environmental review under the requirements of the California Environmental Quality Act (Cal. Code Regs. Tit. 14 § 15332) because it is consistent with Class 32, In-Fill Development Projects.

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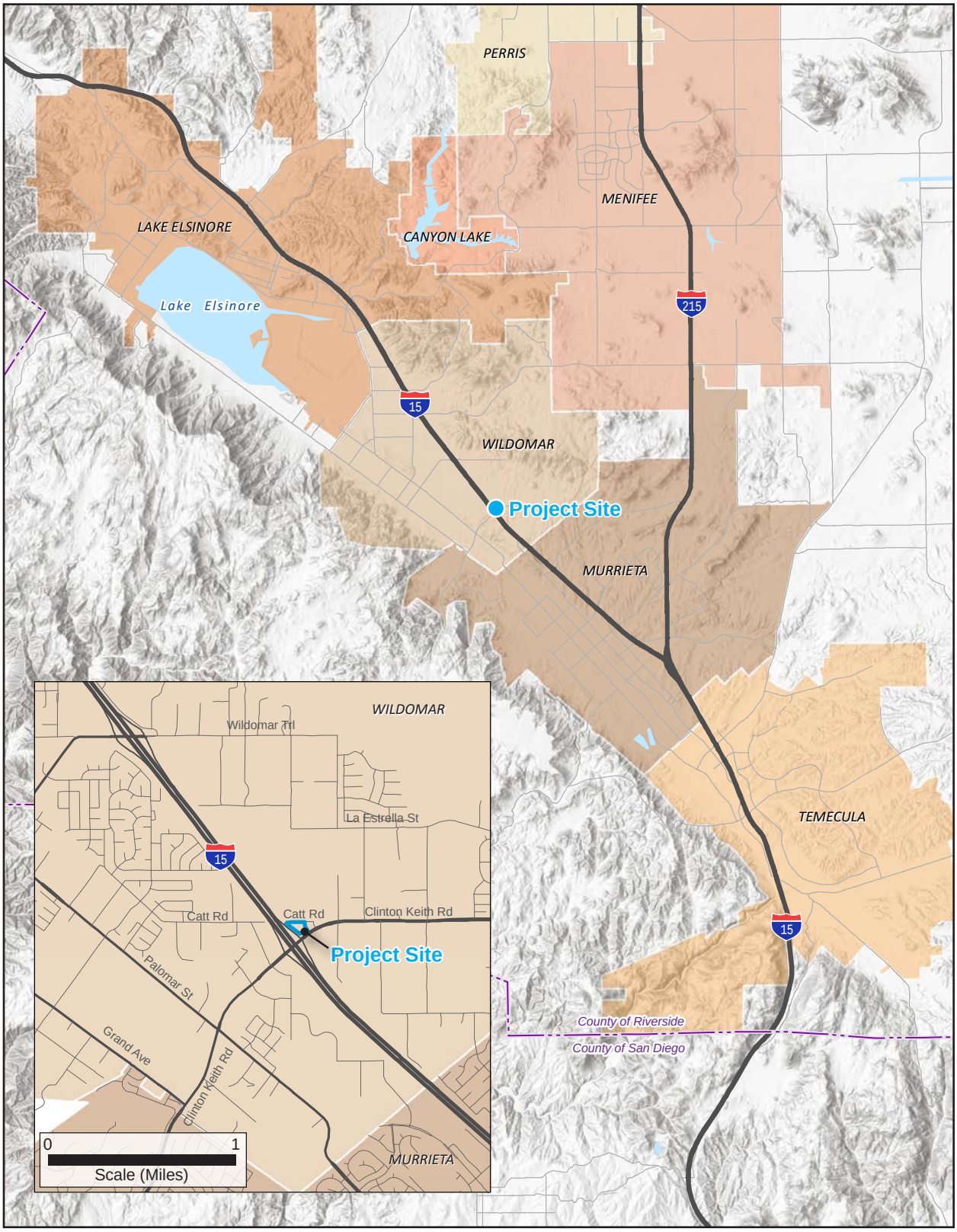
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Attachments

Figure 1 Project Location and Local Vicinity
Figure 2 Aerial Photograph
Figure 3 Conceptual Project Site Plan

Figure 1 - Project Location and Local Vicinity



Note: Unincorporated county areas are shown in white.

Source: Generated using ArcMap, Inc., 2022.

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Scale (Miles)

Figure 2 - Aerial Photograph



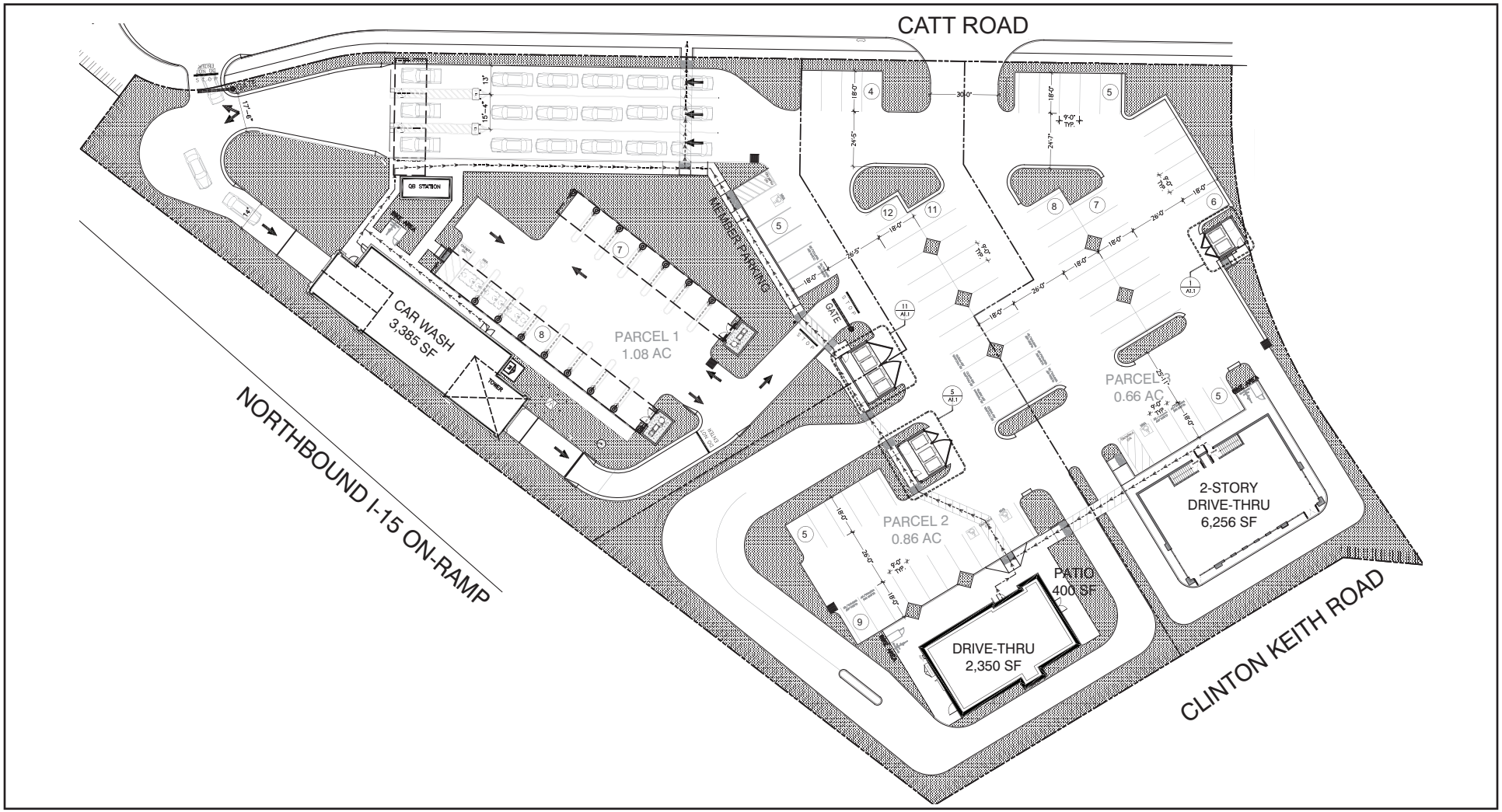
Project Site

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Scale (Feet)

Source: Nearmap, Inc., 2022.

PlaceWorks

Figure 3 - Conceptual Project Site Plan



Source: Catalyst, 2022.

NEC I-15 & Clinton Keith Traffic Impact Analysis

City of Wildomar, California

March 28, 2023

Prepared by:

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TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

March 28, 2023

Mr. Brandon Humann
Catalyst Commercial Group
38605 Calistoga Drive, Suite 150
Murrietta, CA 92563

Subject: NEC I-15 & Clinton Keith Traffic Analysis, City of Wildomar

Dear Mr. Humann:

TJW ENGINEERING, INC. (TJW) is pleased to present you with this traffic impact analysis for the proposed NEC I-15 & Clinton Keith project located on the northeast corner of I-15 and Clinton Keith Road.

This traffic study has been prepared to meet the traffic study requirements for the City of Wildomar and assesses the forecast traffic operations associated with the proposed project and its impact on the local street network. This report is being submitted to you for review and forwarding to the City of Wildomar.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

Thomas Wheat, PE, TE
President

Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*





David Chew, PTP
Transportation Planner

Daniel Flores, EIT
Project Engineer

NEC I-15 & Clinton Keith
Traffic Impact Analysis

City of Wildomar, California

March 28, 2023

Prepared for:

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Catalyst Commercial Group
38605 Calistoga Drive, Suite 150
Murrietta, CA 92563

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1.0 EXECUTIVE SUMMARY

This traffic impact analysis (TIA) analyzes the projected traffic operations associated with the NEC I-15 & Clinton Keith project located at the northeast corner of I-15 and Clinton Keith Road in the City of Wildomar. The purpose of this TIA is to evaluate potential circulation system deficiencies that may result from development of the proposed project, and to recommend improvements to achieve acceptable operations, if applicable. This analysis has been prepared in coordination with the City of Wildomar via a scoping agreement (See **Appendix B**) and is pursuant to applicable County of Riverside General Plan, Caltrans traffic impact analysis guidelines, and the City of Wildomar General Plan.

The proposed project consists of constructing a 108 linear foot car wash tunnel, 5,200 square feet of retail space, and a 2,350 square foot drive-thru restaurant. Site access is planned via one full-access driveway and a secondary emergency carwash exit only on Catt Road. The site is currently classified as commercial retail in the City of Wildomar General Plan Land Use Plan.

The proposed project is anticipated to be fully built and generating trips in 2024. To account for ambient growth on roadways, *Existing* traffic volumes have been increased by a growth rate of 2% per year over a two-year period for Project Completion conditions.

The proposed project is projected to generate 606 daily trips, 58 AM peak hour trips, and 150 PM peak hour trips.

The following seven (7) intersections in the vicinity of the project site have been included in the intersection level of service (LOS) analysis:

1. Clinton Keith Road/Hidden Springs Road;
2. Clinton Keith Road /I-15 SB Ramps;
3. Clinton Keith Road /I-15 NB Ramps;
4. Clinton Keith Road /Arya Road;
5. Clinton Keith Road /Wildomar Trail;
6. Arya Road/Catt Road;
7. Project Driveway/Catt Road;

The study intersections are analyzed for the following study scenarios:

- Existing Conditions;
- Opening Year With Project (Existing + Ambient +Project) Conditions;
- Cumulative Year With Project (Existing + Ambient + Cumulative + Project) Conditions.

1.1 SUMMARY OF LEVEL OF SERVICE ANALYSIS RESULTS

Table ES-1 summarizes the results of the intersection level of service analysis based on the City of Wildomar's General Plan thresholds of significance for analyzing transportation deficiencies.

Table ES-1
Summary of Transportation Deficiencies at Study Intersections

Intersection			Cumulative Year 2024
1	Clinton Keith Road	Hidden Springs Road	No Deficiencies
2	Clinton Keith Road	I-15 SB Ramps	No Deficiencies
3	Clinton Keith Road	I-15 NB Ramps	No Deficiencies
4	Clinton Keith Road	Arya Road	Deficient
5	Clinton Keith Road	Wildomar Trial	Deficient
6	Arya Road	Catt Road	No Deficiencies
7	Project Driveway	Catt Road	No Deficiencies

Existing Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for *Existing* conditions except for the following intersections.

- #4 – Clinton Keith Road/Arya Road (PM Peak Hours).

Opening Year With Project (OYP) Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for *Opening Year 2024* conditions except for the following intersections.

- #4 – Clinton Keith Road/Arya Road (PM Peak Hours).

Cumulative Year With Project (CYP) Conditions

The study intersections are projected to operate at an acceptable LOS during the AM and PM peak hours for *Cumulative Year With Project* conditions except for the following intersections.

- #4 – Clinton Keith Road/Arya Road (PM Peak Hours);
- #5 – Wildomar Trail/Clinton Keith Road (PM Peak Hours).

1.2 ON-SITE ROADWAY AND SITE ACCESS IMPROVEMENTS

Wherever necessary, roadways adjacent to the proposed project site and site access points will be constructed in compliance with recommended roadway classifications and respective cross-sections in the City of Wildomar's General Plan or as directed by the City Engineer.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City sight distance standards at the time of final grading, landscaping and street improvement plans.

Signing/striping should be implemented in conjunction with detailed construction plans for the project site.

2.0 INTRODUCTION

This traffic impact analysis (TIA) analyzes the projected traffic operations associated with the NEC I-15 & Clinton Keith project located at the northeast corner of I-15 and Clinton Keith Road in the City of Wildomar. The purpose of this TIA is to evaluate potential circulation system deficiencies that may result from development of the proposed project, and to recommend improvements to achieve acceptable operations, if applicable. This analysis has been prepared in coordination with the City of Wildomar via a scoping agreement (See **Appendix B**) and is pursuant to applicable County of Riverside, and Caltrans traffic impact analysis guidelines.

2.1 PROJECT DESCRIPTION

The proposed project consists of constructing a 108 linear foot car wash tunnel, 5,200 square feet of retail space, and a 2,350 square foot drive-thru restaurant. Site access is planned via one full-access driveway and a secondary emergency carwash exit only on Catt Road. The site is currently classified as commercial retail in the City of Wildomar General Plan Land Use Plan.

The proposed project is anticipated to be fully built and generating trips in 2024. To account for ambient growth on roadways, *Existing* traffic volumes have been increased by a growth rate of 2% per year over a two-year period for Project Completion conditions.

Exhibit 1 shows the project site location. **Exhibit 2** shows the proposed project site plan.

2.2 STUDY AREA

The following seven (7) intersections in the vicinity of the project site have been included in the intersection level of service (LOS) analysis:

1. Hidden Springs Road/Clinton Keith Road;
2. I-15 SB Ramps/Clinton Keith Road;
3. I-15 NB Ramps/ Clinton Keith Road;
4. Arya Road/Clinton Keith Road;
5. Wildomar Trail/Clinton Keith Road;
6. Arya Road/Catt Road;
7. Project Driveway/Catt Road;

The study intersections are all located within the City of Wildomar.

This traffic analysis follows the *City of Wildomar General Plan, County of Riverside Traffic Impact Analysis Guidelines Revised (December, 2020)*, and the *Caltrans Guidelines for the Preparation of Traffic Impact Studies (December, 2002)*. Below are the following study scenarios:

- Existing Conditions;
- Opening Year With Project (Existing + Ambient +Project) Conditions;
- Cumulative Year With Project (Existing + Ambient + Cumulative + Project) Conditions.

Traffic operations are evaluated for the following time periods:

- Weekday AM Peak Hour occurring within 7:00 AM to 9:00 AM; and
- Weekday PM Peak Hour occurring within 4:00 PM to 6:00 PM; and

2.3 ANALYSIS METHODOLOGY

2.3.1 Intersection Analysis Methodology

Level of Service (LOS) is commonly used to describe the quality of flow on roadways and at intersections using a range of LOS from LOS A (free flow with little congestion) to LOS F (severely congested conditions). The definitions for LOS for interruption of traffic flow differ depending on the type of traffic control (traffic signal, unsignalized intersection with side street stops, unsignalized intersection with all-way stops). The *Highway Capacity Manual (HCM) 6* (Transportation Research Board, 2016) methodology expresses the LOS of an intersection in terms of delay time for the intersection approaches. The HCM methodology utilizes different procedures for different types of intersection control.

The City of Wildomar, County of Riverside, and Caltrans, traffic impact study guidelines require signalized intersection operations be analyzed utilizing the HCM 6th Edition methodology. Intersection LOS for signalized intersections is based on the intersections average control delay for all movements at the intersection during the peak hour. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Table 1 describes the general characteristics of traffic flow and accompanying delay ranges at signalized intersections.

Table 1

HCM – LOS & Delay Ranges – Signalized Intersections

Level of Service	Description	Delay (in seconds)
A	Very favorable progression; most vehicles arrive during green signal and do not stop. Short cycle lengths.	0 – 10.00
B	Good progression, short cycle lengths. More vehicles stop than for LOS A.	10.01 – 20.00
C	Fair progression; longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant, though many vehicles still pass through without stopping.	20.01 – 35.00
D	Progression less favorable, longer cycle length and high flow/capacity ratio. The proportion of vehicles that pass through without stopping diminishes. Individual cycle failures are obvious.	35.01 – 55.00
E	Severe congestion with some long-standing queues on critical approaches. Poor progression, long cycle lengths and high flow/capacity ratio. Individual cycle failures are frequent.	55.01 – 80.00
F	Very poor progression, long cycle lengths and many individual cycle failures. Arrival flow rates exceed capacity of intersection.	> 80.01

Source: Transportation Research Board, *Highway Capacity Manual*, HCM6 Edition (Washington D.C., 2016).

Collected peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. It is a common practice in LOS analysis to conservatively use a peak 15-minute flow rate applied to the entire hour to derive flow rates in vehicles per hour that are used in the LOS analysis. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume. PHF = [Hourly Volume]/ [4 * Peak 15-Minute Volume]. The use of a 15-minute PHF produces a more detailed and conservative analysis compared to analyzing vehicles per hour. Existing PHFs, obtained from the existing traffic counts have been used for all analysis scenarios in this study.

The traffic study guidelines also require unsignalized intersection operations be analyzed utilizing the HCM 6th Edition methodology. Intersection operation for unsignalized intersections is based on the weighted average control delay expressed in seconds per vehicle.

At a two-way or side-street stop-controlled intersection, LOS is calculated for each stop-controlled minor street movement, for the left-turn movement(s) from the major street, and for the intersection as a whole. For approaches consisting of a single lane, the delay is calculated as the average of all movements in that lane. For all-way stop-controlled intersection, LOS is computed for the intersection as a whole.

Table 2 describes the general characteristics of traffic flow and accompanying delay ranges at unsignalized intersections.

Table 2
HCM – LOS & Delay Ranges – Unsignalized Intersections

Level Of Service	Description	Delay (in seconds)
A	Little or no delays.	0 – 10.00
B	Short traffic delays.	10.01 – 15.00
C	Average traffic delays.	15.01 – 25.00
D	Long traffic delays. Multiple vehicles in queue.	25.01 – 35.00
E	Very long delays. Demand approaching capacity of intersection	35.01 – 50.00
F	Very constrained flow with extreme delays and intersection capacity exceeded.	> 50.01

Source: Transportation Research Board, *Highway Capacity Manual*, HCM6 Edition (Washington D.C., 2016).

This analysis utilizes *PTV Vistro* 2022 analysis software for all signalized and unsignalized intersections. Vistro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis specified in Chapter 16 of the HCM. The level of service and capacity analysis performed within Vistro takes the optimization and coordination of signalized intersections within a network into consideration.

2.4 ROADWAY SEGMENT ANALYSIS METHODOLOGY

LOS for roadway segments is based on volume/capacity ratio (V/C). Roadway capacities for various types of facilities have been referenced from the *City of Wildomar General Plan*. The capacities for each type of facility are defined below in **Table 3**.

Table 3
City of Wildomar Roadway Capacities

Facility Type	Number of Lanes	LOS C Capacity (Vehicles Per Day)	LOS D Capacity (Vehicles Per Day)	LOS E Capacity (Vehicles Per Day)
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial	2	14,400	16,200	18,000
Arterial	4	28,700	32,300	35,900
Mountain Arterial	2	12,900	14,500	16,100
Mountain Arterial	3	16,700	18,800	20,900
Mountain Arterial	4	29,800	33,500	37,200
Urban Arterial	4	28,700	32,300	35,900
Urban Arterial	6	43,100	48,500	53,900
Urban Arterial	8	57,400	64,600	71,800
Expressway	4	32,700	36,800	40,900
Expressway	6	49,000	55,200	61,300
Expressway	8	65,400	73,500	81,700
Freeway	4	61,200	68,900	76,500
Freeway	6	94,000	105,800	117,500
Freeway	8	128,400	144,500	160,500
Freeway	10	160,500	180,500	200,600
Lane Ramp	1	16,000	18,000	20,000

Table 4 below describes the LOS and V/C ranges for roadway segments.

Table 4
LOS & V/C Ranges – Roadway Segments

Level of Service	Volume/Capacity Ratio
A	0.00 - 0.60
B	> 0.60 – 0.70
C	> 0.70 – 0.80
D	> 0.80 – 0.90
E	> 0.90 – 1.00
F	> 1.00

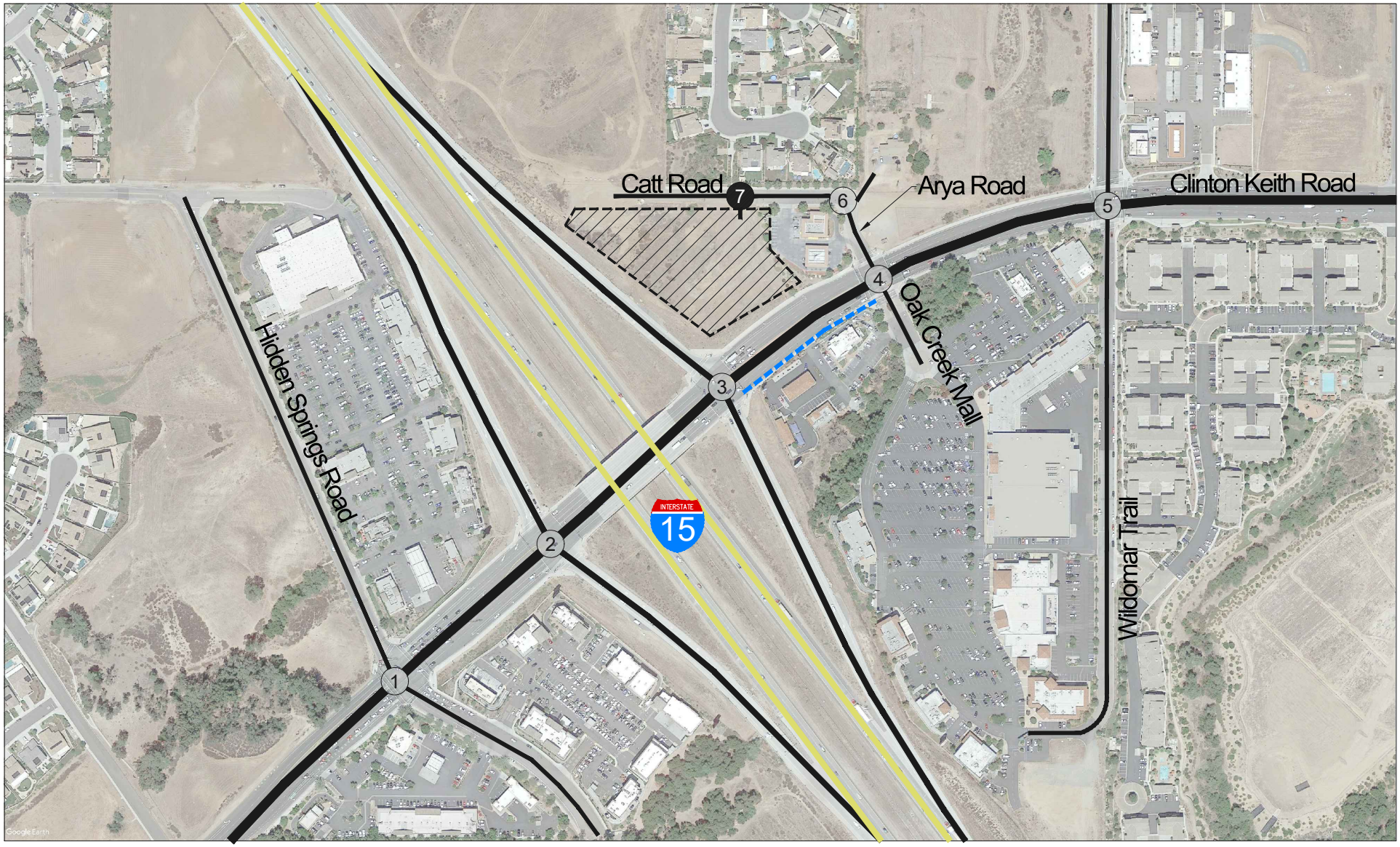
2.5 PERFORMANCE CRITERIA

2.5.1 City of Wildomar

The City of Wildomar General Plan Mobility Element identifies LOS D as the threshold for all Mobility Element roadways and intersections, with the exception of Clinton Keith Road, between Hidden Springs Road and I-15 Northbound Ramps, where LOS E would be acceptable due to right-of-way constraints, unless otherwise approved by the City Engineer.

2.5.2 Caltrans

Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State Highway facilities, although Caltrans acknowledges that this may not always be feasible. If an existing State Highway facility is operating at less than this target LOS, the existing LOS should be maintained. In general, the region-wide goal for acceptable LOS on all freeways, roadway segments and intersections is LOS "D". Consistent with the County of Riverside LOS threshold, LOS "D" will be used as the target LOS for state highway intersection in this analysis.



Legend:

- Project Site
- Study Roadway Segments
- (#) Study Intersection Location

Exhibit 1: Project Location and Study Area

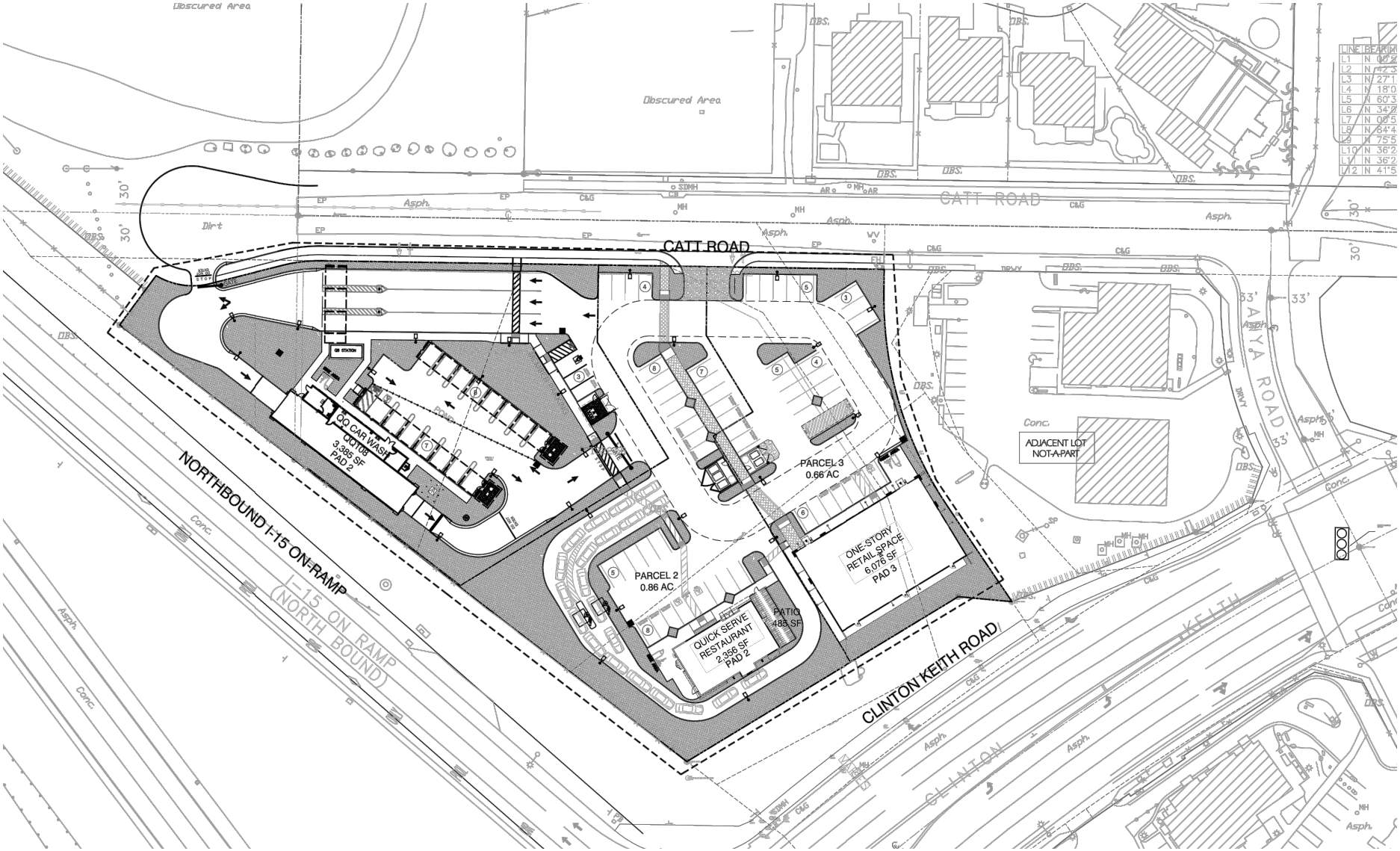


Exhibit 2: Proposed Site Plan

3.0 EXISTING CONDITIONS

3.1 EXISTING CIRCULATION NETWORK/STUDY AREA CONDITIONS

The characteristics of the roadway system in the vicinity of the proposed project are described in **Table 5.**

Table 5
Roadway Characteristics within Study Area

Roadway	Classification[1]	Jurisdiction	Direction	Existing Travel Lanes	Median Type[2]	Speed Limit (mph)	On-Street Parking
Clinton Keith	Primary Arterial	Wildomar	East-West	6-4	RM-NM	35	No
Hidden Springs	Major Arterial	Wildomar	North-South	2	RM-TWLTL	35	No
Arya	Industrial Collector	Wildomar	North-South	2	NM	25	No
Catt	Collector	Wildomar	East-West	2	NM	25	No
Wildomar	Collector	Wildomar	North-South	2	NM	40	Yes

1: Sources: City of Wildomar Mobility Element (June, 2021)
2: TWLTL = Two-Way Left-Turn Lane, RM= Raised Median, NM = No Median.

Exhibit 3 show existing conditions lane geometry and intersection controls.

3.2 CITY OF WILDOMAR GENERAL PLAN MOBILITY ELEMENT

The proposed project site is located within the City of Wildomar. **Appendix B** contains the current *City of Wildomar General Plan Mobility Element* and an explanation of roadway cross sections.

3.3 EXISTING BICYCLE AND PEDESTRIAN FACILITIES

Within the study area, Clinton Keith Road, Hidden Springs Road, and Wildomar Trail have existing bikeways. **Appendix B** contains the City of Wildomar and Riverside County's Bikeway paths.

3.4 EXISTING PUBLIC TRANSIT SERVICES

Riverside County is served by the Riverside Transit Agency which provides bus service throughout the Riverside County region. **Appendix B** shows the RTA routes in the vicinity of the project site.

Riverside Transit Agency routes 23 is the nearest bus stops located at Wildomar Trail and Clinton Keith Road. The stop is located approximately 1,000 feet away from the proposed project.

3.5 EXISTING TRAFFIC VOLUMES

To determine the existing operation of the study intersections, AM and PM peak period traffic volumes were estimated based on new traffic counts collected on Thursday July 28, 2022. Detailed traffic count data is provided in **Appendix C**. **Exhibit 4** shows existing AM and PM peak hour volumes at the study intersection.

3.6 EXISTING CONDITIONS INTERSECTION LEVEL OF SERVICE ANALYSIS

Existing conditions AM, PM Saturday peak hour intersection analysis is shown in **Table 6**. Calculations are based on the existing geometrics at the study area intersections as shown in **Exhibit 3**. HCM analysis sheets are provided in **Appendix D**.

Table 6

Intersection Analysis – Existing Conditions

Intersection			Control Type	Peak Hour	Existing Conditions	
					Delay[1]	LOS
1	Hidden Springs Road	Clinton Keith Road	Signal	AM	25.0	C
				PM	31.1	C
2	I-15 SB Ramps	Clinton Keith Road	Signal	AM	16.7	B
				PM	14.2	B
3	I-15 NB Ramps	Clinton Keith Road	Signal	AM	12.8	B
				PM	16.0	B
4	Arya Road	Clinton Keith Road	Signal	AM	37.3	D
				PM	61.4	E
5	Wildomar Trail	Clinton Keith Road	Signal	AM	12.4	B
				PM	14.9	B
6	Arya Road	Catt Road	AWSC	AM	6.6	A
				PM	6.7	A

1 = Per the Highway Capacity Manual 6th Edition, overall average delay and LOS are shown for signalized and all-way stop-controlled intersections. For intersections with one-or-two-way stop-control, the delay and LOS for the worst individual movement is shown.

As shown in **Table 6**, the study intersections are currently operating at an acceptable LOS during the AM, and PM peak hours for *existing* conditions, except for the following intersections.

- #4 – Arya Road/Clinton Keith Road (PM Peak Hours).

3.7 EXISTING CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Table 7 summarizes *Existing* conditions roadway segment analysis based on the LOS capacities referenced in the *City of Wildomar General Plan*.

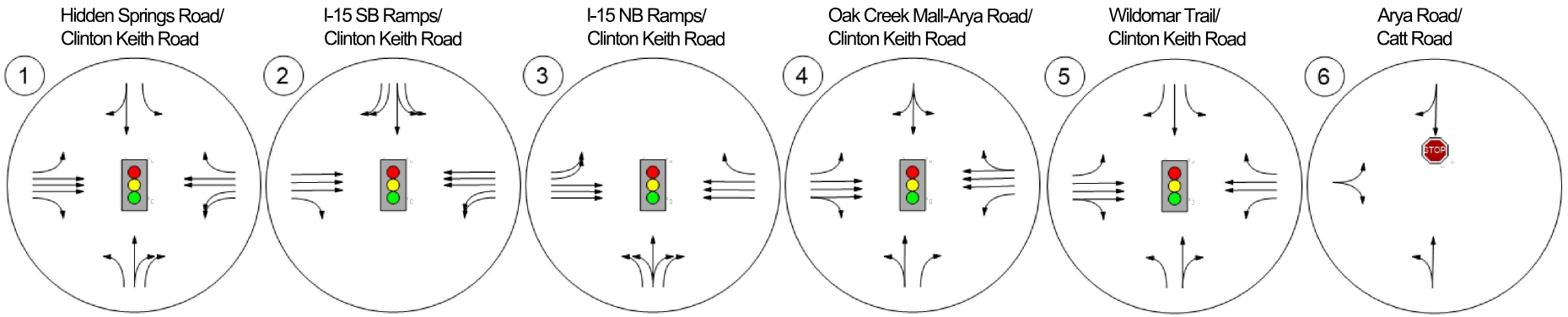
Table 7

Roadway Segment Analysis – Existing Conditions

Roadway Segment	Roadway Classification	Lane Configuration	LOS E Capacity[1]	Existing ADT	V/C	LOS
Clinton Keith Road West of Arya Road	Primary Arterial	6 Lanes Divided	53,900	35,192	0.65	B

1: Capacity based on City of Wildomar General Plan.
Note: 6D = six-lane divided roadway. V/C = volume/capacity ratio

As shown in **Table 7**, the study roadway segment is projected to continue to operate at an acceptable LOS in *Existing* conditions.



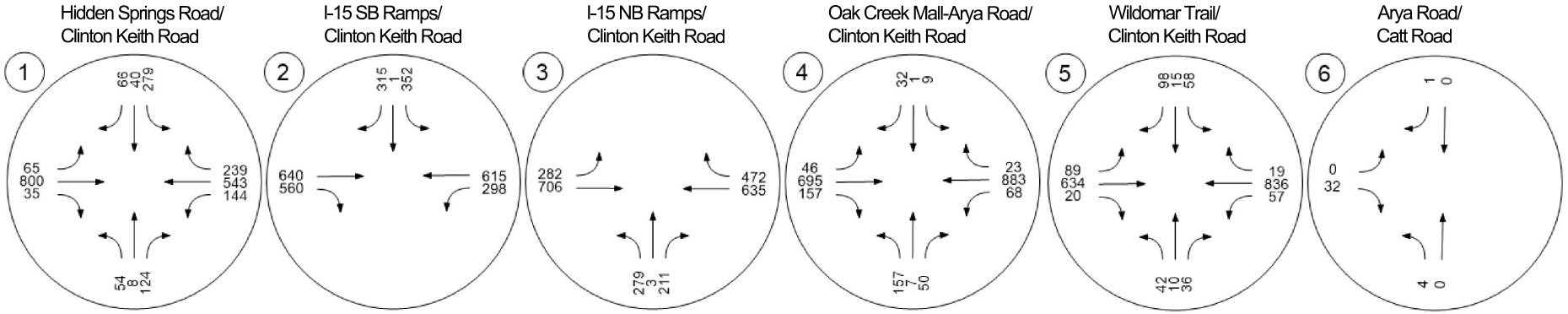


Legend:

- Project Site
- Existing Lane
- 2U 2-Lane Undivided Roadway

Exhibit 3: Lane Geometry and Intersection Controls

AM Peak Hour Volumes



PM Peak Hour Volumes

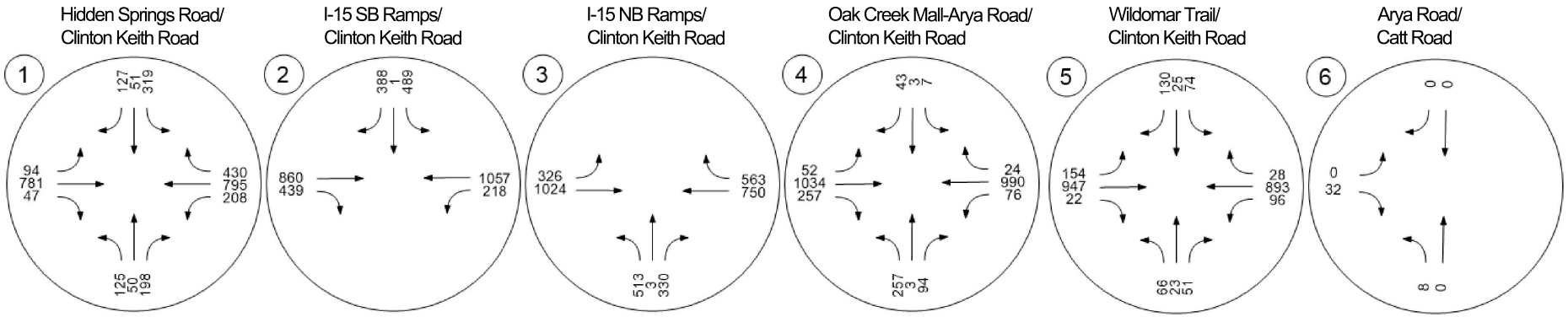


Exhibit 4: Existing AM and PM Peak Hour Volumes

4.0 PROPOSED PROJECT

4.1 PROJECT DESCRIPTION

The proposed project consists of constructing a 108 linear foot car wash tunnel, 5,200 square feet of retail space, and a 2,350 square foot drive-thru restaurant. Site access is planned via one full-access driveway and a secondary emergency carwash exit only on Catt Road. The site is currently classified as commercial retail in the City of Wildomar General Plan Land Use Plan. A conceptual striping plan showing site access upon project completion is presented in **Exhibit 5**.

The proposed project is anticipated to be fully built and generating trips in 2024. To account for ambient growth on roadways, *Existing* traffic volumes have been increased by a growth rate of 2% per year over a two-year period for Project Completion conditions.

4.2 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic, both inbound and outbound, produced by a development. Determining trip generation for a proposed project is based on projecting the amount of traffic that the specific land uses being proposed will produce. The trip generation was calculated using the *Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021)* trip generation rates were used to determine trip generation.

It should be noted, trip generation for the car wash land use utilized localized data based on a study approved by the City of Menifee from original data collected at the Victorville Speed Wash.

Table 8 summarizes the proposed project is projected to generate 606 daily trips, 58 AM peak hour trips, and 150 PM peak hour trips.

4.3 PROJECT TRIP DISTRIBUTION

Projecting trip distribution involves the process of identifying probable destinations and traffic routes that will be utilized by the proposed project's traffic. The potential interaction between the proposed land use and surrounding regional access routes are considered to identify the probable routes onto which project traffic would distribute. The projected trip distribution for the proposed project is based on anticipated travel patterns to and from the project site. **Exhibit 6** shows the projected trip distribution of proposed project trips. **Exhibit 7** shows the Project AM and PM peak Hour Volumes.

Table 8

Proposed Project Trip Generation

Proposed Land Use[1]	Qty	Unit[2]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour					Pass-By %'s		
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume					
							In	Out	Total			In	Out	Total	AM	PM	Daily
Strip Retail Plaza (<40K) (822)	5.20	TSF	54.45	283	2.36	60:40	7	5	12	6.59	50:50	17	17	34	0%	34%	34%
Fast-Food Restaurant with Drive-Through Window (934)	2.35	TSF	467.48	1,094	44.61	51:49	53	51	104	33.03	52:48	40	37	77	49%	50%	50%
Automated Car Wash (948)[3]	108	LFWT	11.87	1,282	0.66	58:42	42	30	72	1.25	50:50	68	68	135	10%	34%	10%
Subtotal				**1,377**			**60**	**56**	**116**			**125**	**122**	**246**			
Pass-By Trips (Shopping Center)				-96			0	0	0			-6	-6	-12			
Pass-By Trips (Restaurant)				-547			-26	-25	-51			-20	-19	-39			
Pass-By Trips (Car Wash)				-128			-4	-3	-7			-23	-23	-46			
Total Pass-By				**-771**			**-30**	**-28**	**-58**			**-49**	**-47**	**-96**			
Total				**606**			**30**	**28**	**58**			**76**	**74**	**150**			

1: Rates from ITE Trip Generation 11th Edition, 2021 (Land Use 822, and 934), and Trip Generation Handbook, 3rd Edition.

2: TSF = Thousand Square Feet, LFWT = Linear Foot of Wash Tunnel.

3: Newport Pointe Commercial Center Project Traffic Impact Analysis Report, LLG, April 28, 2021.

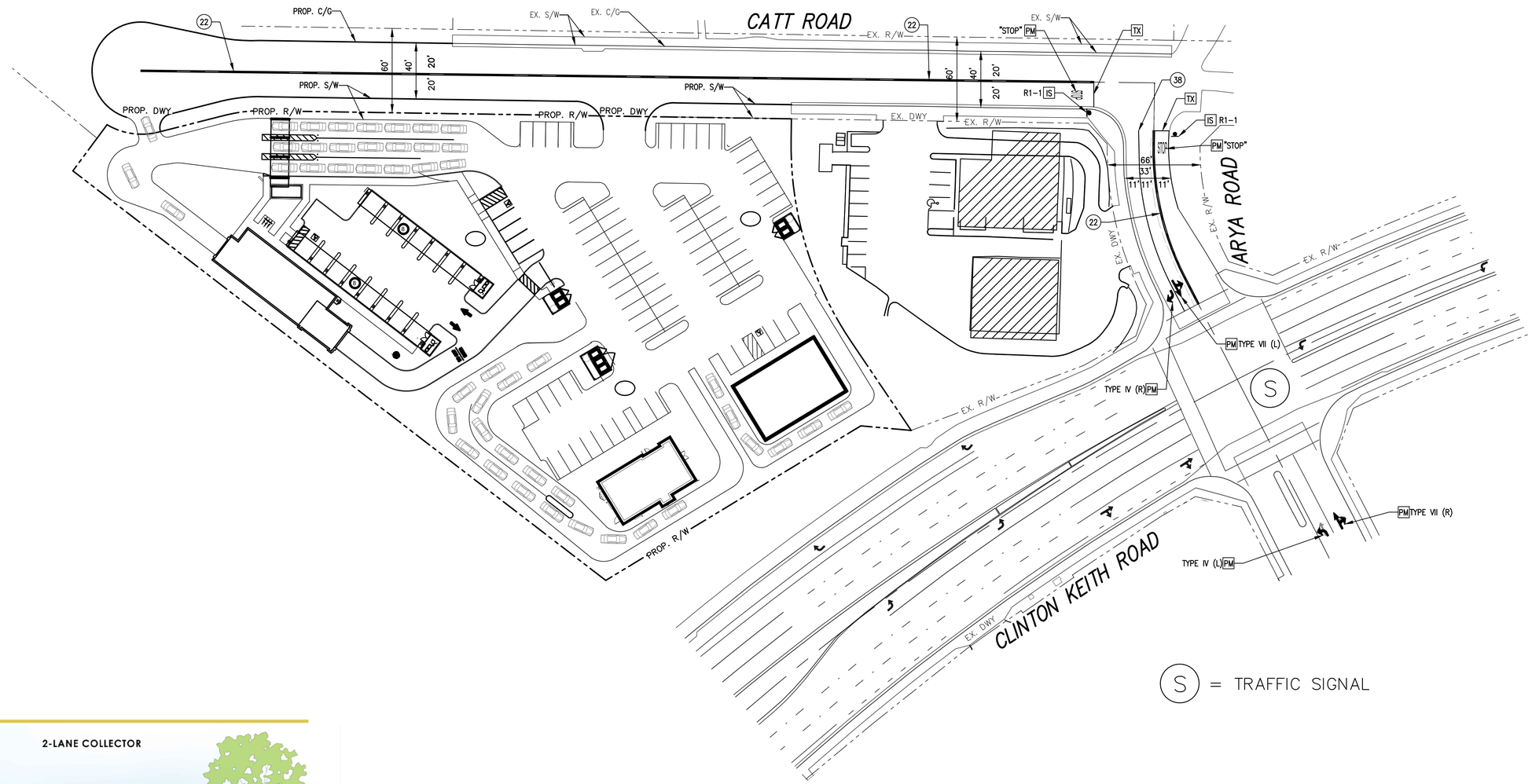
SIGN LEGEND:



R1-1
36"X36"

CONCEPT STRIPING NOTES:

IS	INSTALL SIGN AND POST.
TX	INSTALL THERMOPLASTIC 12" SOLID WHITE LIMIT LINE OR CROSSWALK PER CA-MUTCD STANDARDS.
PM	INSTALL THERMOPLASTIC PAVEMENT MARKING AS SHOWN PER CA-MUTCD STANDARDS.
22	INSTALL THERMOPLASTIC 6" DOUBLE YELLOW CENTERLINE STRIPE PER CALTRANS STD. PLAN A20A – DETAIL 22



S = TRAFFIC SIGNAL

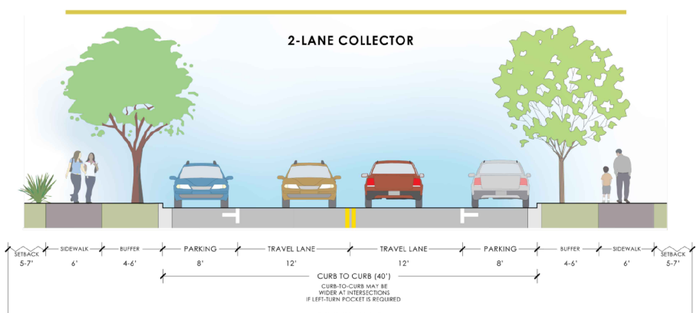


EXHIBIT 5: CONCEPT STRIPING PLAN
I-15 & CLINTON KEITH TIA TRAFFIC IMPACT ANALYSIS
Date: 08/16/22

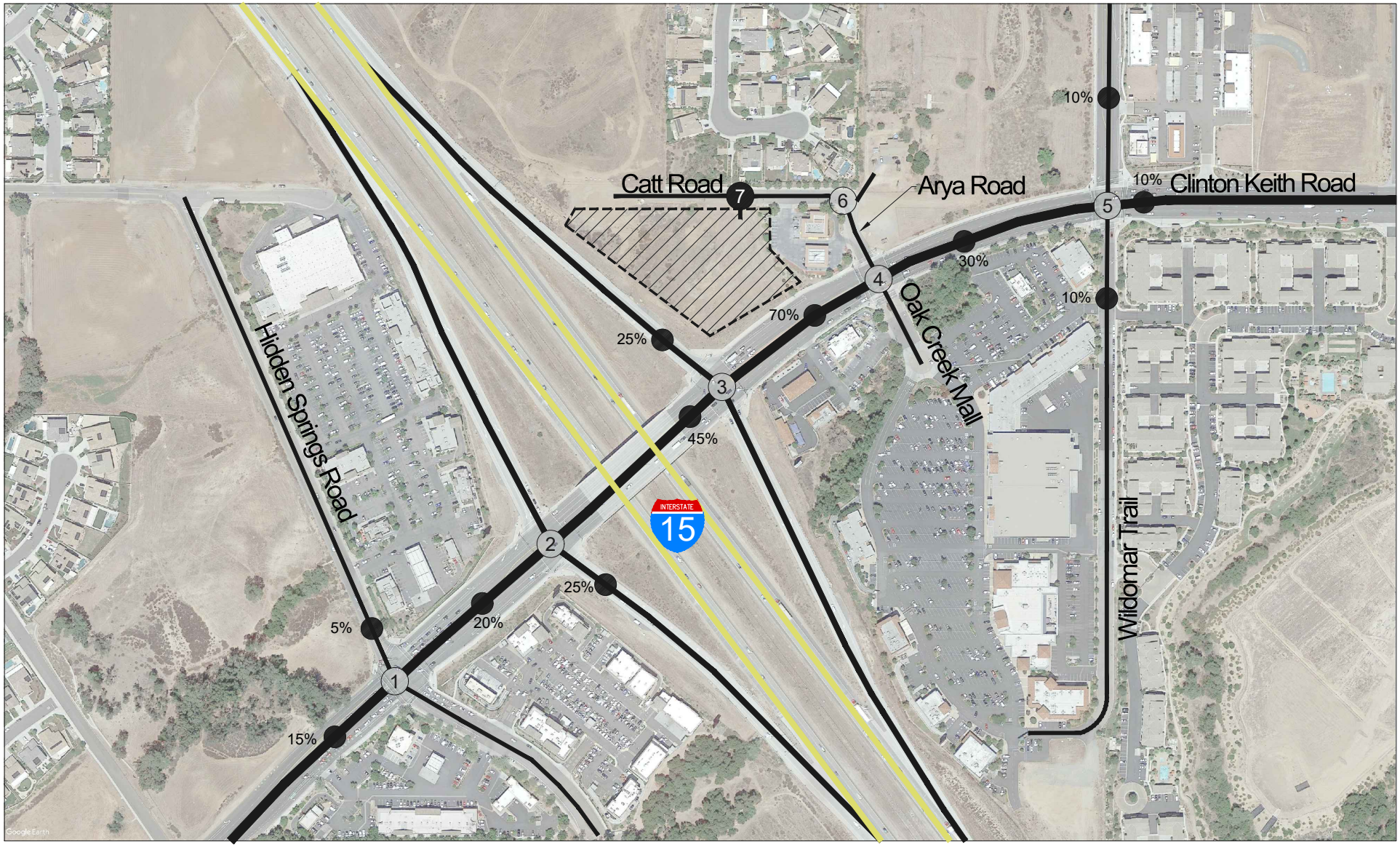
REGISTERED PROFESSIONAL ENGINEER
THOMAS JOSEPH WHEAT
No. 69467
Exp. 6/30/22
CIVIL
STATE OF CALIFORNIA

PREPARED BY:
TJW ENGINEERING, INC.
Traffic Engineering &
Transportation Planning Consultants
9841 Irvine Center Dr., Suite 200,
Irvine, CA 92618
t: (949) 878-3509 f: (949) 878-3593
www.tjwengineering.com

SCALE: 1" = 40'
20 0 20 40 60
24x36 PLOT

EXHIBIT 10: CONCEPT STRIPING PLAN

Plot Date: 03/8/2023 11:06:59 AM User: #### File Name: C:\Users\Daniel\Dropbox (TJW Engineering Inc.)\TJW Projects\CCG Projects\CCG-22-001\CCG22001 Exhibits\CCG22001 Concept Striping.dwg Last Update: 3/7/2023 12:45:17 PM

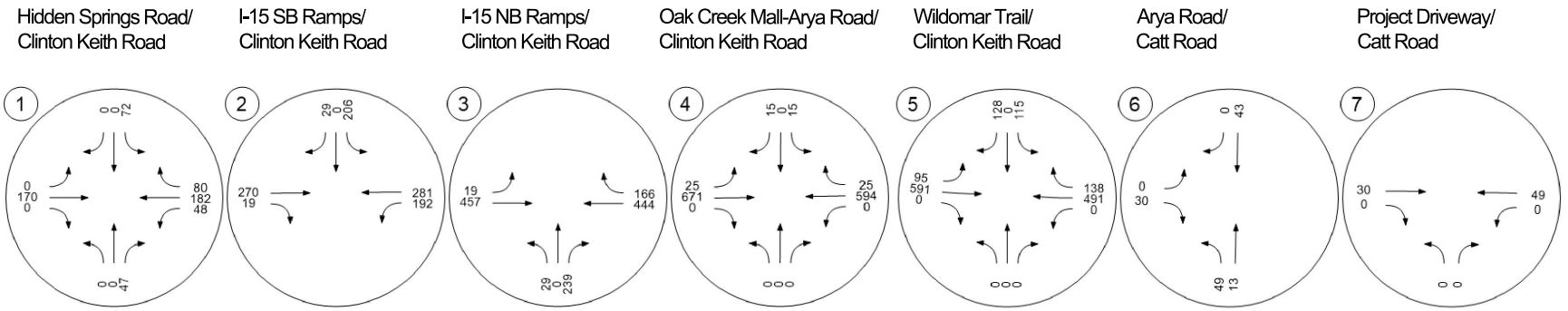


Legend:

- Project Site
- XX% Percent Trip Distribution
- (#) Study Intersection Location

Exhibit 6: Project Trip Distribution

AM Peak Hour Volumes



PM Peak Hour Volumes

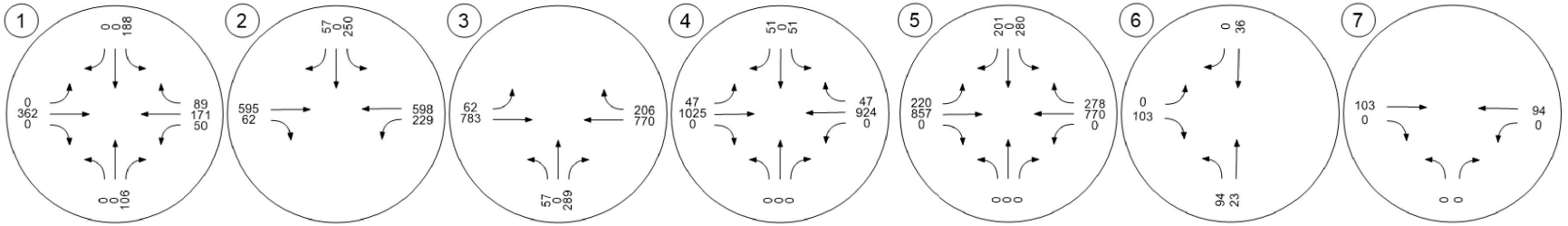


Exhibit 7: Project AM and PM Peak Hour Volumes

5.0 OPENING YEAR WITH PROJECT CONDITIONS (OYP)

Opening year with project (OYP) conditions analysis is intended to identify the project-related impacts on both the existing and planned near-term circulation system.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for the *OYP* scenario are consistent with those previously shown in **Exhibit 3**.

5.2 OPENING YEAR WITH PROJECT TRAFFIC VOLUMES

OYP volumes include the trips generated by the completion of the proposed project. Since the proposed project is expected to be fully completed and generating trips in 2024, OY volumes include an ambient growth rate of 2% per year for two years, applied to existing volumes**.**

Opening Year With Project Volumes = (Existing (2022) Counts * 1.02^2) + Project Volume

Exhibit 8 shows OYP AM and PM peak hour volumes at the study intersection.

5.3 OPENING YEAR WITH PROJECT INTERSECTION LEVEL OF SERVICE ANALYSIS

Opening year with project conditions AM, and PM peak hour intersection analysis is shown in **Table 9.** HCM analysis sheets are provided in ***Appendix D***.

Table 9
Intersection analysis – OYP Conditions

Intersection			Control Type	Peak Hour	OYP Conditions	
					Delay[1]	LOS
1	Hidden Springs Road	Clinton Keith Road	Signal	AM	26.2	C
				PM	32.3	C
2	I-15 SB Ramps	Clinton Keith Road	Signal	AM	17.5	B
				PM	14.6	B
3	I-15 NB Ramps	Clinton Keith Road	Signal	AM	13.4	B
				PM	17.4	B
4	Arya Road	Clinton Keith Road	Signal	AM	39.0	D
				PM	62.7	E
5	Wildomar Trail	Clinton Keith Road	Signal	AM	12.7	B
				PM	15.4	B
6	Arya Road	Catt Road	TWSC	AM	7.1	A
				PM	7.7	A
7	Project Driveway	Catt Road	OWSC	AM	8.4	A
				PM	8.6	A

1 = Per the Highway Capacity Manual 6th Edition, overall average delay and LOS are shown for signalized and all-way stop-controlled intersections. For intersections with one-or-two-way stop-control, the delay and LOS for the worst individual movement is shown.

As shown in **Table 9**, the study intersections are projected to continue to operate at an acceptable LOS during the AM and PM peak hours for *OYP* conditions, except for the following intersections.

- #4 –Arya Road/ Clinton Keith Road (PM Peak Hours).

5.4 OPENING YEAR WITH PROJECT CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Table 10 summarizes *OYP* conditions roadway segment analysis based on the LOS capacities referenced in the *City of Wildomar General Plan*.

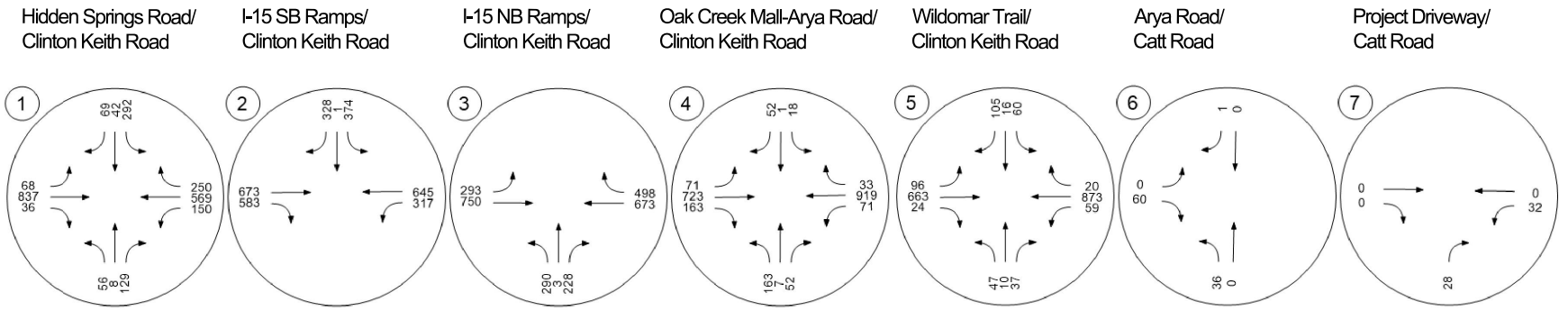
Table 10
Roadway Segment Analysis – Opening Year With Project Conditions

Roadway Segment	Roadway Classification	Lane Configuration	LOS E Capacity[1]	OY ADT	Project ADT	OYP ADT	V/C	LOS
Clinton Keith Road West of Arya Road	Primary Arterial	6 Lanes Divided	53,900	36,614	105	36,719	0.68	B

1: Capacity based on *City of Wildomar General Plan*.
Note: 6D = six-lane divided roadway. V/C = volume/capacity ratio.

As shown in **Table 10**, the study roadway segment is projected to continue to operate at an acceptable LOS in *OYP* conditions.

AM Peak Hour Volumes



PM Peak Hour Volumes

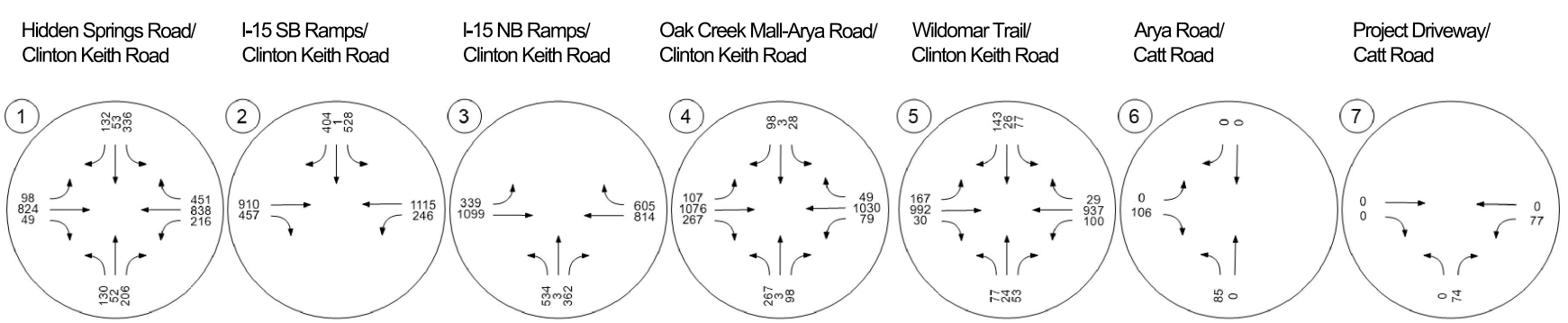


Exhibit 8: Opening Year With Project AM and PM Peak Hour Volumes

6.0 CUMULATIVE YEAR WITH PROJECT CONDITIONS (CYP)

Cumulative year with project (CYP) conditions analysis is intended to identify the project-related impacts on both the existing and planned near-term circulation system.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for the *CYP* scenario are consistent with those previously shown in **Exhibit 3**.

6.2 CUMULATIVE YEAR TRAFFIC VOLUMES

CYP volumes include background traffic plus the addition of the traffic projected to be generated by the proposed project and traffic projected to be generated by cumulative developments in the vicinity of the proposed project. Cumulative developments are projects which are in various stages of planning, entitlement and construction. Since the proposed project is expected to be built and generating trips in 2024, OY*P* volumes include an ambient growth rate of 2% per year for two year, applied to existing volumes**.**

CYP Volumes = (Existing (2022) Counts * 1.02^2) + Project Volume + Cumulative Projects

6.3 CUMULATIVE PROJECTS TRAFFIC

This analysis also accounts for other reasonably foreseeable development projects which are either approved or are currently being processed in the study area as part of a cumulative analysis scenario. A list of cumulative projects was developed for this analysis through consultation with City staff, and obtainment of current development status reports. A summary of cumulative projects land uses is shown in **Table 11**. Cumulative project locations are shown on **Exhibit 8**.

Exhibit 9 shows the cumulative projects AM and PM peak hour volumes at the study intersection.

Table 11
Cumulative Project List

ID[3]	Development Project[1]	Qty	Unit[2]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour				
				Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume		
								In	Out	Total			In	Out	Total
5	PA 12-0053 (PM 36492)	96.42	TSF	36.00	3,471	2.45	79:21	187	50	237	1.38	30:70	40	93	133
13	PA 13-0082 (PM 36122)	118.35	TSF	94.49	11,183	3.53	62:38	259	159	418	9.03	48:52	513	556	1069
		191	DU	4.45	850	0.37	23:77	16	55	71	0.39	61:39	45	29	74
14	PA 13-0089	170	DU	4.45	757	0.37	23:77	14	49	63	0.39	61:39	40	26	66
15	PA 14-0069	50.00	TSF	94.49	4,725	3.53	62:38	110	67	177	9.03	48:52	217	235	452
		162	DU	4.45	721	0.37	23:77	14	46	60	0.39	61:39	38	25	63
17	PA 14-0040	86	Beds	2.60	224	0.18	60:40	10	6	16	0.24	39:61	8	13	21
		138	DU	4.45	614	0.37	23:77	12	40	52	0.39	61:39	33	21	54
39	PA -150129 (TM 36952)	77	DU	9.43	726	0.7	26:74	14	40	54	0.94	63:37	45	27	72
44	PA 16-0134	27.00	TSF	54.45	1,470	2.36	60:40	38	26	64	6.59	50:50	89	89	178
46	PA 17-0111	1,100	seats	0.90	990	0.07	60:40	46	31	77	0.10	45:55	50	61	110
48	PA 20-0044	288	DU	4.45	1,282	0.37	23:77	25	82	107	0.39	61:39	68	44	112
53	PA 20-0116	202	Beds	22.32	4,509	1.79	72:28	261	101	362	1.69	33:67	113	228	341
55	PA 21-0033	66.69	TSF	94.49	6,302	3.53	62:38	146	90	236	9.03	48:52	289	313	602
		4.80	TSF	211.12	1,013	10.54	51:49	26	25	51	18.92	50:50	46	46	91
57	PA 21-0145	150	DU	4.54	681	0.37	23:77	13	43	56	0.39	39:61	23	36	59
		35.42	TSF	109.25	3,870	6.38	55:45	124	102	226	9.77	51:49	176	170	346
Total					43,388			1,316	1,011	2,327			1,834	2,010	3,843

1: Rates from ITE Trip Generation (11th Edition, 2021).
2: TSF = Thousand Square Feet, DU = Dwelling Units.
3: Cumulative project list provided by City Staff.

6.4 CUMULATIVE YEAR WITH PROJECT INTERSECTION LEVEL OF SERVICE ANALYSIS

Cumulative year with project conditions AM, and PM peak hour intersection analysis is shown in **Table 12.** HCM analysis sheets are provided in ***Appendix D***. **Exhibit 11** shows CYP AM and PM peak hour volumes at the study intersection.

Table 12
Intersection Analysis – Cumulative Year With Project Conditions

Intersection			Control Type	Peak Hour	OYP Conditions		CYP Conditions		Change	Deficient?
					Delay[1]	LOS	Delay[1]	LOS		
1	Hidden Springs Road	Clinton Keith Road	Signal	AM	26.2	C	31.9	C	5.7	No
				PM	32.3	C	54.8	D	22.5	No
2	I-15 SB Ramps	Clinton Keith Road	Signal	AM	17.5	B	25.2	C	7.7	No
				PM	14.6	B	20.8	C	6.2	No
3	I-15 NB Ramps	Clinton Keith Road	Signal	AM	13.4	B	19.3	B	5.9	No
				PM	17.4	B	36.0	D	18.6	No
4	Arya Road	Clinton Keith Road	Signal	AM	39.0	D	40.2	D	1.2	No
				PM	62.7	E	64.0	E	1.3	Yes
5	Wildomar Trail	Clinton Keith Road	Signal	AM	12.7	B	27.1	C	14.4	No
				PM	15.4	B	64.9	E	49.5	Yes
6	Arya Road	Catt Road	TWSC	AM	7.1	A	8.0	A	0.9	No
				PM	7.7	A	9.9	A	2.2	No
7	Project Driveway	Catt Road	OWSC	AM	8.4	A	8.4	A	0.0	No
				PM	8.6	A	8.6	A	0.0	No

1 = Per the Highway Capacity Manual 6th Edition, overall average delay and LOS are shown for signalized and all-way stop-controlled intersections. For intersections with one-or-two-way stop-control, the delay and LOS for the worst individual movement is shown.

As shown in **Table 12**, the study intersections are projected to continue to operate at an acceptable LOS during the AM and PM peak hours for *Cumulative* Year With Project conditions, except for the following intersections.

- #4 – Arya Road/Clinton Keith Road (PM Peak Hours);
- #5 – Wildomar Trail/Clinton Keith Road (PM Peak Hours).

6.5 CUMULATIVE YEAR WITH PROJECT CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Table 13 summarizes *CYP* conditions roadway segment analysis based on the LOS capacities referenced in the *City of Wildomar General Plan.)*.

Table 13
Roadway Segment Analysis – Opening Year With Project Conditions

Roadway Segment	Roadway Classification	Lane Configuration	LOS E Capacity[1]	OYP ADT	Cumulative Projects ADT	OYCP ADT	V/C	LOS
Clinton Keith Road West of Arya Road	Primary Arterial	6 Lanes Divided	53,900	36,719	23,572	60,290	1.12	F

1: Capacity based on the *City of Wildomar General Plan*.
Note: 6D = six-lane divided roadway. V/C = volume/capacity ratio.

As shown in **Table 13**, the study roadway segment is projected to operate at LOS F in *CYP* conditions.

6.6 QUEUING ANALYSIS

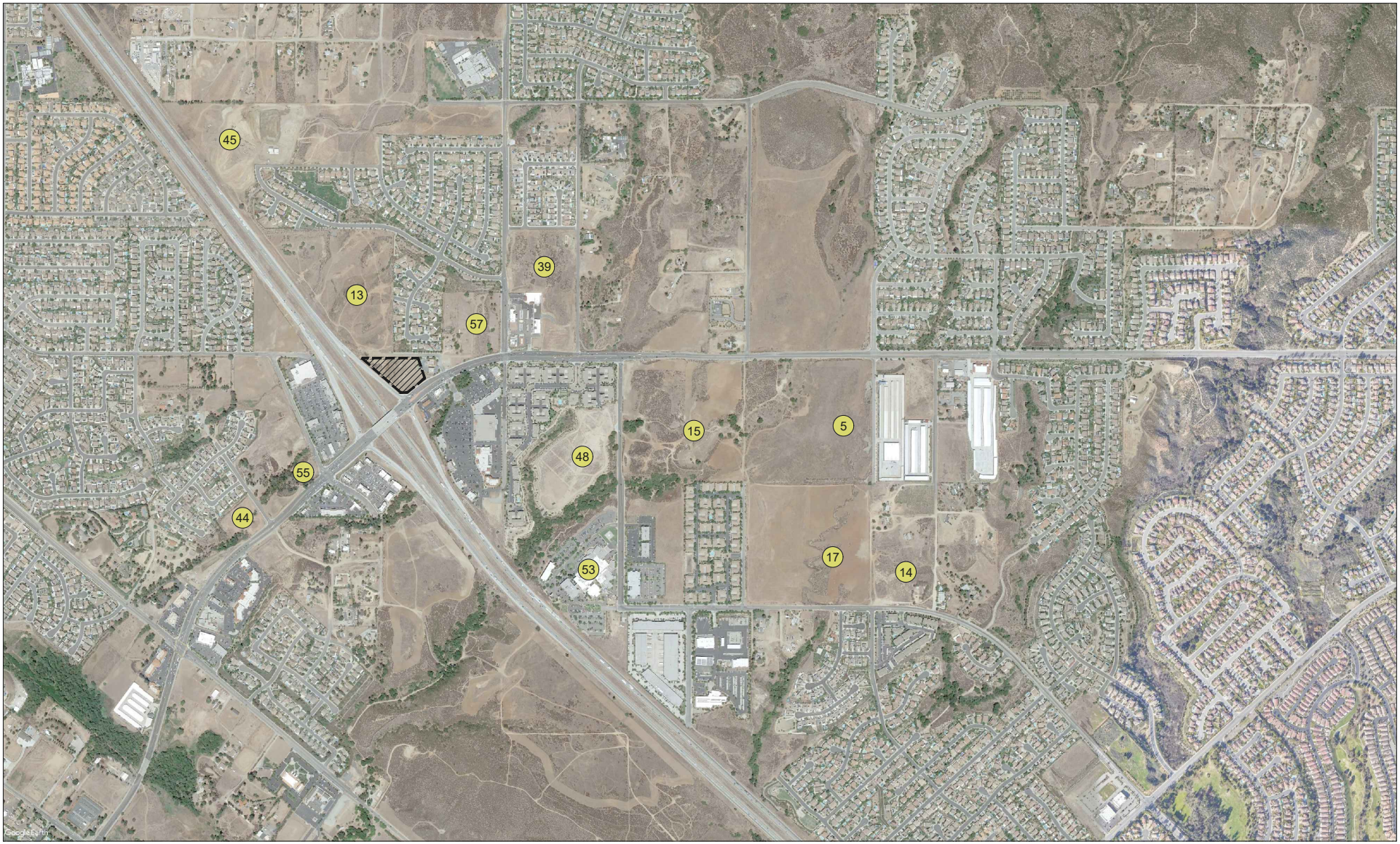
A queuing analysis was conducted for CYP conditions to determine 95th percentile queues. **Table 14** shows 95th percentile queue length for movements at intersection #4 and #6. The queue was analyzed to ensure vehicles turning have enough storage length for vehicles.

Table 14
Queuing Analysis

Intersection		Movement	Existing Storage Length (ft)	Existing 95th Percentile Queue Length (ft)		OYP 95th Percentile Queue Length (ft)		CYP 95th Percentile Queue Length (ft)	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
4	Array Road/ Clinton Keith Road	SBLTR	142	20	22	37	120	73	929
		EBL	295	61	50	97	126	134	184
		WBL	315	93	74	97	89	98	89
		WBR	200	330	304	370	383	617	356
6	Arya Road/Catt Road	NB	140	1	1	2	6	2	6
		EB	600	4	4	2	4	2	4

6.7 ON-SITE CIRCULATION

As shown in **Exhibit 12** and **Exhibit 13** turning movement templates have been added to display the on-site car wash circulation, and the delivery truck circulation. Adequate space is provided to allow vehicle turning within the proposed the site.



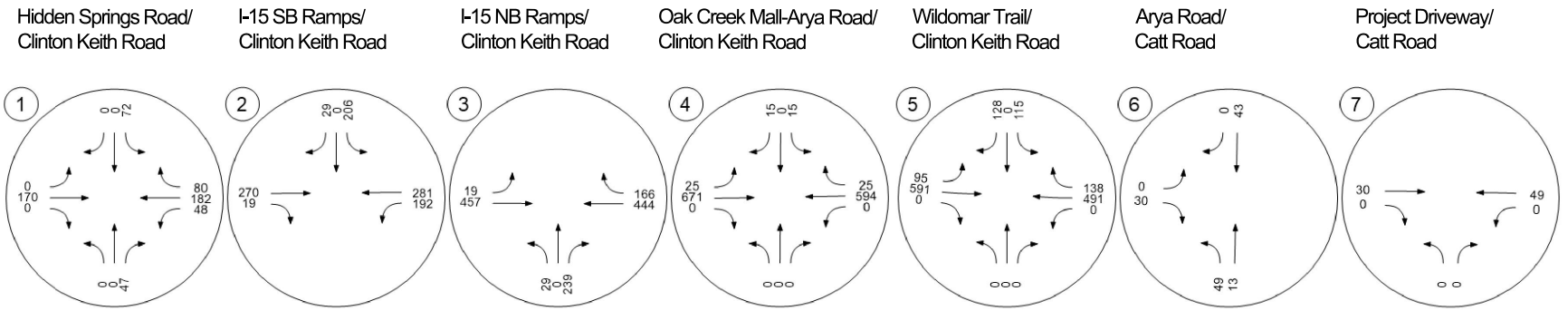
Legend:

X — Approximate Cumulative Project Locations

Project Site

Exhibit 9: Cumulative Project Map

AM Peak Hour Volumes



PM Peak Hour Volumes

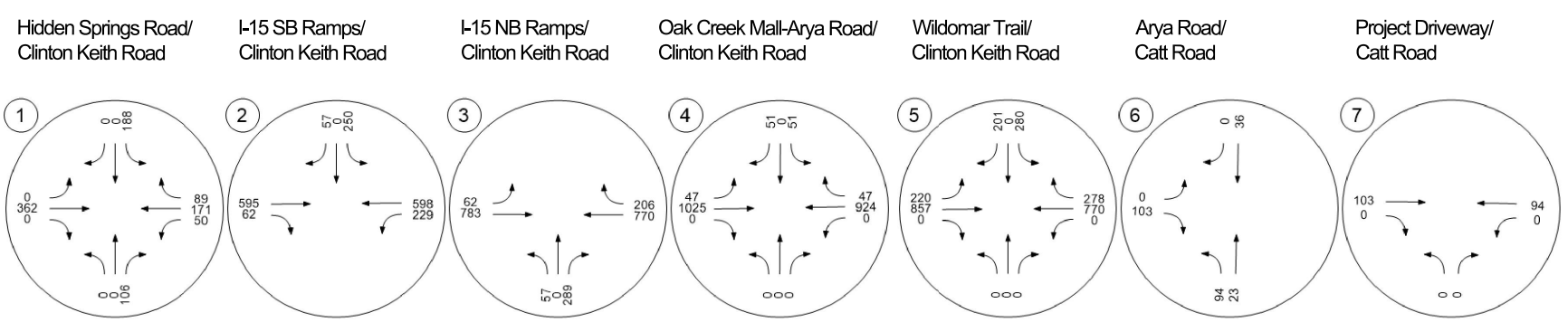
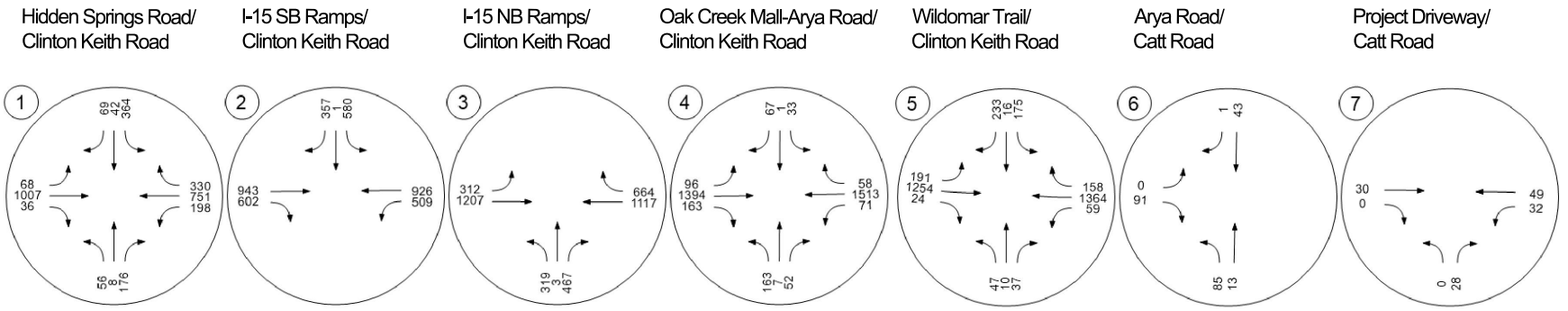


Exhibit 10: Cumulative Projects AM and PM Peak Hour Volumes

AM Peak Hour Volumes



PM Peak Hour Volumes

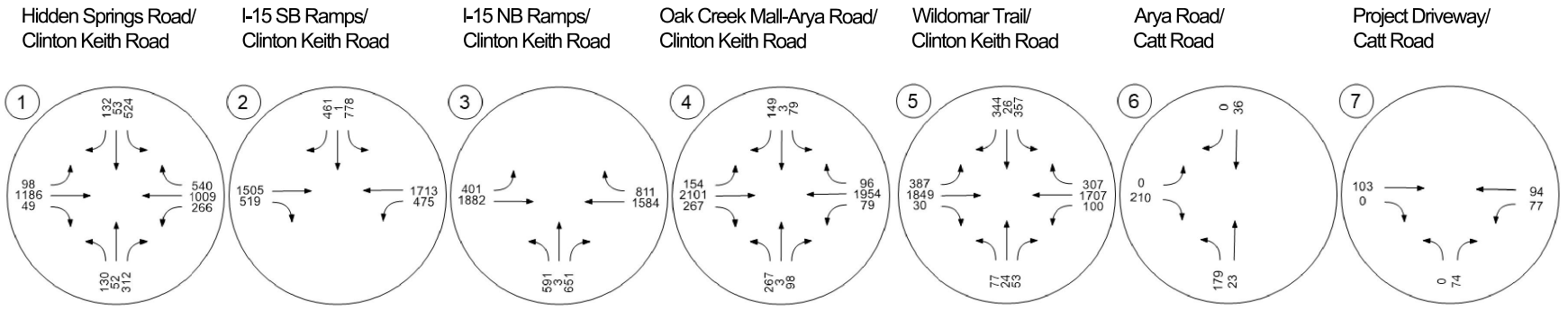


Exhibit 11: Cumulative Year With Project AM and PM Peak Hour Volumes

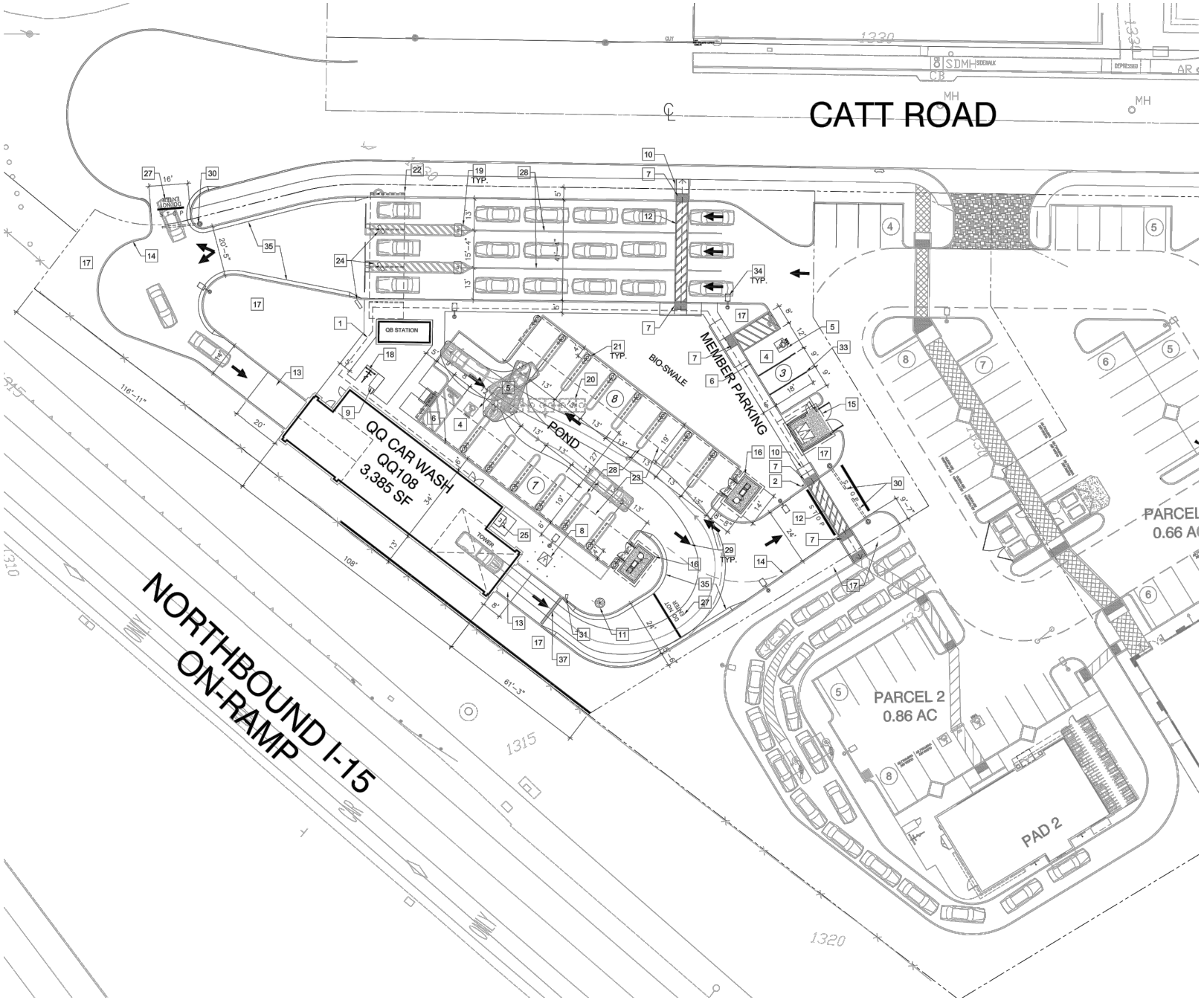


Exhibit 12: On-Site Car Wash Circulation

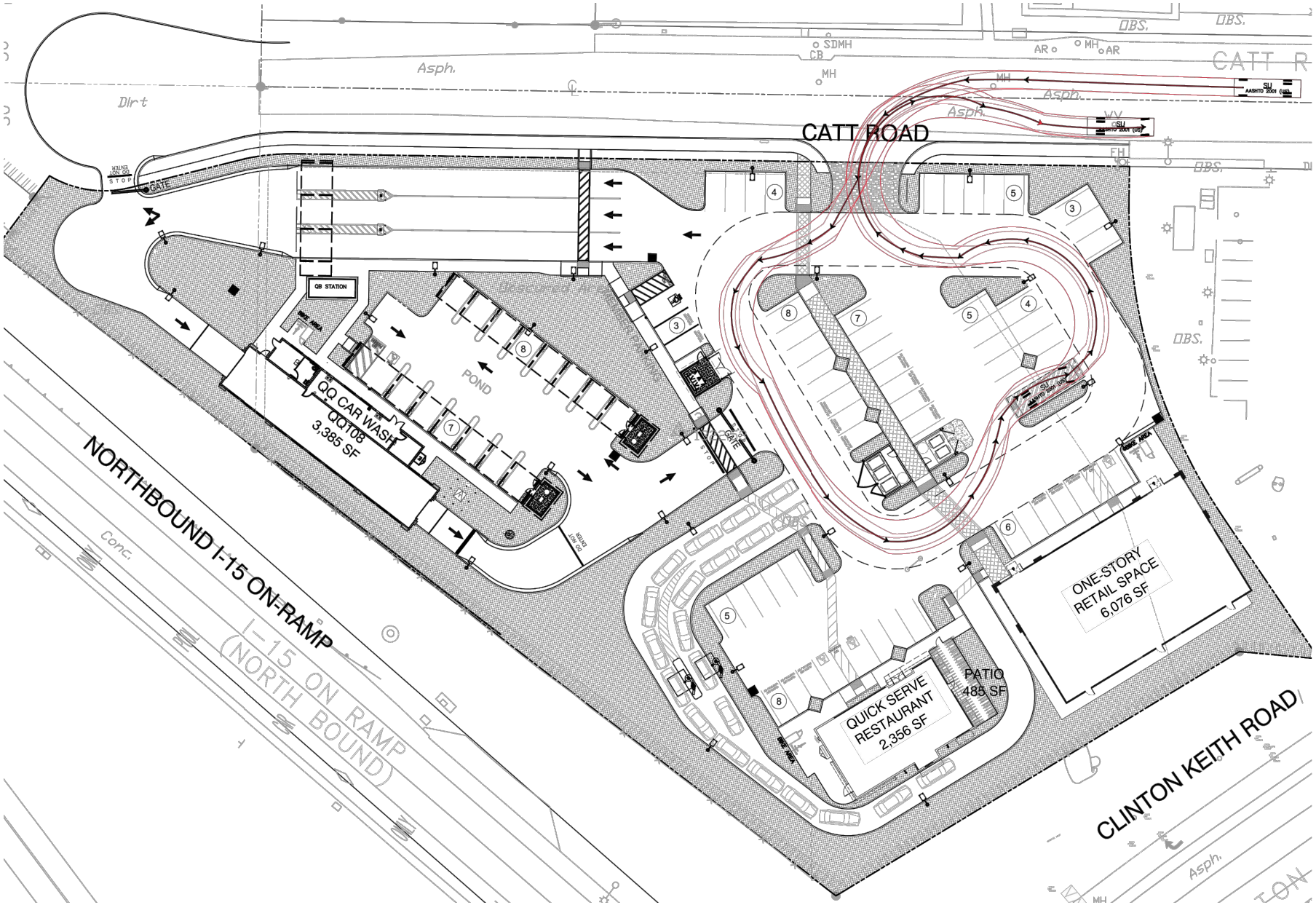


Exhibit 12: On-Site Truck Circulation

NEC I-15 & Clinton Keith Traffic Analysis

CCG-22-001

Not to Scale

TJW ENGINEERING, INC.

7.0 RECOMMENDED PROJECT IMPROVEMENTS AND PROJECT FAIR SHARE

7.1 RECOMMENDED PROJECT IMPROVEMENTS

Development of the proposed project would result in unsatisfactory queueing impacts at one intersection in the CYP conditions. The following improvements would result in the intersections operating with satisfactory and improved queueing. In consistency with the *Wildomar Crossroads TIA prepared by EPD Solutions, Inc. (August, 2022).* The following recommendations were provided:

- Intersection #4 – Restripe NBTL to NBL and NBR to NBTR, SBLTR to SBTL, Add SBR;
- Intersection #5 – Restripe WBR to WBTR.

Recommended project improvements AM, and PM peak hour intersection analysis is shown in **Table 15**. HCM analysis sheets are provided in ***Appendix D***.

Table 15
Intersection Analysis – Recommended Project Improvements

Intersection			Control Type	Peak Hour	CYP Conditions		Improvement Conditions		Change	Deficient ?
					Delay[1]	LOS	Delay[1]	LOS		
4	Arya Road	Clinton Keith Road	Signal	AM	40.2	D	18.6	B	-21.6	No
				PM	64.0	E	38.5	D	-25.5	No
5	Wildomar Trail	Clinton Keith Road	Signal	AM	27.1	C	19.4	B	-7.7	No
				PM	64.9	E	54.4	D	-10.5	No

Recommended Queuing Improvements for AM, and PM are shown in **Table 16**.

Table 16
Recommended Queuing Improvements

Intersection		Movement	Proposed Storage Length (ft)	CYP 95th Percentile Queue Length (ft)		Recommended Improvements 95th Percentile Queue Length (ft)	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
4	Arrya Road/ Clinton Keith Road	SBTL	142	-	-	133	307[1]
		SBR	142	-	-	23	66
		SBLTR	142	73	929	-	-
		EBL	295	134	184	87	183
		WBL	315	98	89	63	88
		WBR	200	617	356	302[1]	576[1]

1: Unavoidable queuing, overflow expected on Arya and Catt Road, which are consistent with the Wildomar Crossroads EPD solutions TIA.

7.2 PROJECT FAIR SHARE

The project's fair share percentage for each recommended improvement is identified in **Table 17** below. The percentage of project fair-share at affected intersections was calculated using the total trips generated by

the project divided by the total "new" traffic, which is the net increase in traffic volume in the Cumulative conditions as a result of all other proposed projects.

Table 17
Cumulative Year with Conditions

Intersection		Peak Hour	Existing	Project	Cumulative Year With Project	Project % of Fair Share
4	Arya Road/ Clinton Keith Road	AM	2,128	58	3,618	4%
		PM	2,840	150	5,250	6%
5	Wildomar Trail/ Clinton Keith Road	AM	1,914	1,558	3,568	94%
		PM	2,509	2,606	5,261	95%

APPENDIX

APPENDIX A

GLOSSARY OF TERMS

Glossary of Terms

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
LOS	Level of Service
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic travelling at a given speed to radically alter their speed or trajectory. Corner sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 36 inches above the pavement in the center of the nearest approach lane.

CYCLE LENGTH: The time period in seconds required for a traffic signal to complete one full cycle of indications.

CUL-DE-SAC: A local street open at one end only and with special provisions for turning around.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

PASSENGER CAR EQUIVALENT (PCE): A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a Traffic signal, stop sign, or access gate.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queueing to occur.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through an intersection.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle on the major roadway travelling at a given speed to bring the vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 6 inches above the pavement.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP GENERATION RATE: The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheel base as well as the steering mechanism of the vehicle.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

SCOPING AGREEMENT/CITY DOCUMENTS

Daniel Flores

From: Justin Schlaefli <Jschlaefli@tkeengineering.com>
Sent: Monday, July 25, 2022 9:19 AM
To: Brandon Humann
Cc: Matthew Bassi; Emily Stadnik; Dan York; Jason Farag; Nick Earle; Nicholas Corbell; Mark Cooper; David Chew; Daniel Flores
Subject: Re: PAR 21-0141

Brandon,

Thank you for following up. I cannot sign the scoping form as it is not the one in use by our jurisdiction. However, **I recommend approval of this scope**. You do not need to revise or resubmit the scope.

This approval is based off of the information presented. Should the project be changed and/or additional information become available in the future, changes to the scope may be necessary. In addition, the City reserves the right to change the scope of study at any time for any reason. Areas of special study may be necessary upon determination of roadway deficiencies and proposed improvements by the project and/or additional details regarding the site plan. Please note that truck turns and details for servicing vehicles will need to be discussed and provided along with further site plan details. The project appears to be screened out of study for VMT purposes. Please provide a one page memo stating the reason (locally-serving retail) and justification while referring to the City's policy for the file and for Matt's use in future staff reports/environmental.

Thanks,

Justin Schlaefli, P.E., T.E., PTOE | Resident Engineer
TKE ENGINEERING, INC. | Civil Engineering Consultants
d: 619.818.6465 | o: 951.680.0440 | jschlaefli@tkeengineering.com
73710 Fred Waring Drive #104 | Palm Desert, CA 92260 | www.TKEengineering.com

Civil Engineering | Municipal Staff Augmentation | Construction Management | Inspection | Water Resources | Water and Wastewater Systems | Drainage | Traffic Engineering | Transportation Planning | Grant Writing and Funds Acquisition | Land Development | Land Surveying | Environmental Planning | Utility Coordination | Development Services

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From: Brandon Humann <bhumann@catalystretail.com>
Sent: Monday, July 25, 2022 8:53:21 AM
To: Justin Schlaefli
Cc: Matthew Bassi; Emily Stadnik; Dan York; Jason Farag; Nick Earle; Nicholas Corbell; Mark Cooper; David Chew; Daniel Flores
Subject: RE: PAR 21-0141

Good Morning Justin,

Following up again on the attached scoping agreement. Desperately needing to get this approved.

Scoping Agreement for Traffic Impact Analysis

This form acknowledges the requirements for the traffic impact analysis of the following project. The analysis will follow the local jurisdiction's traffic impact analysis guidelines.

Project Name:	NEC I-15 & Clinton Keith
Project Address:	northeast corner of I-15 and Clinton Keith Road In the City of Wildomar
Project Description:	108 linear foot car wash tunnel, 5,200 square feet of retail, 2,350 square feet of drive-through

	Consultant	Developer
Name:	TJW Engineering	Catalyst Commercial Group
Address:	9841 Irvine Center Drive, Suite 200	38605 Calistoga Drive, Suite 150
	Irvine, CA 92618	Murrieta, CA 92563
Telephone:	949-878-3509	
Email:	daniel@tjwengineering.com	

Trip Generation Source: ITE Trip Generation Manual, 11th Edition (2021)

Current GP Land Use:	Commercial Retail	Proposed Land Use:	Commercial Retail
Current Zoning:	Scenic Highway Commercial	Proposed Zoning:	Scenic Highway Commercial

Is the project screened from LOS analysis? [ ] Yes [X] No

Justification:	

Is the project screened from VMT analysis? [X] Yes [ ] No

Justification:	Locally serving retail 50,000 square feet or less

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				30	28	58
PM Trips				76	74	150
Daily						606

Internal Trip Capture: [ ] Yes [X] No _____ % Trip Discount

Pass-By Allowance: [X] Yes [ ] No See Table 1 % Trip Discount

Trip Distribution: See attached exhibit

Project Build-out Year: 2024 Annual Ambient Growth Rate: 2%

Study Intersections:

1. Clinton Keith Rd / Hidden Springs Rd
2. Clinton Keith Rd / I-15 SB Ramps
3. Clinton Keith Rd / I-15 NB Ramps
4. Clinton Keith Rd / Wildomar Trail
5. Clinton Keith Rd / Arya Rd – Oak Creek Mall
6. Arya Rd / Catt Rd
7. West Project Dwy / Catt Rd
8. East Project Dwy / Catt Rd
9.
10.

Study Roadway Segments:

1. Clinton Keith Road between I-15 NB ramp and Arya Road – Oak Creek Mall
2.

1. *Existing Traffic Conditions (Existing);*
2. *Opening Year With Project Conditions (Existing + Ambient + Project);*
3. *Cumulative Year With Project Conditions (Existing + Ambient + Cumulative + Project)*
4.
5.

Other Jurisdiction Analyzed? [ ] Yes [X] No Name of Jurisdiction: _____

Date of Traffic Counts: New counts will be collected

Provide approved cumulative projects list

Additional Items to be Addressed:	TJW would prepare a concept striping plan for the proposed project access along Catt Road. The striping plan would incorporate the anticipated driveway and roadway configuration demonstrating project site's access to and from the adjacent roadway.

Additional Notes:	

Signatures:

Consultant's Representative	City (Approved By)
07/14/22	
Date	Date

Table 1

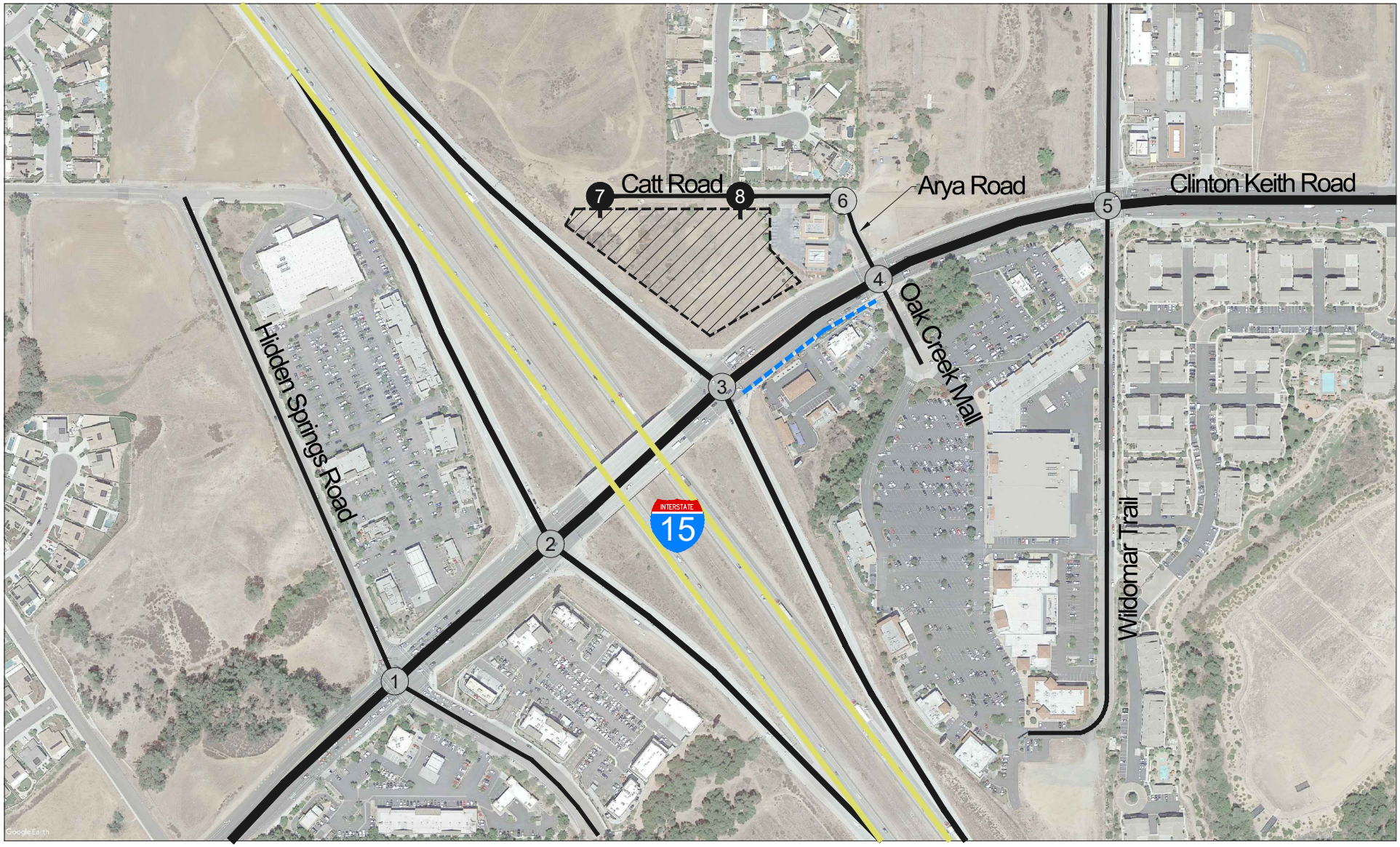
Proposed Project Trip Generation

Proposed Land Use[1]	Qty	Unit[2]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour					Pass-By %'s		
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume					
							In	Out	Total			In	Out	Total	AM	PM	Daily
Strip Retail Plaza (<40K) (822)	5.20	TSF	54.45	283	2.36	60:40	7	5	12	6.59	50:50	17	17	34	0%	34%	34%
Fast-Food Restaurant with Drive-Through Window (934)	2.35	TSF	467.48	1,094	44.61	51:49	53	51	104	33.03	52:48	40	37	77	49%	50%	50%
Automated Car Wash (948)[3]	108	LFWT	11.87	1,282	0.66	58:42	42	30	72	1.25	50:50	68	68	135	10%	34%	10%
Subtotal				**1,377**			**60**	**56**	**116**			**125**	**122**	**246**			
Pass-By Trips (Shopping Center)				-96			0	0	0			-6	-6	-12			
Pass-By Trips (Restaurant)				-547			-26	-25	-51			-20	-19	-39			
Pass-By Trips (Car Wash)				-128			-4	-3	-7			-23	-23	-46			
Total Pass-By				**-771**			**-30**	**-28**	**-58**			**-49**	**-47**	**-96**			
Total				**606**			**30**	**28**	**58**			**76**	**74**	**150**			

1: Rates from ITE Trip Generation 11th Edition, 2021 (Land Use 822, and 934), and Trip Generation Handbook, 3rd Edition.

2: TSF = Thousand Square Feet, LFWT = Linear Foot of Wash Tunnel.

3: Newport Pointe Commercial Center Project Traffic Impact Analysis Report, LLG, April 28, 2021.



Legend:

- Project Site
- Study Roadway Segments
- (#) Study Intersection Location

Exhibit 1: Project Location

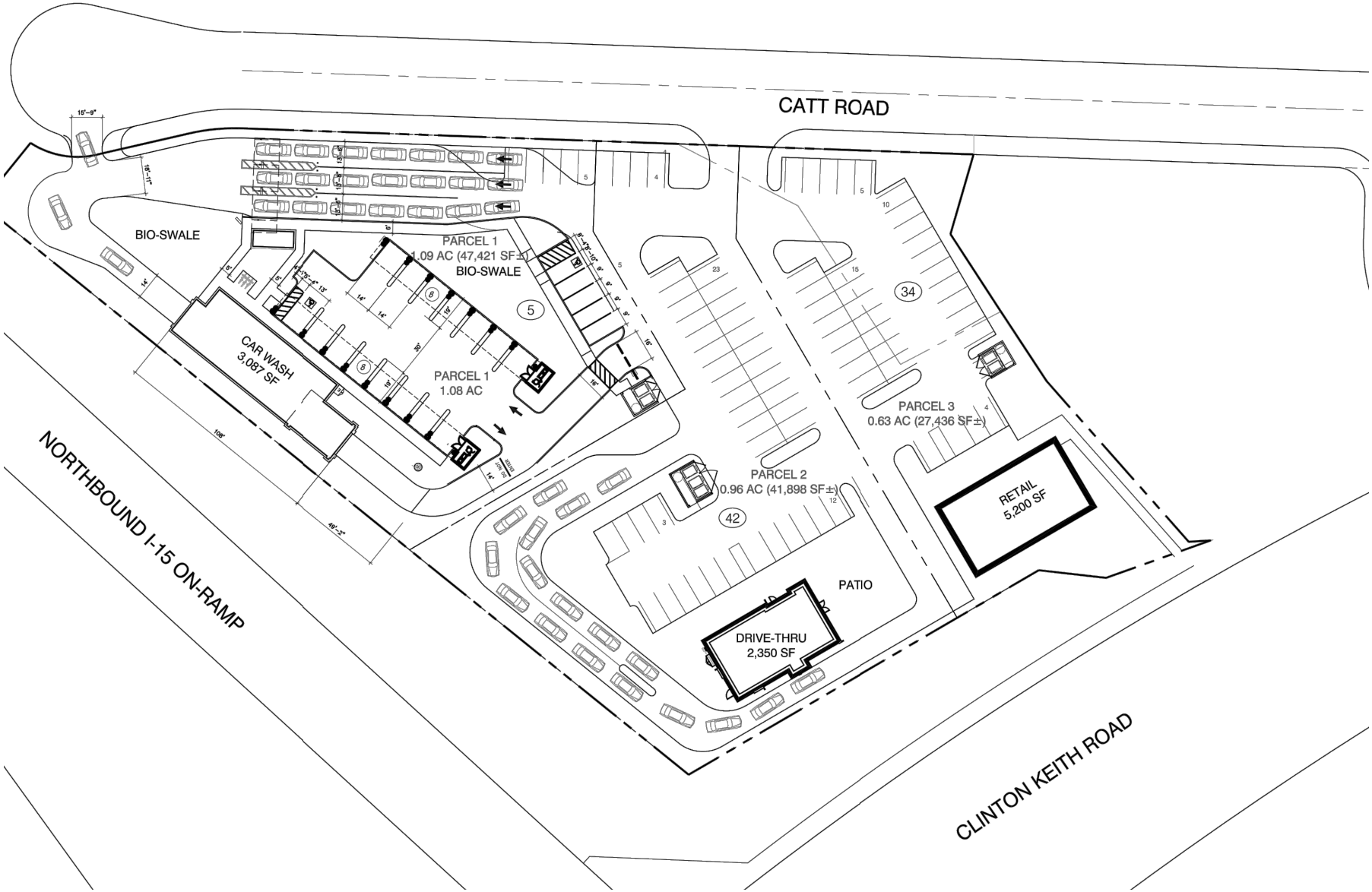
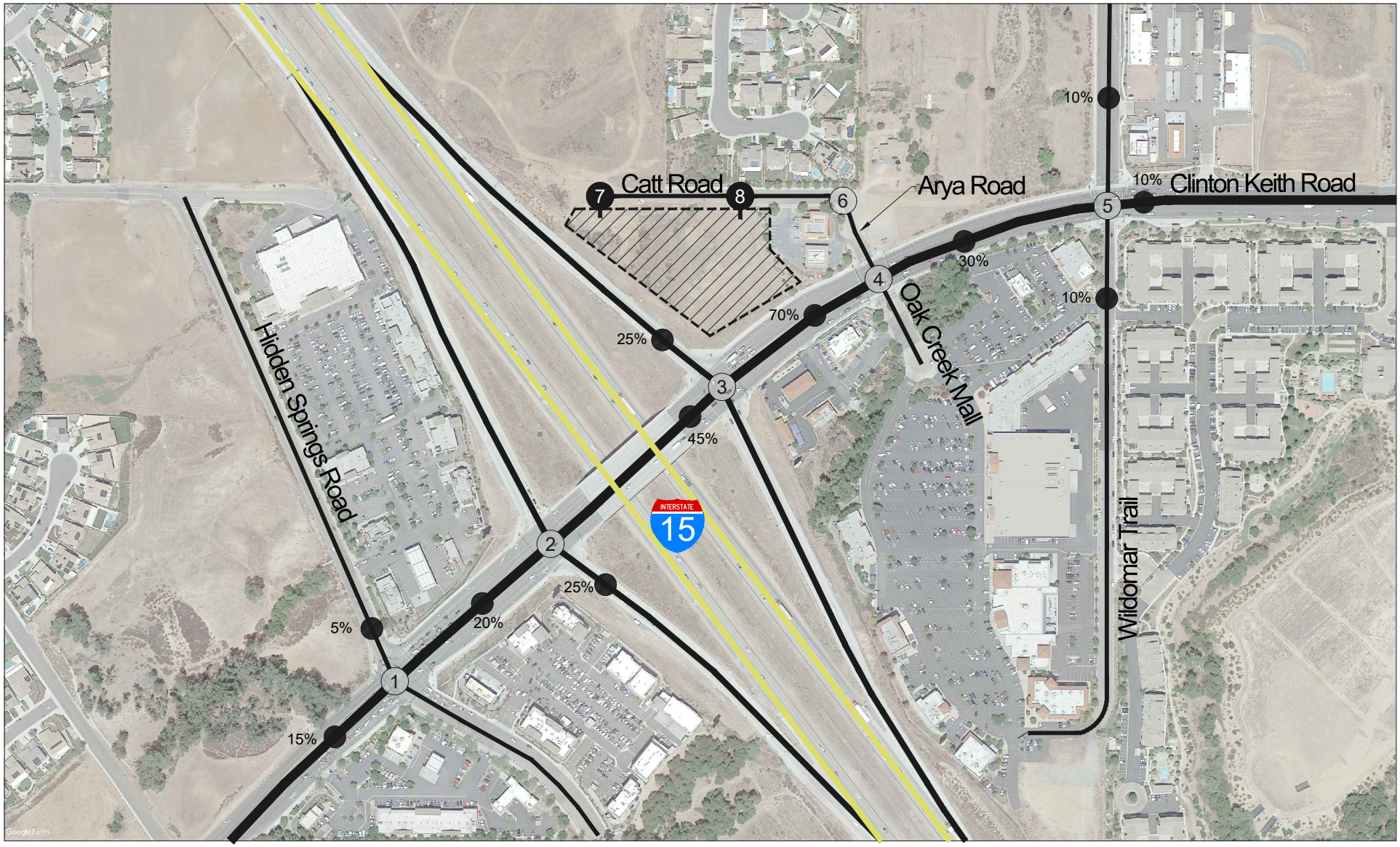


Exhibit 2: Proposed Project Site Plan



Legend:

- Project Site
- XX% Percent Trip Distribution
- (#) Study Intersection Location

Exhibit 3: Proposed Trip Distribution

Figure 2-1 Planned Pedestrian Route Types

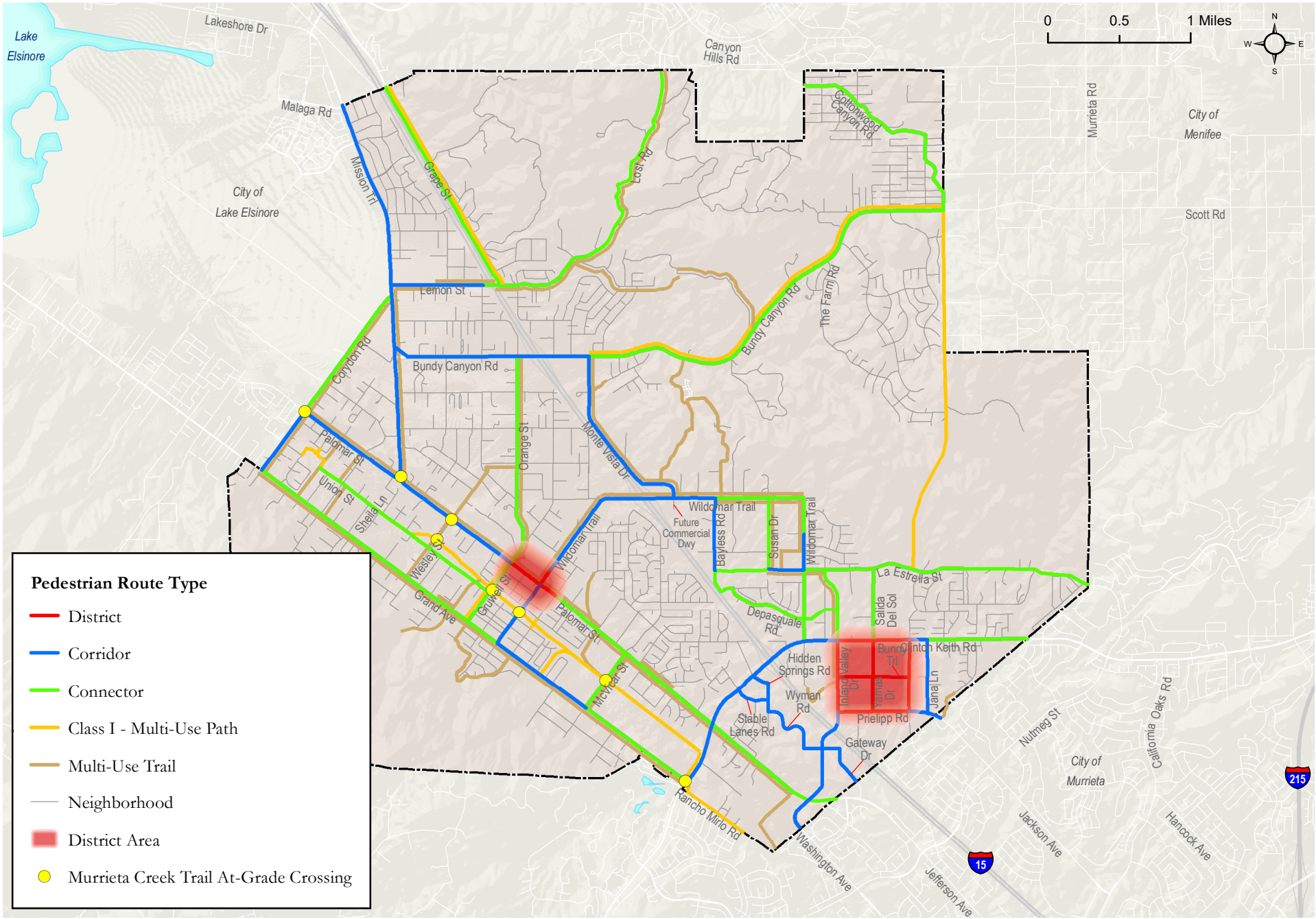


Figure 3-1 Planned Bicycle Network

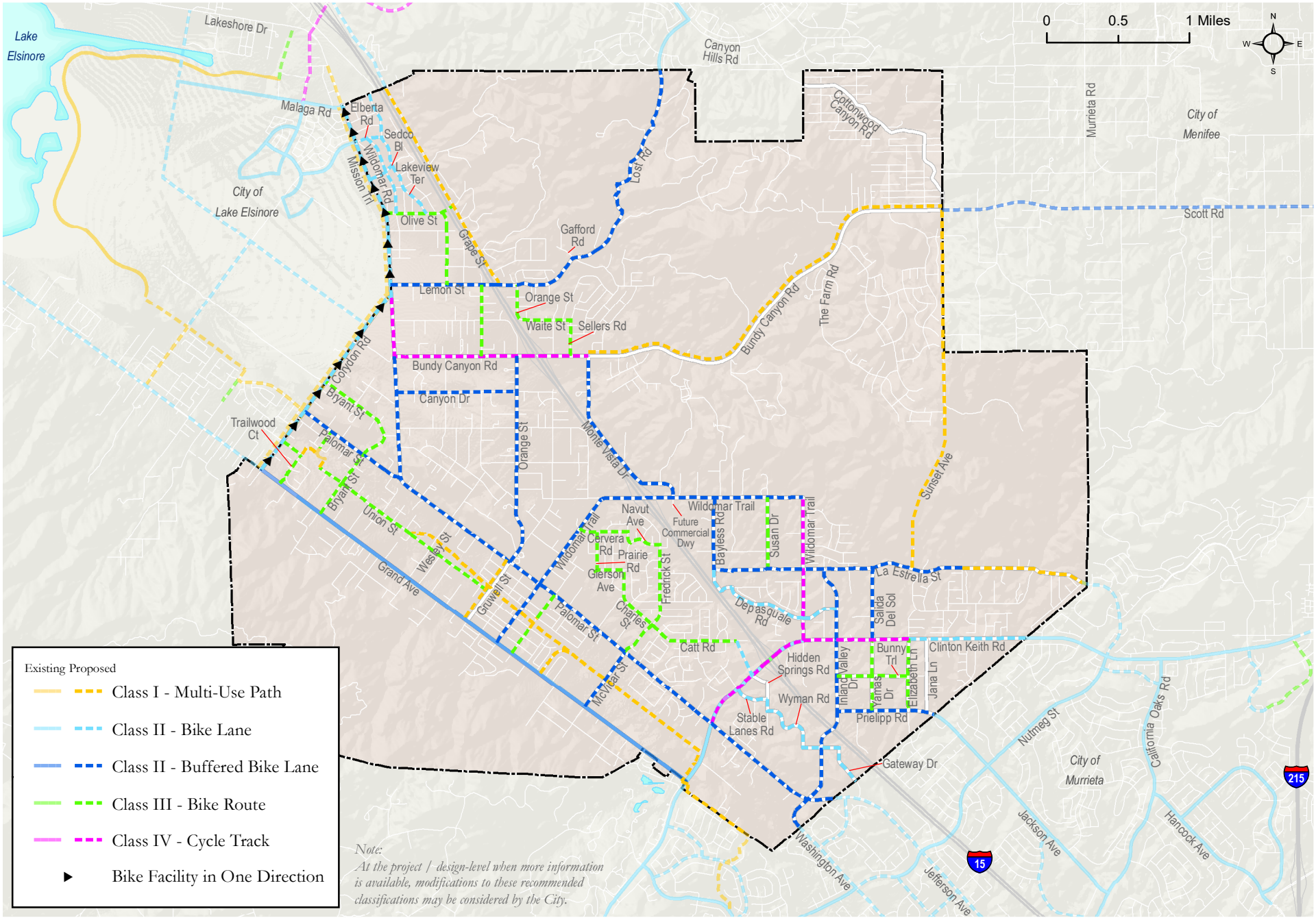


Figure 4-1 Public Transit Network

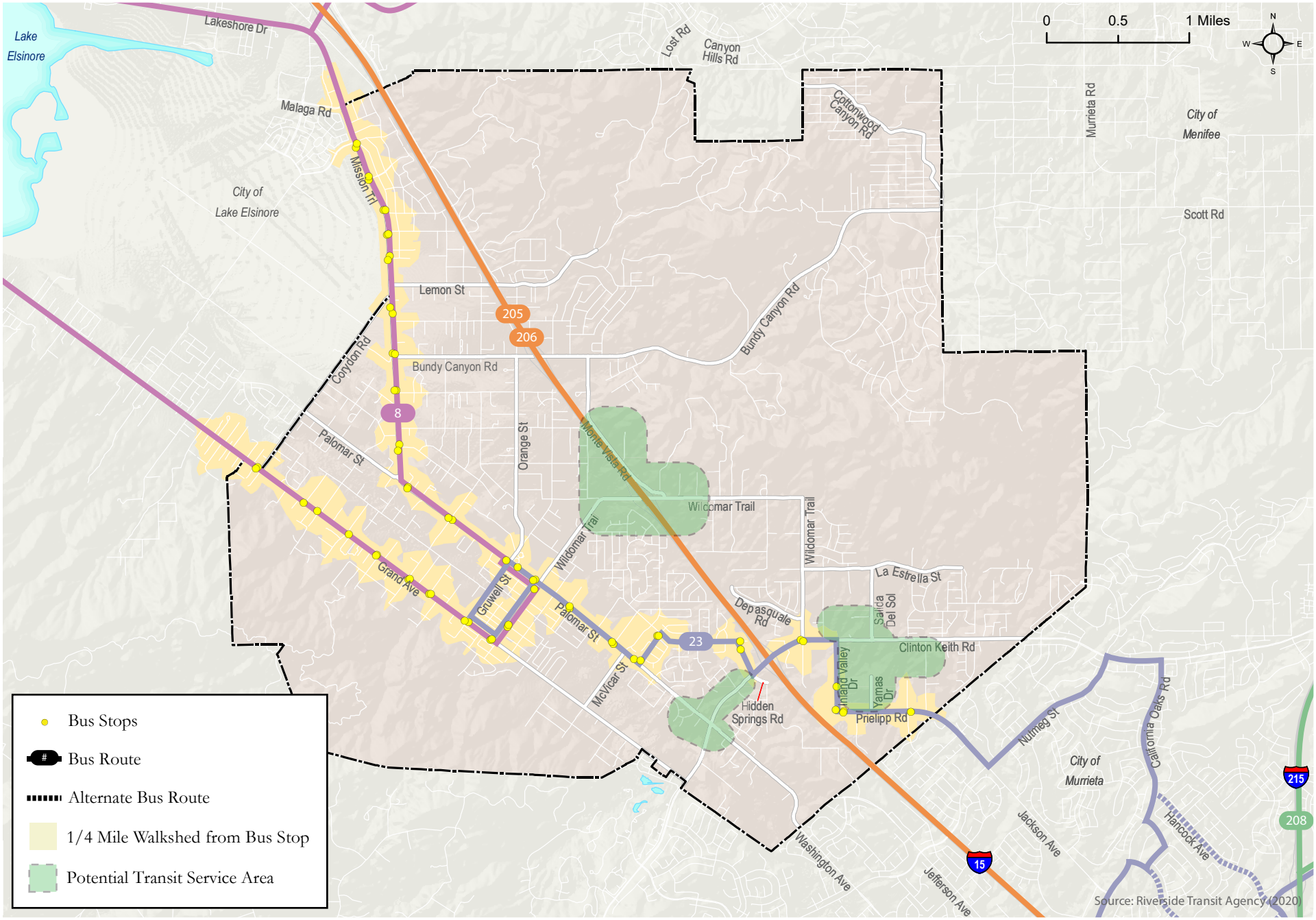
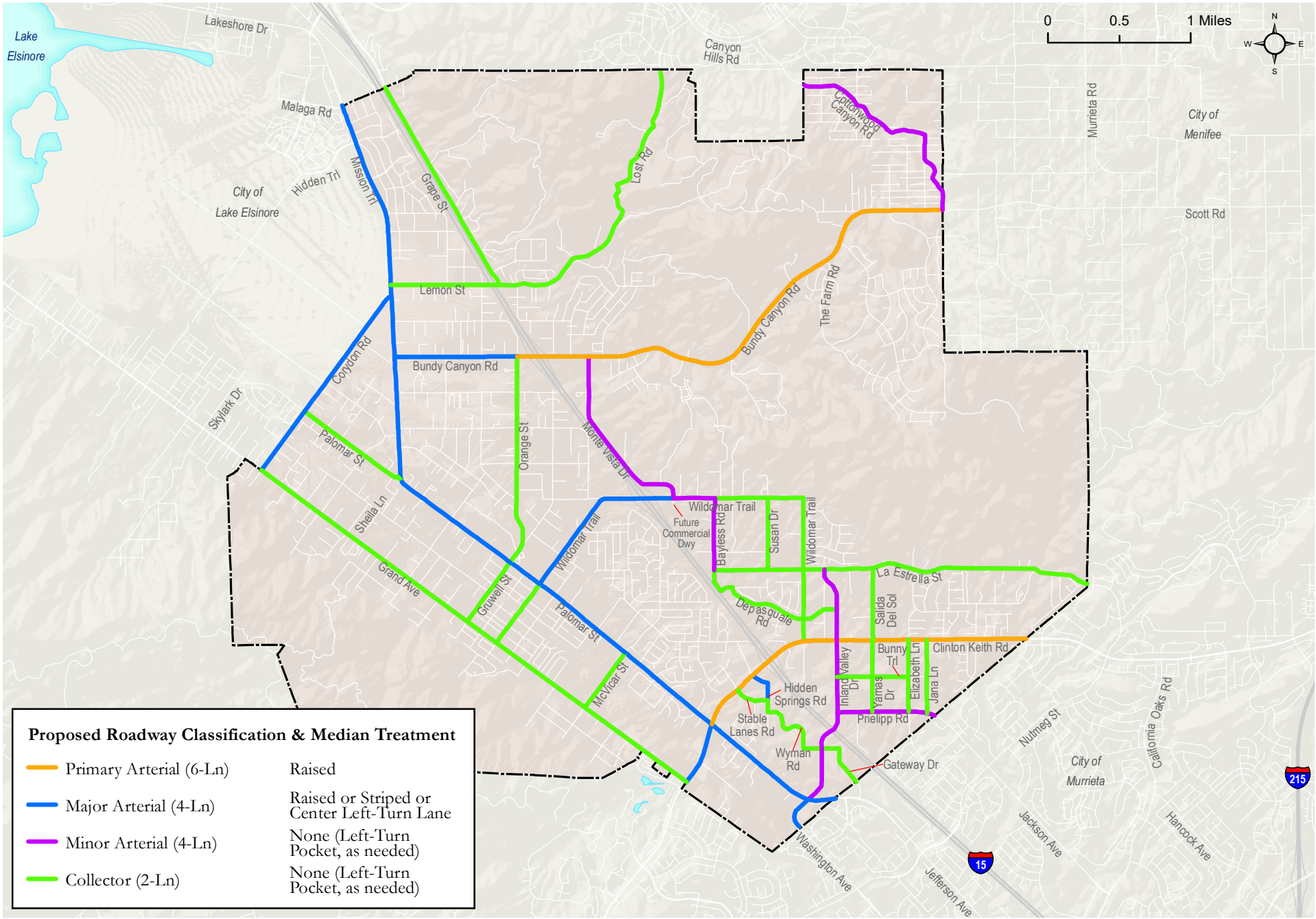
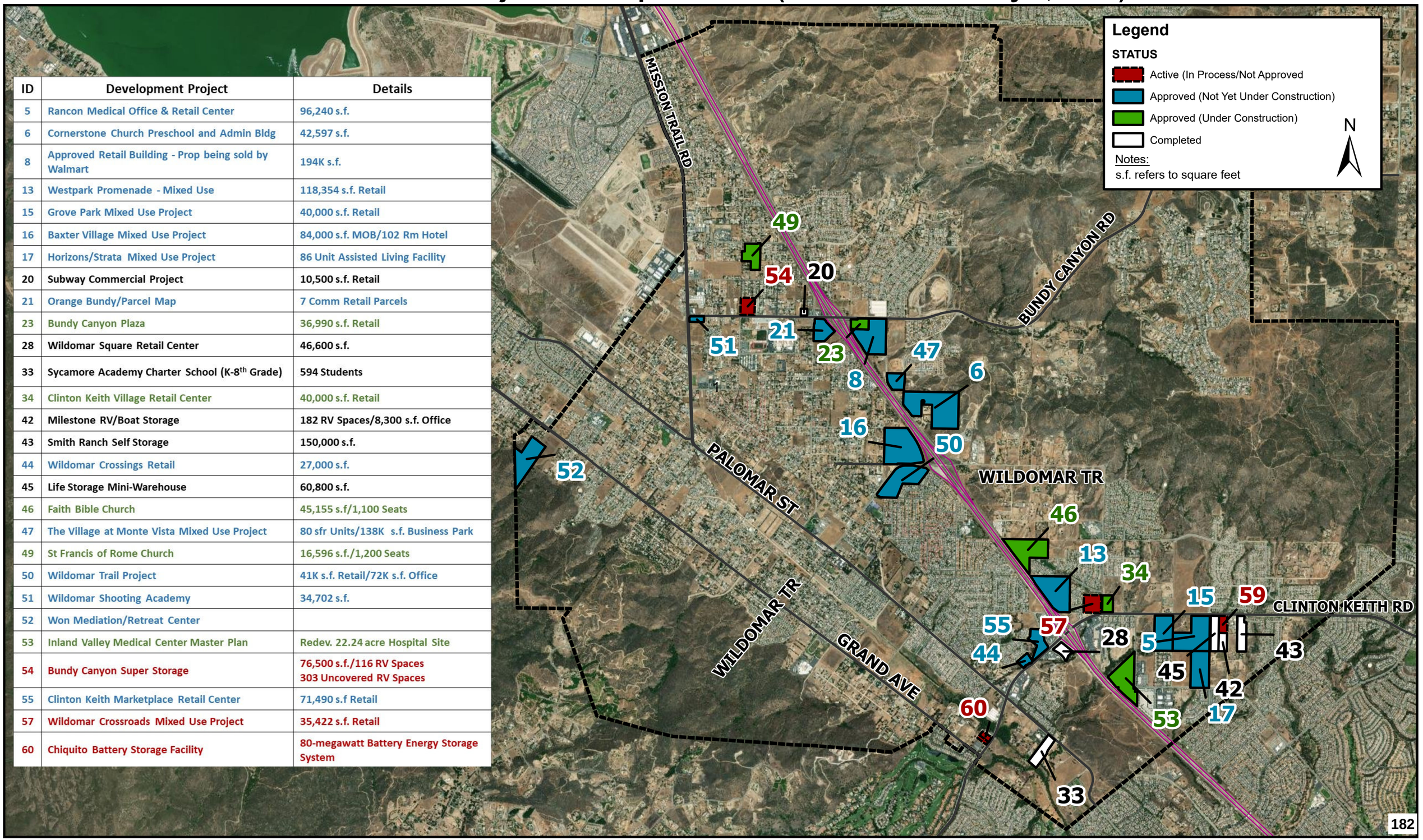


Figure 5-1 Planned Roadway Network Classifications



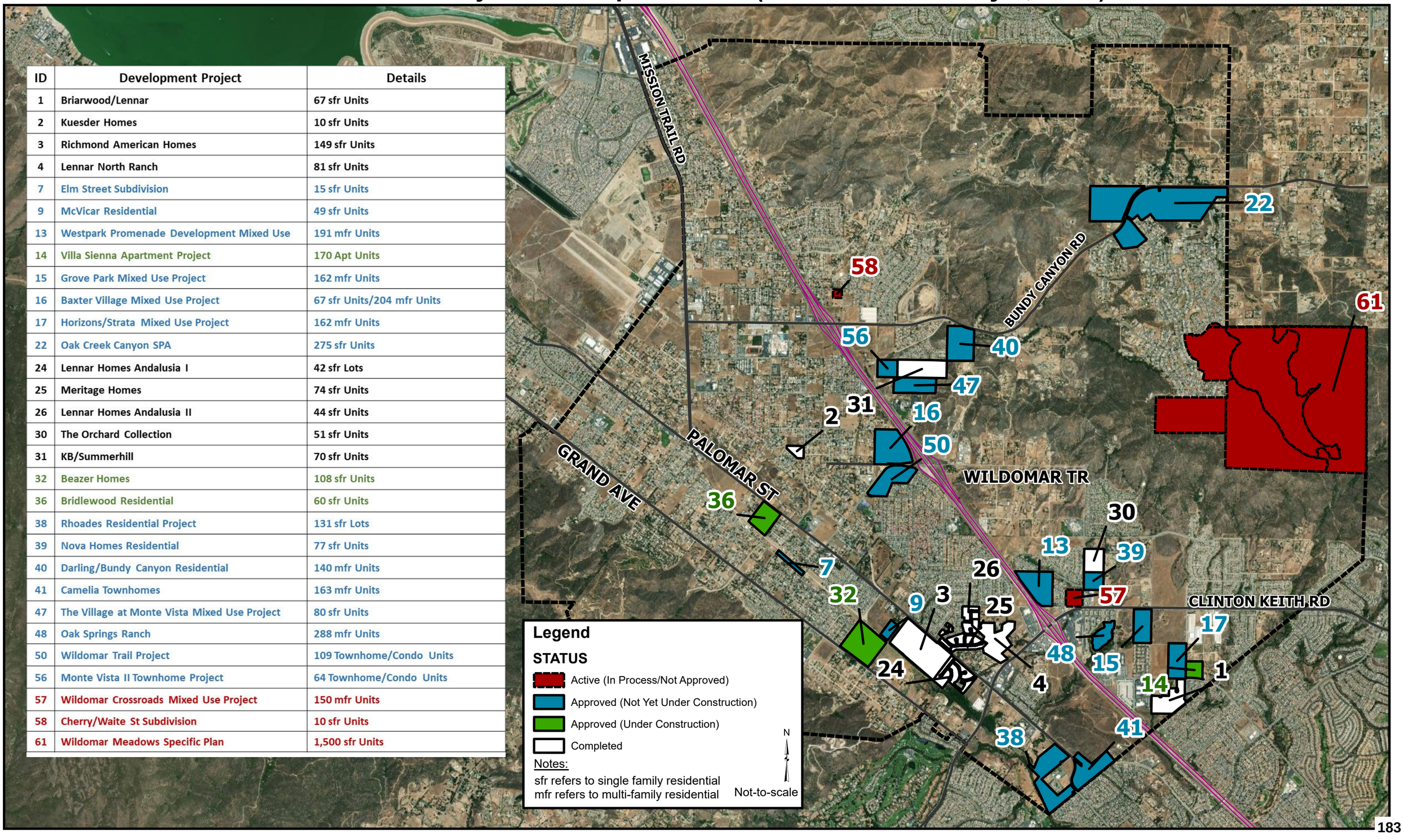
City of Wildomar
Commercial Project Development List (Effective Date: July 1, 2022)

ID	Development Project	Details
5	Rancon Medical Office & Retail Center	96,240 s.f.
6	Cornerstone Church Preschool and Admin Bldg	42,597 s.f.
8	Approved Retail Building - Prop being sold by Walmart	194K s.f.
13	Westpark Promenade - Mixed Use	118,354 s.f. Retail
15	Grove Park Mixed Use Project	40,000 s.f. Retail
16	Baxter Village Mixed Use Project	84,000 s.f. MOB/102 Rm Hotel
17	Horizons/Strata Mixed Use Project	86 Unit Assisted Living Facility
20	Subway Commercial Project	10,500 s.f. Retail
21	Orange Bundy/Parcel Map	7 Comm Retail Parcels
23	Bundy Canyon Plaza	36,990 s.f. Retail
28	Wildomar Square Retail Center	46,600 s.f.
33	Sycamore Academy Charter School (K-8th Grade)	594 Students
34	Clinton Keith Village Retail Center	40,000 s.f. Retail
42	Milestone RV/Boat Storage	182 RV Spaces/8,300 s.f. Office
43	Smith Ranch Self Storage	150,000 s.f.
44	Wildomar Crossings Retail	27,000 s.f.
45	Life Storage Mini-Warehouse	60,800 s.f.
46	Faith Bible Church	45,155 s.f/1,100 Seats
47	The Village at Monte Vista Mixed Use Project	80 sfr Units/138K s.f. Business Park
49	St Francis of Rome Church	16,596 s.f./1,200 Seats
50	Wildomar Trail Project	41K s.f. Retail/72K s.f. Office
51	Wildomar Shooting Academy	34,702 s.f.
52	Won Mediation/Retreat Center	
53	Inland Valley Medical Center Master Plan	Redev. 22.24 acre Hospital Site
54	Bundy Canyon Super Storage	76,500 s.f./116 RV Spaces 303 Uncovered RV Spaces
55	Clinton Keith Marketplace Retail Center	71,490 s.f Retail
57	Wildomar Crossroads Mixed Use Project	35,422 s.f. Retail
60	Chiquito Battery Storage Facility	80-megawatt Battery Energy Storage System



City of Wildomar
Residential Project Development List (Effective Date: July 1, 2022)

ID	Development Project	Details
1	Briarwood/Lennar	67 sfr Units
2	Kuesder Homes	10 sfr Units
3	Richmond American Homes	149 sfr Units
4	Lennar North Ranch	81 sfr Units
7	Elm Street Subdivision	15 sfr Units
9	McVicar Residential	49 sfr Units
13	Westpark Promenade Development Mixed Use	191 mfr Units
14	Villa Sienna Apartment Project	170 Apt Units
15	Grove Park Mixed Use Project	162 mfr Units
16	Baxter Village Mixed Use Project	67 sfr Units/204 mfr Units
17	Horizons/Strata Mixed Use Project	162 mfr Units
22	Oak Creek Canyon SPA	275 sfr Units
24	Lennar Homes Andalusia I	42 sfr Lots
25	Meritage Homes	74 sfr Units
26	Lennar Homes Andalusia II	44 sfr Units
30	The Orchard Collection	51 sfr Units
31	KB/Summerhill	70 sfr Units
32	Beazer Homes	108 sfr Units
36	Bridlewood Residential	60 sfr Units
38	Rhoades Residential Project	131 sfr Lots
39	Nova Homes Residential	77 sfr Units
40	Darling/Bundy Canyon Residential	140 mfr Units
41	Camelia Townhomes	163 mfr Units
47	The Village at Monte Vista Mixed Use Project	80 sfr Units
48	Oak Springs Ranch	288 mfr Units
50	Wildomar Trail Project	109 Townhome/Condo Units
56	Monte Vista II Townhome Project	64 Townhome/Condo Units
57	Wildomar Crossroads Mixed Use Project	150 mfr Units
58	Cherry/Waite St Subdivision	10 sfr Units
61	Wildomar Meadows Specific Plan	1,500 sfr Units



CITY OF WILDOMAR - CURRENT PLANNING CUMULATIVE DEVELOPMENT PROJECTS MATRIX

ACTIVE DEVELOPMENT PROJECTS (IN REVIEW -- NOT YET APPROVED BY PC/CC)

MAP EXHIBIT #	PLANNING APPLICATION NUMBER	PROJECT NAME	PROJECT APPLICANT & CONTACT INFORMATION	PROJECT TYPE	SINGLE FAMILY LOTS/UNITS	MULTI-FAMILY UNITS	COMMERCIAL / INDUSTRIAL SQ. FT.	APN INFORMATION.	PROJECT DESCRIPTION
61	PA 21-0025	Wildomar Meadows Specific Plan	Erik Lunde, Wildomar Meadows, LLC	Mixed Use SPA	1,504		10-15 acres retail	362-130-002, 022, 031, 032, 033, & 034)	Amendment #5 to the Farm Specific Plan to accommodate a 792-acre residential/commercial/open space community "consisting of a GPA, CZ, SPA, TTM, TPM, DA for the future development of 1,504-lot single family subdivision, 10-15 acres of commercial/retail w/parks and open space located in the Farm Specific Plan community area (APN: 362-130-002, 022, 031, 032, 033, & 034).
60	PA 22-0026	Chiquito Battery Storage Facility	James Damon, Chiquito Grid, LLC	Comm.			80-megawatt battery energy storage system	380-150-019 & 380-150-020	A proposed 80-megawatt Battery Energy Storage System (BESS) on a vacant 1.73-acre parcel in the C-1/C-P zone located north side of Clinton Keith Road, approximately 540 feet east of Grand Avenue (APN: 380-150-019 & 380-150-020).
59	PA 22-0006	Beyond Gas Station	Michael Ackerman Beyond Gas (760) 810-8548	Comm. / Ind.			12,500 sq. ft. gas station/ mini-mart & 21,000 sq. ft. industrial bld.	380-290-002	A proposed gas station a future 12,500 square feet convenience store/gas station (with beer & wine sales & drive thru car wash), two (2) drive thru restaurants, and a 21,000 sq. ft. industrial warehouse building on 4.35 acres located at the SWC of CKR/Jana Ln (APN: 380-290-002).
58	PA 21-0182	TTM No. 38525 Subdivision	Haitham Abdelhafeez Project Engineer (657) 230-9228	Residential	10			366-280-022	A proposal to subdivide a 2.37-acre site into 10 lots (4.2 units/acre density) for development of 10 single family homes in the R-1 zone located at the SWC of corner of Cherry Street and Waite Street (APN: 366-280-022)
57	PA 21-0145	Wildomar Crossroads Mixed-Use Project:	Kassen Klein, Project Manager (951) 733-7665	Mixed-Use		150 (Apartments)	35,422 sq. ft.	376-410-015, 016, 017 & 021	A proposed mixed-use project including a 150-unit "gated" multi-family apartment community on 4.48 acres and 2) a 35,422 square-foot commercial retail center (4.53-acres) anchored by a Sprouts Grocery store one (1) multi-tenant retail building, two (2) drive-through restaurants and one (1) drive-through coffee shop located at the NWC of Wildomar Trail & Clinton Keith Road (APN: 376-410-015, 016, 017 & 021)
54	PA 20-0031	Bundy Canyon Super Storage RV & Boat Storage	Pete Prestininzi, Owner/Applicant (951) 245-9100	Comm.			76,500 s.f. indoor (116 RV spaces) & 303 uncovered RV spaces	366-210-035; 036 & 037	A proposed GPA from BP to CR, a Change of Zone from RR to C-1/C-P, a Parcel Merger to consolidate 3 lots into 1, and a Plot Plan to develop a 116 space (76,500 s.f. enclosed building) and 303 spaces (uncovered) RV & Boat storage facility (no rental office shown) on 6.85 acres located at 21562 Bundy Canyon Road.

CITY OF WILDOMAR - CURRENT PLANNING CUMULATIVE DEVELOPMENT PROJECTS MATRIX

APPROVED DEVELOPMENT PROJECTS (NOT YET UNDER CONSTRUCTION)

MAP EXHIBIT #	PLANNING APPLICATION NUMBER	PROJECT NAME	APPLICANT & CONTACT INFORMATION	PROJECT TYPE	SINGLE FAMILY LOTS/UNITS	MULTI-FAMILY UNITS	COMMERCIAL / INDUSTRIAL SQ. FT.	APN(S) INFO.	PROJECT APPROVAL DATE	PROJECT DESCRIPTION
55	PA 21-0033	Clinton Keith Marketplace Retail Center	Stephen Macie, Somar Land Group (702) 497-3101	Comm.			71,490 sq. ft.	380-110-009, -010, -014 & -016	**5/18/22**	A proposal to build a 71,490 square-foot multi-tenant retail center consisting of: 1) a 22,000 sf grocery store, 2) an 18,000 sf building that includes a 13,000 sf pharmacy store (1st floor) and a 5,000 sf office/medical use (2nd floor), 3) a 7,700 sf multi-tenant retail building 4) a 7,600 sf automotive retail store, 5) a 4,800 sf retail building for a future cannabis business; 6) a 4,800 sf fast food/drive through restaurant, 7) a 3,590 sf car wash (CUP), and 8) Variance to allow a 65-foot tall freeway sign. The proposal includes a vesting parcel map (VTPM 37736) to subdivide the 8.8-acre site into 5 parcels within the C-P-S zone, and 6) located at the NWC of Hidden Springs Road and Clinton Keith Road
56	PA 21-0045	Monte Vista II Townhome Project	Erik Lunde, Applicant (714) 318-3500	MFR		62 units (Townhouse Condos)		367-140-011	**12/15/21**	A proposal to: 1) amend the General Plan land use map from Business Park (BP) to High Density Residential (HDR, 8 - 14 units/acre); 2) a Change of Zone from C-O to R-3; 3) a Tentative Tract Map to subdivide the 6.47 acre site for condominium purposes, and a Final Site Plan of Development to construct 62 townhome/condos on a 6.47-acre site located on the NEC of Monte Vista Road & Summersage Way.
50	PA 20-0039	Wildomar Trail Mixed-Use Project	Jack Kofdarali, JNT Management (951-280-3833)	Residential, Comm., Retail & Office		121 units (Townhouse Condos)	41,609 s.f. retail & 72,000 s.f. office	376-180-006 & 376-190-002	**9/8/21**	The applicant is proposing to develop a 4-phased mixed-use project on 25.8 acres consisting of: 1) a zone change on a 6.07 acre portion of the site from C-P-S (Scenic Highway Commercial) to R-3 (General Residential) and remove the MU overlay zoning district; 2) plot plan approval to develop a 41,609 square-foot retail center (includes a gas station & mini-market (w/alcohol sales), restaurants, retail shops, grocery store and car wash); 3) plot plan approval to develop a 72,000 square-foot professional office building complex; and 4) final site plan of development approval to develop a 109-unit townhouse (for sale) project with full on-site/off-site improvements. The four (4) planned phases are as follows: Phase 1 will be 5.11 acres and includes development of a gas station/mini market (w/alcohol sales), car wash and water detention basin; Phase 2 will be 4.89 acres and includes development of multi-tenant retail shops, restaurant pads and a market; Phase 3 will be 6.26 acres and includes development of two office buildings; and Phase 4 will be 6.07 acres and includes development of 121 townhouse residential units.

CITY OF WILDOMAR - CURRENT PLANNING CUMULATIVE DEVELOPMENT PROJECTS MATRIX

APPROVED DEVELOPMENT PROJECTS (NOT YET UNDER CONSTRUCTION)

MAP EXHIBIT #	PLANNING APPLICATION NUMBER	PROJECT NAME	APPLICANT & CONTACT INFORMATION	PROJECT TYPE	SINGLE FAMILY LOTS/UNITS	MULTI-FAMILY UNITS	COMMERCIAL / INDUSTRIAL SQ. FT.	APN(S) INFO.	PROJECT APPROVAL DATE	PROJECT DESCRIPTION
48	PA 20-0044	Oak Springs Ranch Phase 2 Apartments	Chris Schoeneck Wermers Prop. (858-623-4962)	MFR		288 units (Apartments)		380-250-038	**8/11/2021**	A proposed GPA from MHDR to HHDR, a SPA to modify the Oak Springs Ranch Specific Plan & a Plot Plan to develop a 288-unit apartment project on the southerly vacant portion of the Oak Springs Ranch SP located at the SWC of Inland Valley Drive and Clinton Keith Road.
52	PA 19-0164	Won Meditation & Retreat Center	Sean Mo, Architect, (213-925-9709)	Religious Retreat Center			11,999 s.f.	381-140-002 & 382-150-001	**8/19/2020**	Applicant is proposing a retreat/meditation center open to all faiths that includes: 1) a 7,185 s.f. meditation hall (w/kitchen and cooking facilities); 2) a 3,157 s.f. guesthouse (w/12 rooms); 3) a 1,657 s.f. meditation pavilion (i.e., building); and 4) 2-manufactured homes for housing/admin services on 21.76 in the R-R zone located at 19993 Grand Avenue.
51	PA 19-0093	Wildomar Shooting Academy	Don McLean, Applicant (760-846-9760)	Service Commercial			34,702 s.f.	367-020-038	**2/12/2020**	Approval to establish an indoor shooting range consisting of 1) a GPA to reduce the size of Bundy Canyon Road to 4 lanes; 2) a zone change from R-R to M-SC; and 3) a CUP to develop a 2-story 34,702 square-foot indoor shooting range/academy with live fire pistol ranges of 8 bays (range 1), 9 bays (range 2), 8 bays Rifle/Pistol (range 3), 8 bays law enforcement use (range 4), and a tactical training facility which will utilize simulated non-live fire weaponry for law enforcement training. The site is on 2.33 acres located at the SEC of Mission Trail & Bundy Canyon Road.
47	PA 18-0034 (TTM 37476)	"Summerhill Phase II / Village at Monte Vista"	Tom Mungari, Nova Homes, Inc. (714-423-5156)	SFR / Bus. Park	80 (KB Homes)		136,000 S.F. (Nova Dev.)	367-140-008, 367-140-010 & 367-140-012	**2/13/2019**	An approved mixed-use project consisting of the following: 1) change of zone from R-R to R-1 on 28.86 and R-R to I-P on 9.36 acres; 2) a tentative tract map (TM 37476) to subdivide 38.22 acres into 80 lots for single family development and 4 lots for commercial/industrial park development; 3) a final site plan of development (FSPOD) to build 80 single family dwellings; and 4) a plot plan to develop a 136,000 square-foot commercial/business park on 38.22 acres. Project includes an IS/MND.
44	PA 16-0134	Wildomar Crossings Retail Center	Jim Rochelle, Mann Property (925-250-7118)	CR			27,000 s.f. Commercia & Retail	380-120-003; 380-120-004	**05/9/2018**	An approved Change of Zone, Parcel Map and Plot Plan to develop a 27,000 square-foot commercial retail center with users such as Auto Zone, Dollar Tree, Wendy's restaurant with other retail uses on 3.4 acres.

CITY OF WILDOMAR - CURRENT PLANNING CUMULATIVE DEVELOPMENT PROJECTS MATRIX

APPROVED DEVELOPMENT PROJECTS (NOT YET UNDER CONSTRUCTION)

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41	PA 16-0070	Camelia Townhouse Project	Bill Lo, Sunbelt Communities (949-218-6023)	MFR		163 (Condos)		380-220-003	**8/9/2017**	An approved Change of Zone from R-R to R-3, a Tentative Tract Map (TM No. 37156) to subdivide 29.4 acres into 1 lot for condominium purposes, and a Plot Plan to develop a 163-unit multi-family for-sale townhome complex on 29.4 acres.
40	PA 16-0006	Bundy Canyon Resort Apts.	Dick Darling, Darling Dev. (805-379-2111)	MFR		140 (Apts.)		367-250-008	**4/12/2017**	An approved Change of Zone from R-R to R-3 and a Plot Plan for the development of a 140-unit multi-family apartment complex on 28.8 acres.
39	PA 15-0129 (TM 36952)	Wildomar Ridge Residential	Tom Mungari, Nova Homes, Inc. (562-355-0835)	SFR	77			362-250-001 362-250-026	**2/8/2017**	An approved single family detached residential condominium project including: 1) a GPA from MUPA to MHDR (6.84 units/acre); 2) a Change of Zone from R-R to R-4; 3) a Tract Map (TM 36952) to subdivide 11.25 gross acres into one (1) lot for condominium purposes; 4) a Plot Plan to develop 77 single family detached & attached residences.
9	PA 09-0380 (TM 32035)	McVicar Residential Project	Martin Boone, Omni Financial (831-464-5021)	SFR	48			380-040-005, 007, 008, & 012	**1/11/2017**	An approved Change of Zone from R-R (Rural Residential) to R-1 (One Family Dwelling) & W-1 (Watercourse/Conservation) and a tentative tract map (TM 32035) to subdivide 19.2 acres into 48 lots for future single residential development.
13	PA 13-0082 (PM 36122)	Westpark Promenade Project	Danny Brose, Golden Eagle Multifamily Prop. (714-874-7474)	Mixed Use		191 (Condos)	118,354 s.f.	376-410-013, 023 and 025	**12/14/2016**	An approved mixed use project comprising the following: 1) a GPA from Commercial Office (C-O) to Commercial Retail (CR) on 13.43 acres and to Very High Density Residential (VHDR) on 14.17 acres; a change of zone from C-P-S (Scenic Highway Commercial) to R- 3 (General Residential) on a 14.17 acre portion of the project site; a Tentative Parcel Map (TPM 36612) to subdivide the 27.6 acre project site into 3 parcels; 4) two (2) Tentative Tract Maps (TTM's 36781 & 36782) for condominium purposes on a 14.17 acre portion of the site; and 5) a plot plan for the development of 118,354 square feet of commercial retail on 13.43 acres, and 191 for-sale townhomes/condos on 14.17 acres.

CITY OF WILDOMAR - CURRENT PLANNING CUMULATIVE DEVELOPMENT PROJECTS MATRIX

APPROVED DEVELOPMENT PROJECTS (NOT YET UNDER CONSTRUCTION)

MAP EXHIBIT #	PLANNING APPLICATION NUMBER	PROJECT NAME	APPLICANT & CONTACT INFORMATION	PROJECT TYPE	SINGLE FAMILY LOTS/UNITS	MULTI-FAMILY UNITS	COMMERCIAL / INDUSTRIAL SQ. FT.	APN(S) INFO.	PROJECT APPROVAL DATE	PROJECT DESCRIPTION
16	PA 14-0002	Baxter Village Mixed Use Project	Eric Flodine, Strata Equity Group (858-546-0900)	Mixed Use	67	204 (Apts.)	84,000 s.f. M.O.B. and 102-room Hotel	367-180-015 367-180-043	**7/13/2016**	An approved 35 acre mixed-use project consisting of the following: 1) a GPA from MUPA to CR, MHDR & VHDR; 2) a Change of Zone to C-P-S, R-3 and R-4; 3) a Tentative Tract Map (TTM 36674) to subdivide 35 acres into 85 parcels to accommodate the mixed use project; and 4) a plot plan to develop a 75,000 square-foot retail center, a 204 unit multi-family apartment project, and a 67-lot single family development.
15	PA 14-0069	Grove Park Mixed Use Project	Eric Flodine, Strata Equity Group, (858-546-0900)	Mixed Use		162 (Apts.)	50,000 s.f.	380-250-003	**2/10/2016**	An approved GPA from Business Park to Commercial Retail for a 10.3 acre portion of the project site, a Change of Zone from R-R (Rural Residential) to CPS (Scenic Highway Commercial) on a 10.3 acre portion of the project site, a tentative parcel map (PM 36674) to subdivide the site into 2 parcels, and a Plot Plan to develop a 50,000 square-foot retail center (northerly portion) and a 162-unit multi-family apartment project.
17	PA 14-0040	Horizons Mixed Use Project	Eric Flodine, Strata Equity Group, (858-546-0900)	Mixed Use		138 (Condos by Lennar Homes)	86-unit - Assisted Living Facility	380-250-023	**2/10/2016**	An approved GPA from Business Park to Commercial Retail (on 5.2 acres) and High Density Residential (on 10.6 acres), a Change of Zone from R-R (Rural Residential) to R-3 (General Residential) on 10.6 acres and from R-R (Rural Residential) to C-1/C-P (General Commercial (on 5.2 acres), Tract Map (36672) to subdivide the site into 3 parcels, and a Plot Plan to develop an 86-unit assisted living facility and a 138-unit multi-family townhome / condominium project.
7	PA 08-0154 (TM 33840)	Elm Street Subdivision	Zareh Hookasian, (615-838-4820)	SFR	14			376-043-027	**9/23/2015**	An approved subdivision of 4.07 acres into 15 lots for future single-family homes (ranging in size from 7,200 s.f. to 15,061 s.f. - average lot size of 9,000 s.f.) and a Zone Change from R-R (Rural Residential) to R-1.

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APPROVED DEVELOPMENT PROJECTS (NOT YET UNDER CONSTRUCTION)

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8	PA 13-0086 (PM 36652)	Wal-Mart Retail Project	Philip Serghini, Director of Public Affairs, Walmart, Inc. (479-204-8557)	CR			193,792 s.f.	367-100-033, 367-100-034 367-100-035 367-100-039	**3/11/2015**	An approved Change of Zone from R-R (Rural Residential) to C-1/C- P (General Commercial), and a Plot Plan for the development of a Walmart retail building totaling 185,992 s.f. and a 7,800 s.f. retail pad on 22 acres. • *Walmart to sell property…plans to construct the project have been scrapped.*
6	PA 12-0194	Cornerstone Church Preschool & Admin Bld.	Jeff Rosen, Pastor (951-262-5970)	Church			42,597 s.f.	367-210-007, 008, 018, 034, 035 & 043	**12/10/2014**	An approved PUP to build a 2-story, 17,135 sq. ft. preschool building for 170 children; a 2,438 sq. ft. maintenance building and a future 3-story, 23,024 sq. ft. administration building and related 2 new parking lots.
5	PA 12-0053 (PM 36492)	Rancon Medical & Retail Center	Dan Long, Rancon Group (951-200-2367)	Off. & CR			294,900 s.f.	380-250-022	**10/1/2014**	An approved Parcel Map No. 36492 to subdivide 1 parcel of 29.40 acres into 13 parcels for commercial/retail, industrial and open space purposes, and Plot Plan No. 12-0053 for the development of 96,240 square feet of medical, office and retail uses. Future development of the industrial lots will result in 294,900 square feet of business park.
21	PA 10-0301 (PM 30522)	Orange Bundy/ Parcel Map	Mike Sater, Sater Oil, Inc. (909-293-7588)	CR			7 parcels	367-100-024; 367-100-026	**7/3/2013**	An approved commercial Parcel Map (PM 30522) for a 7-lot commercial subdivision.
22	PA 11-0261 (TM 36388)	Oak Creek Canyon Residential Proj.	Bill Lo, Sunbelt Communities (949-218-6023)	SFR	275		5-acre parcel/site	362-070-001, 003, 006, 010, 013, 018, 021, 023, & 024; 362-080-004, 005, 007, 008, 009 & 012; 362-090-009 & 015	**5/22/2013**	An approved Specific Plan Amendment , General Plan Amendment, Change of Zone and Tract Map (TTM 36388) to accommodate a 275-lot single family residential subdivision, and a 5-acre commercial pad with an EIR.
38	TTM 31896	Rhoads Residential Project	Jeff Rhoads, R&H Wildomar, LLC (951-296-3466)	SFR	131			380-210-003, 004, 005, 008, 016 and 380-160-018	**1/9/2007**	An approved single-family residential tract map for the subdivision of 46.7 acres into 131 lots for future single-family residential development.

CITY OF WILDOMAR - CURRENT PLANNING CUMULATIVE DEVELOPMENT PROJECTS MATRIX

APPROVED DEVELOPMENT PROJECTS (UNDER CONSTRUCTION)

MAP EXHIBIT #	PLANNING APPLICATION #	PROJECT NAME	APPLICANT & CONTACT INFORMATION	PROJECT TYPE	SINGLE FAMILY LOTS/UNITS	MULTI-FAMILY UNITS	COMMERCIAL / INDUSTRIAL SQ. FT.	APN(S) INFO.	PROJECT DESCRIPTION
32	TTM 31667	Beazer Homes	Lonnie Ellison, (951-698-1350)	SFR	108			380-060-007 380-060-008	An approved Tentative Tract Map (TM 31667) for a 108-lot single family residential subdivision on approximately 35.2 acres.
16	PA 20-0028	Kaiser Medical Office Building	Eric Flodine, Strata Equity Group (858-546-0900)	Mixed Use			84,000 s.f. Medical Office Bld. & 102-Room Hotel	367-180-057	A revised plot plan to remove an approved 75,000 square-foot retail and replace it the development of an 84,000 square-foot medical office building and 102-room hotel. Located at the NWC of I-15 freeway and Wildomar Trial
53	PA 20-0116	Inland Valley Medical Center Master Plan Project	Terry Strom, Project Manager (951) 970-7995	Hospital			290,000 sq. ft. & 202 total patient beds	380-250-026	A proposal from IVMC/UHS to redevelop the 22.24-acre hospital site that includes the following: 1) Zone Change to create the "IVMC Hospital Overlay zone designation; 2) ZOA to adopt the IVMC-Hospital Overlay development standards; 3) CUP to relocate and establish a new Heliport onsite; & 4) Plot Plan to redevelop the hospital site with a new 7-story, 290,000 square-foot hospital tower building with 202 total patient beds located at 36485 Inland Valley Drive.
14	PA 13-0089	Villa Sienna Apartment Project	Bryan Bergeron, Foremost Pacific Grp (714-722-1170)	MFR		170 (Apts.)		380-290-029	An approved GPA from MHDR (5 - 8 units/acre) to VHDR (14 - 20 units/acre), a Change of Zone from I-P (Industrial Park) to R-3 (General Residential) and a Plot Plan for the development of a 170-unit multi-family apartment project on 9.22 acres.
49	PA 19-0017	St. Frances of Rome Church	William McKeever, WJ McKeever, Inc. (909-825-8048)	Church			26,596 S.F.	366-170-005; 366-170-058; & 366-330-011	Approval for a church expansion within the R- R zone, including an initial study/mitigated negative declaration, located at 21591 Lemon Street consisting of the following: 1) construct a new 1,200 seat sanctuary (16,896 sq. ft.); 2) convert the existing church into a multi-purpose building; 3) construct a new 9,700 sq. ft. office/classroom building; and 4) add 263 new parking spaces bringing the total parking count to 442 parking spaces.
46	PA 17-0111	Faith Bible Church	Francisco Martinez, FM Civil Engineers (951-676-8042)	Church			45,155 S.F.	376-410-002 & 024	A proposal for a proposed 45,155 square-foot (1,100 seats) church, including a 350-space parking lot and athletic field on 25.5 acres located at the terminus of DePasquale and Glaze brook Road. Project includes an EIR, GPA, Parcel Merger, & Plot Plan
36	PA 21-0044 TTM 32206	Bridlewood	Edgar Gomez, Richmond American (714) 613-3073	SFR	60			368-331-020	An approved Tentative Tract Map for the development of 60 single family residential lots ranging in size for 8,000 square feet to 20,000 square feet located at the southwest corner of Ione Lane and Palomar Street.

CITY OF WILDOMAR - CURRENT PLANNING CUMULATIVE DEVELOPMENT PROJECTS MATRIX

APPROVED DEVELOPMENT PROJECTS (UNDER CONSTRUCTION)									
MAP EXHIBIT #	**PLANNING APPLICATION #**	**PROJECT NAME**	**APPLICANT & CONTACT INFORMATION**	**PROJECT TYPE**	**SINGLE FAMILY LOTS/UNITS**	**MULTI-FAMILY UNITS**	**COMMERCIAL / INDUSTRIAL SQ. FT.**	**APN(S) INFO.**	**PROJECT DESCRIPTION**
34	PA 15-0013	Clinton Keith Village Retail Center	Reza Kassraian, PARS Global, LLC (949-250-9863)	CR			40,000 s.f.	362-250-003	A proposed Plot Plan and CUP for a 5-acre project site to develop a 40,000 square-foot commercial retail center, including a 7- Eleven gas station with alcohol sales.
23	PA 08-0179 (PM 32257)	Bundy Canyon Plaza	Ino Cruz, JNT Management Group (951-280-3833)	CR			36,990 s.f.	367-100-019	An approved retail project (CUP 3403) for the construction of a gasoline service station with carwash (Phase 1), and 3 drive-thru restaurants pads, & 2 retail buildings totaling approximately 36,990 square feet(Phase 2) and an approved Parcel Map (PM 32257) for the subdivision of two existing parcels into 6 commercial parcels.

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DEVELOPMENT PROJECTS – CONSTRUCTION COMPLETED									
MAP EXHIBIT #	**PLANNING APPLICATION #**	**PROJECT NAME**	**APPLICANT & CONTACT INFORMATION**	**PROJECT TYPE**	**SINGLE FAMILY LOTS/UNITS**	**MULTI-FAMILY UNITS**	**COMMERCIAL / INDUSTRIAL SQ. FT.**	**APN(S) INFO.**	**PROJECT DESCRIPTION**
31	PA 19-0080 TTM 32024	Summerhill Community Phase 1	Jordon Mastroianni, KB Homes (951-691-5239)	SFR / CR	70			367-140-007 367-140-011	An approved Tentative Tract Map (TM 32024) for a 70-lot single family residential subdivision and future commercial office project on approximately 40 acres.
43	PA 16-0138	Smith Ranch Self Storage Project	Won Yoo, Ranpac Engineering (951-676-7000)	IND			150,000 s.f. (1,100 units) & 10,000 s.f. office bld.	380-290-037; 380-290-038; 380-290-039; 380-290-040	An approved Zone Change, CUP & Variance to establish a 150,000 s.f. self- storage facility with RV parking and 10,000 s.f. office building on 8.35 acres in the M-SC zone.
1	12-0364 (TM 36497)	Briarwood Community	Jarnne Valdez, Lennar Homes (951-817-3567)	SFR	67			380-280-004, 009 & 012	The subdivision of approximately 24 acres into 67 lots for single family residential development (average lot size of 7,772 s.f.) and a plot plan to develop 67 single family dwelling units.
2	12-0392 (TTM 36519)	Kuesder Homes Res.	Mike Leslie (951-522-2405)	SFR	10			367-170-029	A Tentative Tract Map (TM 36519) to subdivide approximately 5.4 acres into 10 lots (1/2 acre lots) for future single-family residential homes.
4	14-0100 TM 32535	North Ranch Community	Jarnne Valdez, Lennar Homes (951-817-3567)	SFR	84			380-110-005 380-110-006	Tentative Tract Map No. 32535 allows for the subdivision of 31.4 acres into 84 lots, and a plot plan for the development of 84 single residential dwelling units known as North Ranch.
20	10-0222	Subway Commercial Project	Onkar Sud (951-818-6551)	CR			10,500 s.f.	366-390-026 & 366-390-027	A retail project consisting of a Change of Zone from R-R to C-1/C-P and a Plot Plan for the development of a 10,500 s.f. multi-tenant retail building on 1 acre.
24	12-0015 (TM 30839 & TM 30939)	Andalusia I	Jarnne Valdez, Lennar Homes (951-817-3567)	SFR	55			N/A	A Final Site Plan of Development for 55 lots within two recorded tracts (42 lots in TM 30839 & 13 lots within TTM 30939)
25	11-0099 (TM 31499)	Meritage Homes	Peter Vanek, Meritage Homes (951-547-8320)	SFR	74			380-090-033 & 034 / 380-090-038, 041	A Final Site Plan of Development package for 74 single family residential dwelling units within TM 31499.

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DEVELOPMENT PROJECTS – CONSTRUCTION COMPLETED									
MAP EXHIBIT #	PLANNING APPLICATION #	PROJECT NAME	APPLICANT & CONTACT INFORMATION	PROJECT TYPE	SINGLE FAMILY LOTS/UNITS	MULTI-FAMILY UNITS	COMMERCIAL / INDUSTRIAL SQ. FT.	APN(S) INFO.	PROJECT DESCRIPTION
26	12-0401 (TTM 31837)	Andalusia II	Jarnne Valdez, Lennar Homes (951-817-3567)	SFR	44			380-410-001 & 019 380-411-001 & 025	A Final Site Plan of Development for Tract Map 31837 for the development of 44 single family residential dwelling units.
28	08-0072 (PM 36080)	Wildomar Square Retail Center	David Horenstein, DH Holdings, LLC (310-229-5960)	CR			46,600 s.f.	380-110-045	A commercial/retail project consisting of six buildings totaling 46,600 square feet on a 4.8 acre site. Includes a parcel map for 6 lots.
33	14-0074	Sycamore Academy Charter School	Barbara Hale, Sycamore Academy (951-678-5217)	EDU			28,000 s.f. 401 students	380-170-020	A Public Use Permit (PUP) for the development of a 28,000 square-foot charter school for 594 students (K-8 grade).
3	TM 25122 & TM 32078	Richmond American	Sondra Harris, Richmond American Homes (949-467-2633)	SFR	149			380-080-008 380-080-009 380-140-001	An approved Tentative Tract Map for the development of 149 single family residential lots (Plot Plan No. 15-0076) located at the southwest corner of Palomar Avenue and McVicar Street.
30	14-0081 (TM 31479)	The Orchard Collection	Pete Pitassi, Diversified Pacific (909-980-1361)	SFR	51			362-240-020, 023, 029, 031 & 032	An approved Plot Plan for the development of 51 single family residential lots (TM 31479) on 15 acres.
42	PA 16-0095	Milestone RV/Boat Storage	Steve Davis, Alliance Services (619-280-0933)	Ind.			182 RV Spaces & 8,300 s.f. of office	380-290-003	An approved CUP & Variance to establish a 182 space Boat/RV storage facility (with solar panels on the roof), including 64 mini-warehouse/self-storage units (approximately 8,300 s.f. in size) on 5 acres.
45	PA 17-0010	Life Storage Mini-Storage	Cain Garcia, Arch. (602) 955-3900	IND			60,000 s.f.	380-290-030	An approved amendment to an existing CUP to add 2-story, 60,800 square-foot mini-warehouse building in the M-SC zone on 9.56 acres.

Key Notes:

SFR = Single Family Residential; MFR = Multi-Family Residential; CR = Commercial Retail; Ind. = Industrial; PO = Professional Office; EDU = Educational

APPENDIX C

EXISTING TRAFFIC COUNTS

Thursday, July 28, 2022 CITY: Wildomar PROJECT: SC3548

ADT1 Clinton Keith west of Arya. **Prepared by AimTD LLC tel. 714 253 7888**

AM Period	EB		WB			PM Period	EB		WB		
0:00	46		21			12:00	250		304		
0:15	40		28			12:15	236		323		
0:30	45		29			12:30	267		318		
0:45	35	166	22	100	266	12:45	289	1042	276	1221	2263
1:00	32		19			13:00	290		252		
1:15	30		33			13:15	278		292		
1:30	20		28			13:30	305		247		
1:45	26	108	15	95	203	13:45	260	1133	294	1085	2218
2:00	22		12			14:00	285		275		
2:15	10		14			14:15	260		275		
2:30	16		25			14:30	322		287		
2:45	19	67	17	68	135	14:45	288	1155	326	1163	2318
3:00	19		23			15:00	286		298		
3:15	16		29			15:15	290		296		
3:30	22		34			15:30	288		297		
3:45	22	79	48	134	213	15:45	311	1175	306	1197	2372
4:00	17		52			16:00	352		303		
4:15	28		56			16:15	334		334		
4:30	32		89			16:30	335		330		
4:45	45	122	102	299	421	16:45	315	1336	316	1283	2619
5:00	59		102			17:00	359		333		
5:15	68		137			17:15	335		320		
5:30	66		146			17:30	337		302		
5:45	108	301	168	553	854	17:45	328	1359	274	1229	2588
6:00	121		158			18:00	308		306		
6:15	140		159			18:15	293		257		
6:30	159		188			18:30	285		263		
6:45	186	606	211	716	1322	18:45	305	1191	228	1054	2245
7:00	117		193			19:00	287		207		
7:15	166		247			19:15	245		211		
7:30	185		261			19:30	214		212		
7:45	235	703	269	970	1673	19:45	236	982	190	820	1802
8:00	202		259			20:00	228		173		
8:15	217		256			20:15	204		174		
8:30	241		267			20:30	174		174		
8:45	238	898	325	1107	2005	20:45	192	798	149	670	1468
9:00	222		290			21:00	171		127		
9:15	220		247			21:15	137		101		
9:30	196		280			21:30	134		94		
9:45	243	881	268	1085	1966	21:45	138	580	75	397	977
10:00	197		258			22:00	95		91		
10:15	238		281			22:15	103		56		
10:30	231		289			22:30	86		83		
10:45	246	912	274	1102	2014	22:45	87	371	62	292	663
11:00	235		281			23:00	84		44		
11:15	226		297			23:15	73		47		
11:30	220		286			23:30	60		46		
11:45	275	956	321	1185	2141	23:45	58	275	34	171	446
Total Vol.		5799		7414	**13213**			11397		10582	**21979**

	Daily Totals EB	WB	**Combined**
	17196	17996	**35192**

	AM			**PM**		
Split %	43.9%	56.1%	**37.5%**	51.9%	48.1%	**62.5%**
Peak Hour	11:45	11:45	**11:45**	17:00	16:15	**16:15**
Volume	1028	1266	**2294**	1359	1313	**2656**
P.H.F.	0.93	0.98	**0.96**	0.95	0.98	**0.96**

cs@aimtd.com Tell. 714 253 7888

INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

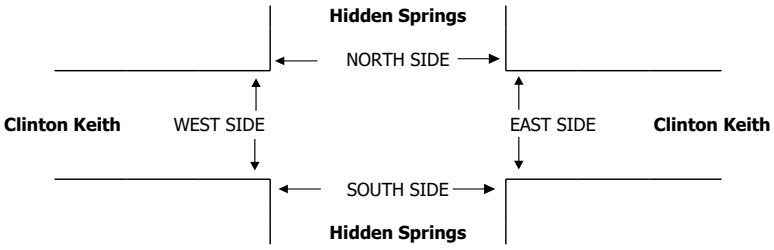
DATE:				
Thu, Jul 28, 22	LOCATION:	Wildomar	PROJECT #:	SC3548
	NORTH & SOUTH:	Hidden Springs	LOCATION #:	1
	EAST & WEST:	Clinton Keith	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

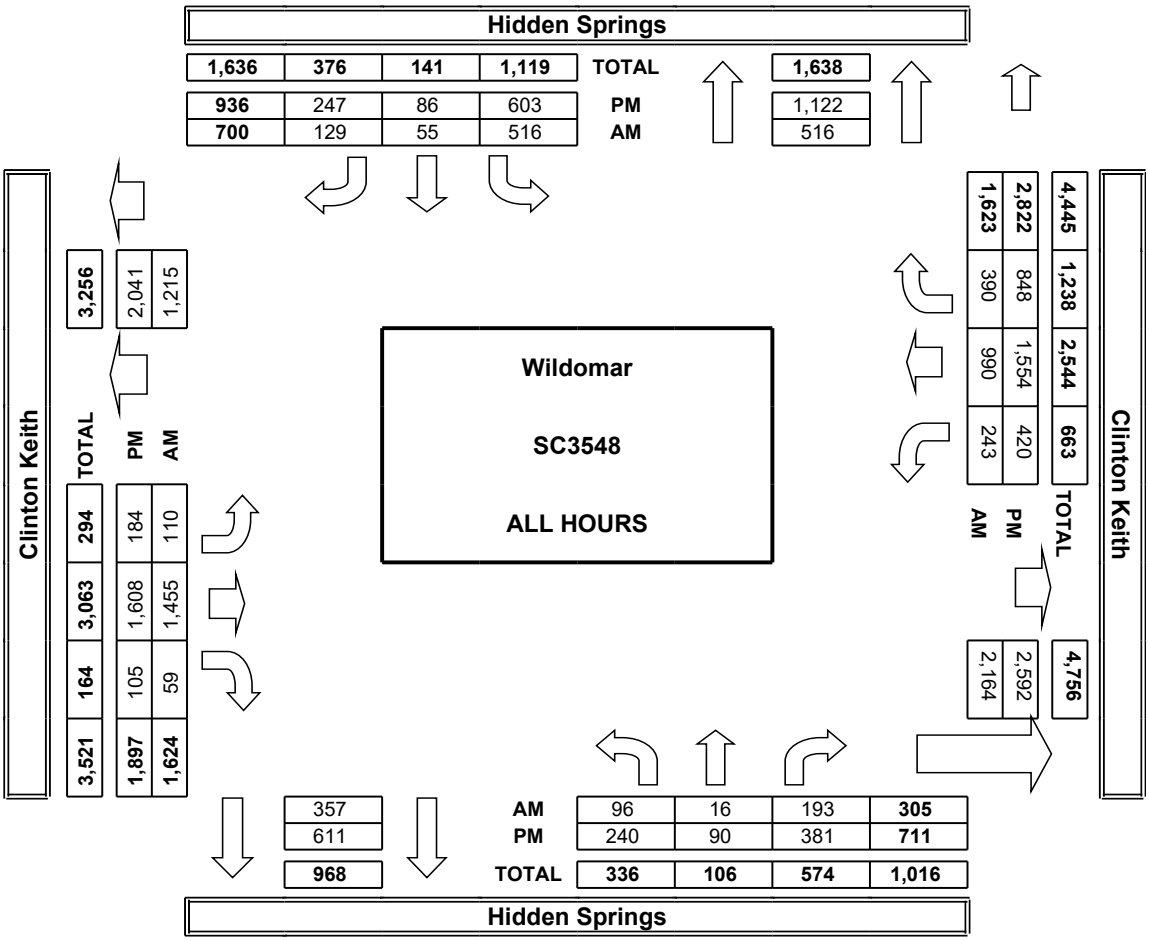
☑ Add U-Turns to Left Turns

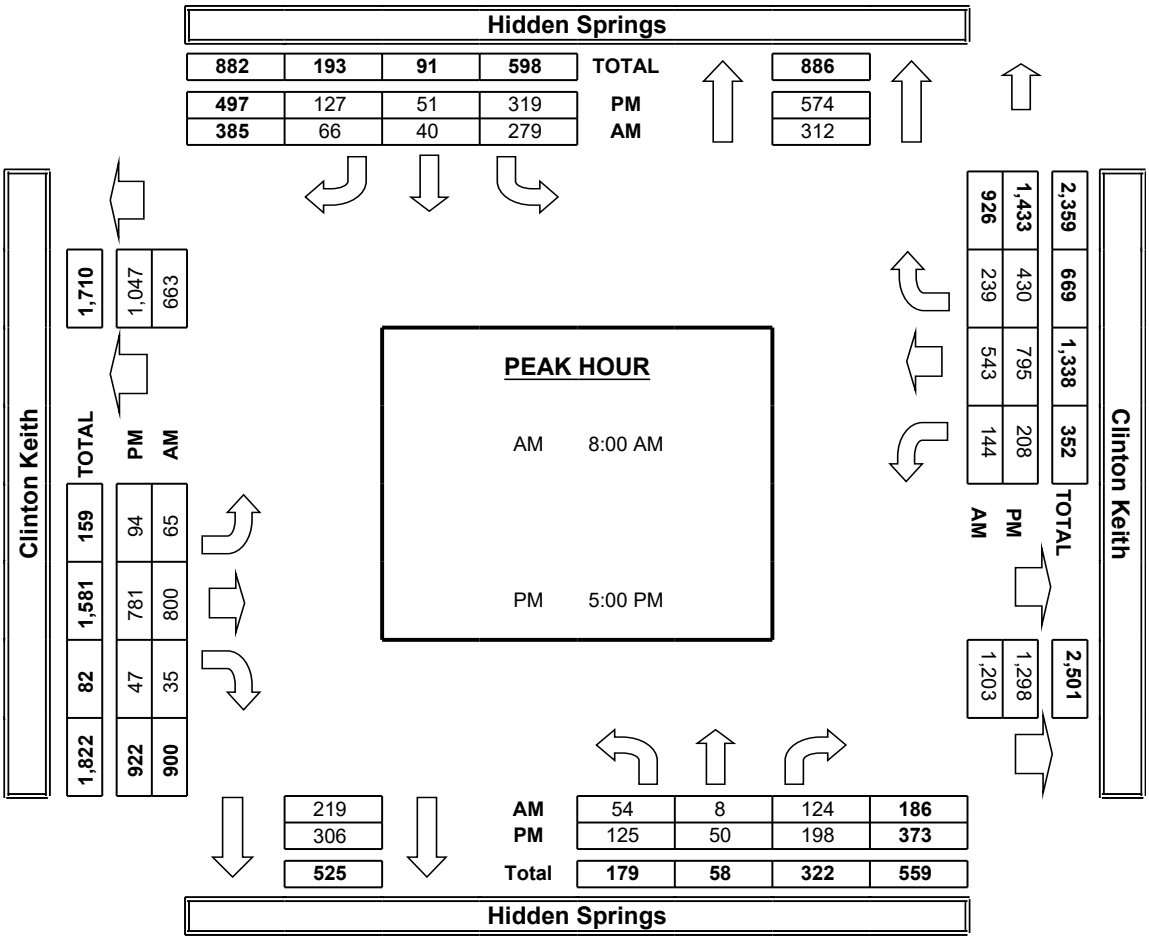
		NORTHBOUND Hidden Springs			SOUTHBOUND Hidden Springs			EASTBOUND Clinton Keith			WESTBOUND Clinton Keith				U-TURNS				
	LANES:	NL 1	NT 0.5	NR 1.5	SL 1	ST 0.5	SR 0.5	EL 1	ET 3	ER 1	WL 2	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	14	1	11	48	4	23	7	124	4	20	84	39	379	0	0	0	0	0
	7:15 AM	7	1	14	55	1	8	13	161	3	24	90	30	407	0	0	0	0	0
	7:30 AM	6	4	20	60	5	12	7	185	13	27	123	43	505	0	0	0	0	0
	7:45 AM	15	2	24	74	5	20	18	185	4	28	150	39	564	0	0	0	0	0
	8:00 AM	14	1	27	70	12	21	12	171	9	30	126	58	551	0	0	0	0	0
	8:15 AM	6	2	39	70	6	11	15	189	9	42	116	60	565	0	0	0	0	0
	8:30 AM	17	1	25	64	11	16	17	213	9	37	134	69	613	0	0	0	0	0
	8:45 AM	17	4	33	75	11	18	21	227	8	35	167	52	668	0	0	0	0	0
	VOLUMES	96	16	193	516	55	129	110	1,455	59	243	990	390	4,252	0	0	0	0	0
	APPROACH %	31%	5%	63%	74%	8%	18%	7%	90%	4%	15%	61%	24%						
	APP/DEPART	305	/	516	700	/	357	1,624	/	2,164	1,623	/	1,215	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	54	8	124	279	40	66	65	800	35	144	543	239	2,397					
	APPROACH %	29%	4%	67%	72%	10%	17%	7%	89%	4%	16%	59%	26%						
	PEAK HR FACTOR		0.861			0.925			0.879			0.911		0.897					
	APP/DEPART	186	/	312	385	/	219	900	/	1,203	926	/	663	0					
PM	4:00 PM	31	8	47	70	6	29	27	186	13	52	201	104	774	0	0	0	0	0
	4:15 PM	25	9	49	79	13	19	24	216	16	65	188	109	812	0	0	0	0	0
	4:30 PM	34	12	46	80	9	33	22	208	14	43	172	106	779	0	0	0	0	0
	4:45 PM	25	11	41	55	7	39	17	217	15	52	198	99	776	0	0	0	0	0
	5:00 PM	26	8	53	98	12	29	21	206	8	48	193	95	797	0	0	0	0	0
	5:15 PM	31	15	48	54	11	22	22	185	11	51	209	130	789	0	0	0	0	0
	5:30 PM	37	13	52	86	15	42	26	206	10	51	210	105	853	0	0	0	0	0
	5:45 PM	31	14	45	81	13	34	25	184	18	58	183	100	786	0	0	0	0	0
	VOLUMES	240	90	381	603	86	247	184	1,608	105	420	1,554	848	6,366	0	0	0	0	0
	APPROACH %	34%	13%	54%	64%	9%	26%	10%	85%	6%	15%	55%	30%						
	APP/DEPART	711	/	1,122	936	/	611	1,897	/	2,592	2,822	/	2,041	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	125	50	198	319	51	127	94	781	47	208	795	430	3,225					
	APPROACH %	34%	13%	53%	64%	10%	26%	10%	85%	5%	15%	55%	30%						
	PEAK HR FACTOR		0.914			0.869			0.952			0.919		0.945					
	APP/DEPART	373	/	574	497	/	306	922	/	1,298	1,433	/	1,047	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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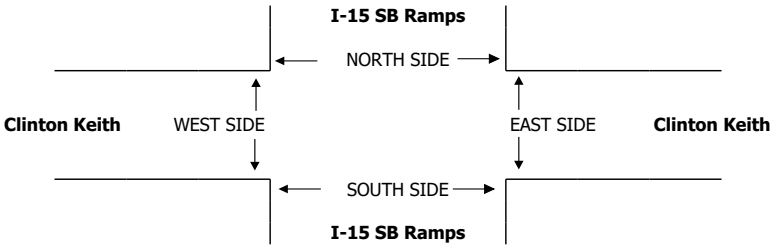
DATE:	LOCATION:	Wildomar	PROJECT #:	SC3548
Thu, Jul 28, 22	NORTH & SOUTH:	I-15 SB Ramps	LOCATION #:	2
	EAST & WEST:	Clinton Keith	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

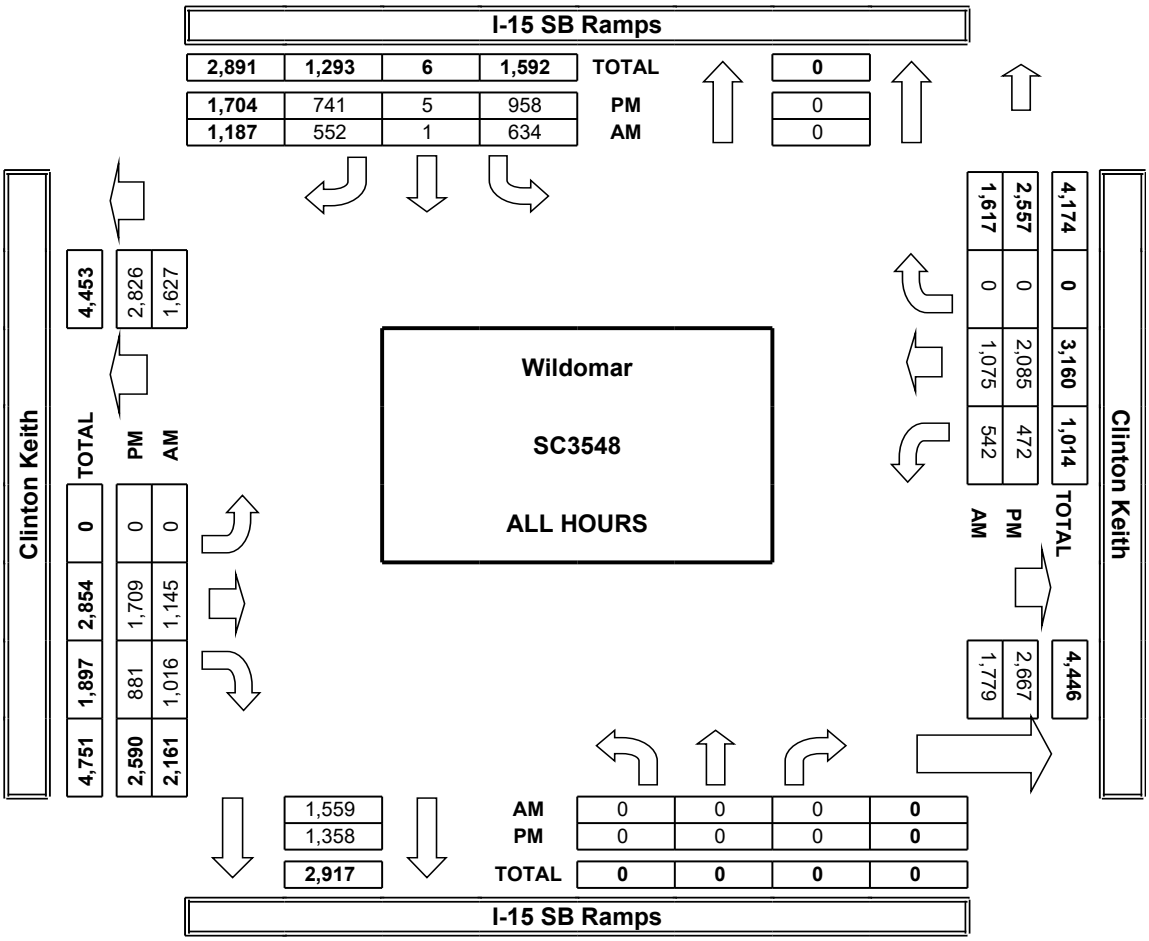
☑ Add U-Turns to Left Turns

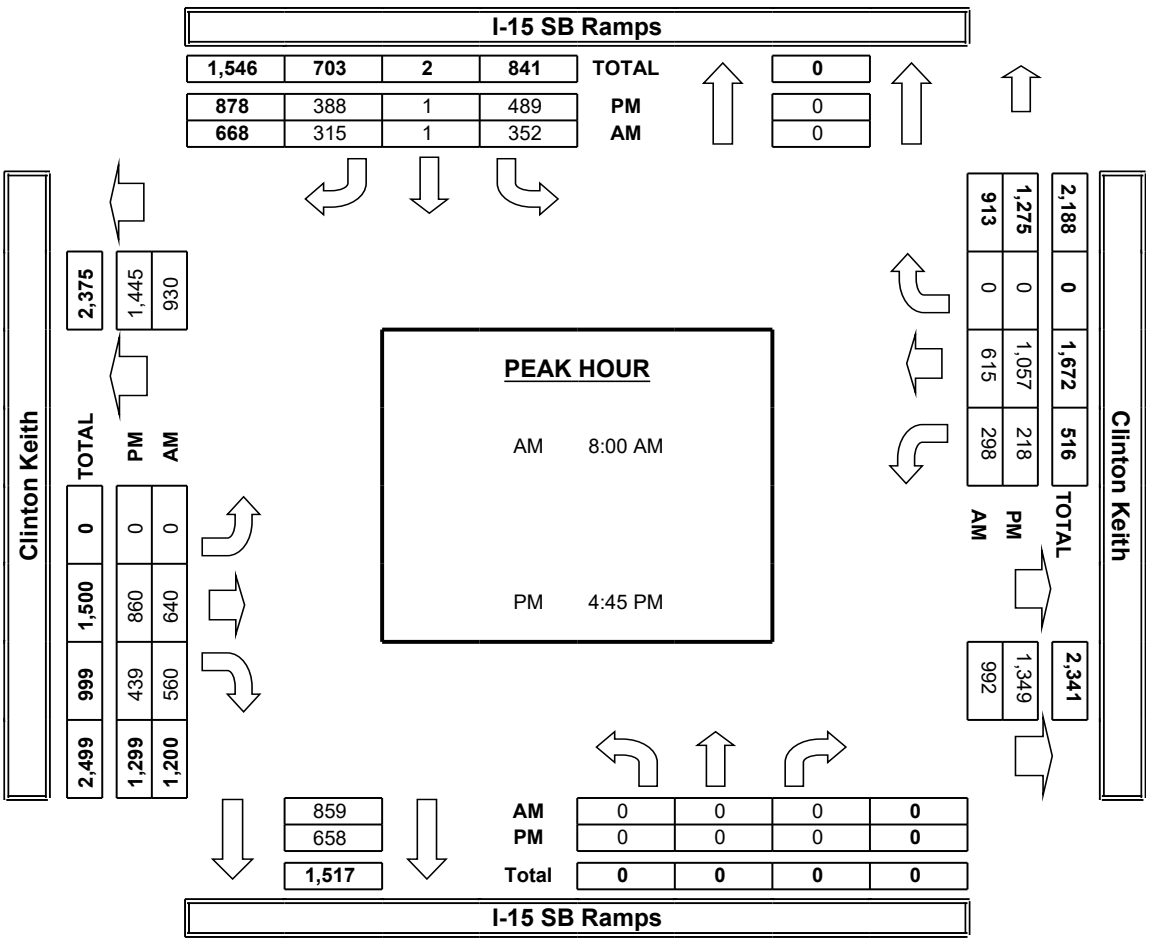
		NORTHBOUND I-15 SB Ramps			SOUTHBOUND I-15 SB Ramps			EASTBOUND Clinton Keith			WESTBOUND Clinton Keith				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 1.5	ST 0.5	SR 2	EL X	ET 3	ER 1	WL 2	WT 3	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	0	0	42	0	45	0	102	81	38	98	0	406	0	0	0	0	0
	7:15 AM	0	0	0	57	0	47	0	125	105	53	97	0	484	0	0	0	0	0
	7:30 AM	0	0	0	71	0	71	0	138	127	74	122	0	603	0	0	0	0	0
	7:45 AM	0	0	0	112	0	74	0	140	143	79	143	0	691	0	0	0	0	0
	8:00 AM	0	0	0	84	0	81	0	135	130	61	133	0	624	0	0	0	0	0
	8:15 AM	0	0	0	89	0	57	0	148	150	59	161	0	664	0	0	0	0	0
	8:30 AM	0	0	0	87	0	89	0	176	126	85	151	0	714	0	0	0	0	0
	8:45 AM	0	0	0	92	1	88	0	181	154	93	170	0	779	0	0	0	0	0
	VOLUMES	0	0	0	634	1	552	0	1,145	1,016	542	1,075	0	4,965	0	0	0	0	0
	APPROACH %	0%	0%	0%	53%	0%	47%	0%	53%	47%	34%	66%	0%						
	APP/DEPART	0	/	0	1,187	/	1,559	2,161	/	1,779	1,617	/	1,627	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	0	0	0	352	1	315	0	640	560	298	615	0	2,781					
	APPROACH %	0%	0%	0%	53%	0%	47%	0%	53%	47%	33%	67%	0%						
	PEAK HR FACTOR		0.000			0.923			0.896			0.868		0.892					
	APP/DEPART	0	/	0	668	/	859	1,200	/	992	913	/	930	0					
PM	4:00 PM	0	0	0	124	0	86	0	197	106	65	271	0	849	0	0	0	0	0
	4:15 PM	0	0	0	108	2	84	0	225	119	61	278	0	877	0	0	0	0	0
	4:30 PM	0	0	0	124	0	87	0	210	124	70	234	0	849	0	0	0	0	0
	4:45 PM	0	0	0	119	1	87	0	212	101	51	262	0	833	0	0	0	0	0
	5:00 PM	0	0	0	122	0	87	0	227	130	59	249	0	874	0	0	0	0	0
	5:15 PM	0	0	0	130	0	113	0	189	96	53	281	0	862	0	0	0	0	0
	5:30 PM	0	0	0	118	0	101	0	232	112	55	265	0	883	0	0	0	0	0
	5:45 PM	0	0	0	113	2	96	0	217	93	58	245	0	824	0	0	0	0	0
	VOLUMES	0	0	0	958	5	741	0	1,709	881	472	2,085	0	6,851	0	0	0	0	0
	APPROACH %	0%	0%	0%	56%	0%	43%	0%	66%	34%	18%	82%	0%						
	APP/DEPART	0	/	0	1,704	/	1,358	2,590	/	2,667	2,557	/	2,826	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	0	0	0	489	1	388	0	860	439	218	1,057	0	3,452					
	APPROACH %	0%	0%	0%	56%	0%	44%	0%	66%	34%	17%	83%	0%						
	PEAK HR FACTOR		0.000			0.903			0.910			0.954		0.977					
	APP/DEPART	0	/	0	878	/	658	1,299	/	1,349	1,275	/	1,445	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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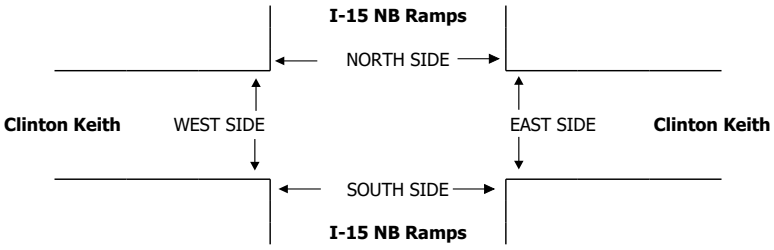
DATE:	LOCATION:	Wildomar	PROJECT #:	SC3548
Thu, Jul 28, 22	NORTH & SOUTH:	I-15 NB Ramps	LOCATION #:	3
	EAST & WEST:	Clinton Keith	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

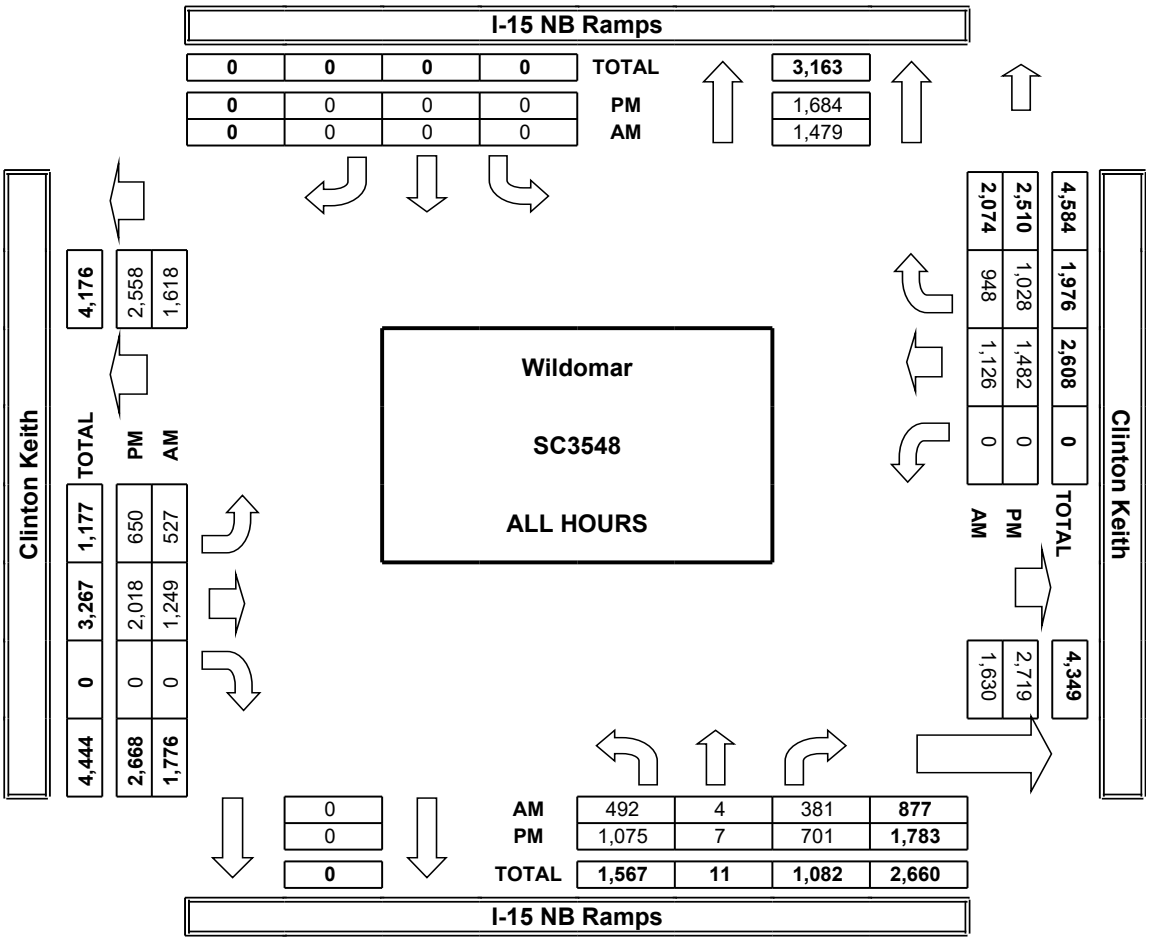
☑ Add U-Turns to Left Turns

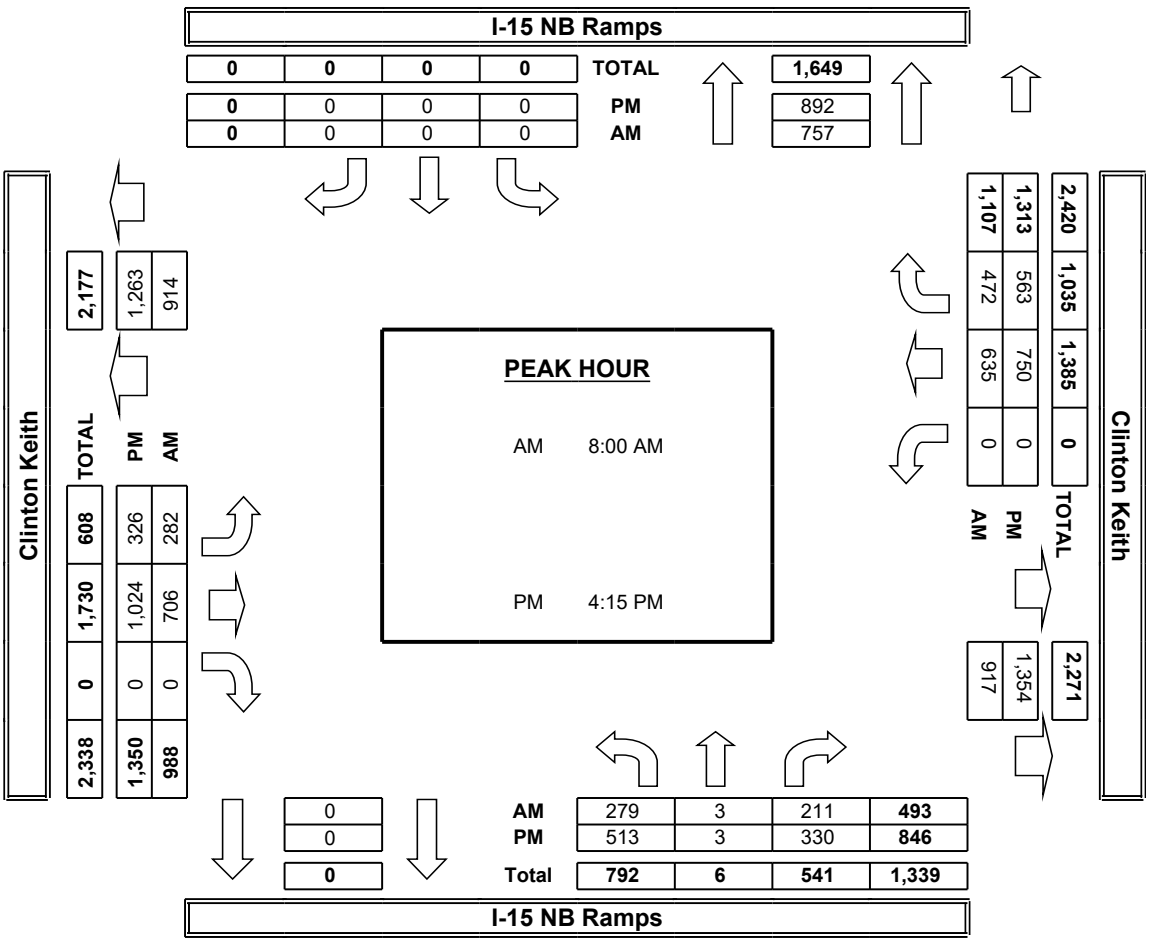
		NORTHBOUND I-15 NB Ramps			SOUTHBOUND I-15 NB Ramps			EASTBOUND Clinton Keith			WESTBOUND Clinton Keith				U-TURNS				
	LANES:	NL 1.3	NT 0.3	NR 1.3	SL X	ST X	SR X	EL 2	ET 3	ER X	WL X	WT 3	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	52	0	31	0	0	0	65	88	0	0	87	106	429	0	0	0	0	0
	7:15 AM	34	0	43	0	0	0	59	118	0	0	113	131	498	0	0	0	0	0
	7:30 AM	53	1	37	0	0	0	47	151	0	0	144	117	550	0	0	0	0	0
	7:45 AM	74	0	59	0	0	0	74	186	0	0	147	122	662	0	0	0	0	0
	8:00 AM	53	0	41	0	0	0	66	154	0	0	141	118	573	0	0	0	0	0
	8:15 AM	89	1	63	0	0	0	64	175	0	0	145	111	648	0	0	0	0	0
	8:30 AM	64	0	54	0	0	0	76	188	0	0	160	107	649	0	0	0	0	0
	8:45 AM	73	2	53	0	0	0	76	189	0	0	189	136	718	0	0	0	0	0
	VOLUMES	492	4	381	0	0	0	527	1,249	0	0	1,126	948	4,727	0	0	0	0	0
	APPROACH %	56%	0%	43%	0%	0%	0%	30%	70%	0%	0%	54%	46%						
	APP/DEPART	877	/	1,479	0	/	0	1,776	/	1,630	2,074	/	1,618	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	279	3	211	0	0	0	282	706	0	0	635	472	2,588					
	APPROACH %	57%	1%	43%	0%	0%	0%	29%	71%	0%	0%	57%	43%						
	PEAK HR FACTOR		0.806			0.000			0.932			0.852		0.901					
	APP/DEPART	493	/	757	0	/	0	988	/	917	1,107	/	914	0					
PM	4:00 PM	160	2	103	0	0	0	70	248	0	0	175	128	886	0	0	0	0	0
	4:15 PM	144	1	87	0	0	0	95	239	0	0	192	142	900	0	0	0	0	0
	4:30 PM	125	0	85	0	0	0	75	260	0	0	180	150	875	0	0	0	0	0
	4:45 PM	133	1	65	0	0	0	75	258	0	0	178	138	848	0	0	0	0	0
	5:00 PM	111	1	93	0	0	0	81	267	0	0	200	133	886	0	0	0	0	0
	5:15 PM	139	0	104	0	0	0	89	233	0	0	199	121	885	0	0	0	0	0
	5:30 PM	138	0	92	0	0	0	77	267	0	0	184	118	876	0	0	1	0	1
	5:45 PM	125	2	72	0	0	0	88	246	0	0	174	98	805	0	0	0	0	0
	VOLUMES	1,075	7	701	0	0	0	650	2,018	0	0	1,482	1,028	6,961	0	0	1	0	1
	APPROACH %	60%	0%	39%	0%	0%	0%	24%	76%	0%	0%	59%	41%						
	APP/DEPART	1,783	/	1,684	0	/	0	2,668	/	2,719	2,510	/	2,558	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	513	3	330	0	0	0	326	1,024	0	0	750	563	3,509					
	APPROACH %	61%	0%	39%	0%	0%	0%	24%	76%	0%	0%	57%	43%						
	PEAK HR FACTOR		0.798			0.000			0.970			0.983		0.975					
	APP/DEPART	846	/	892	0	/	0	1,350	/	1,354	1,313	/	1,263	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

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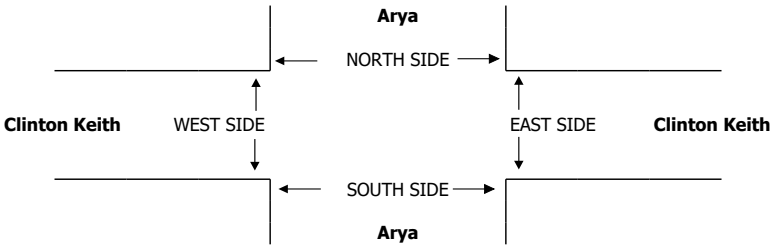
DATE:					
Thu, Jul 28, 22	LOCATION:	Wildomar	PROJECT #:	SC3548
	NORTH & SOUTH:	Arya	LOCATION #:	4
	EAST & WEST:	Clinton Keith	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

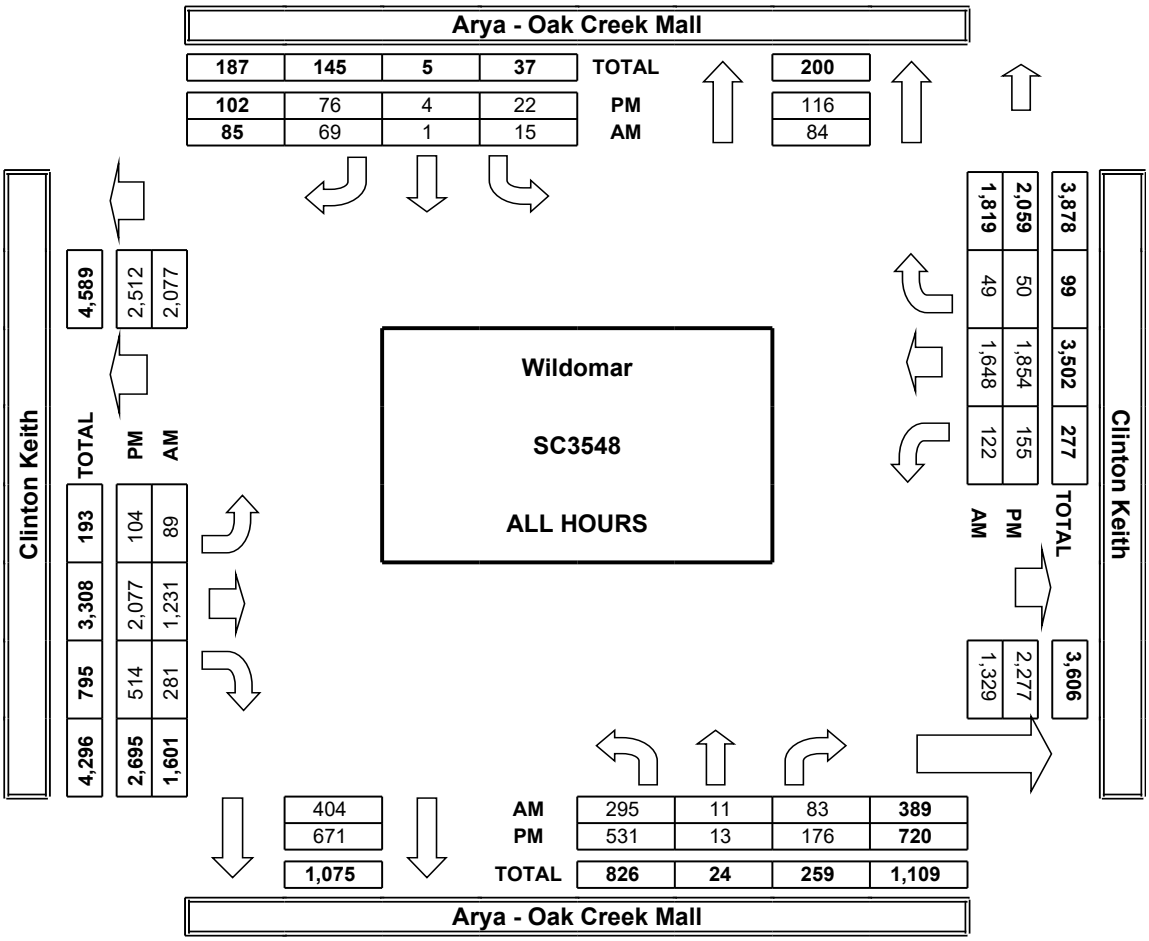
☑ Add U-Turns to Left Turns

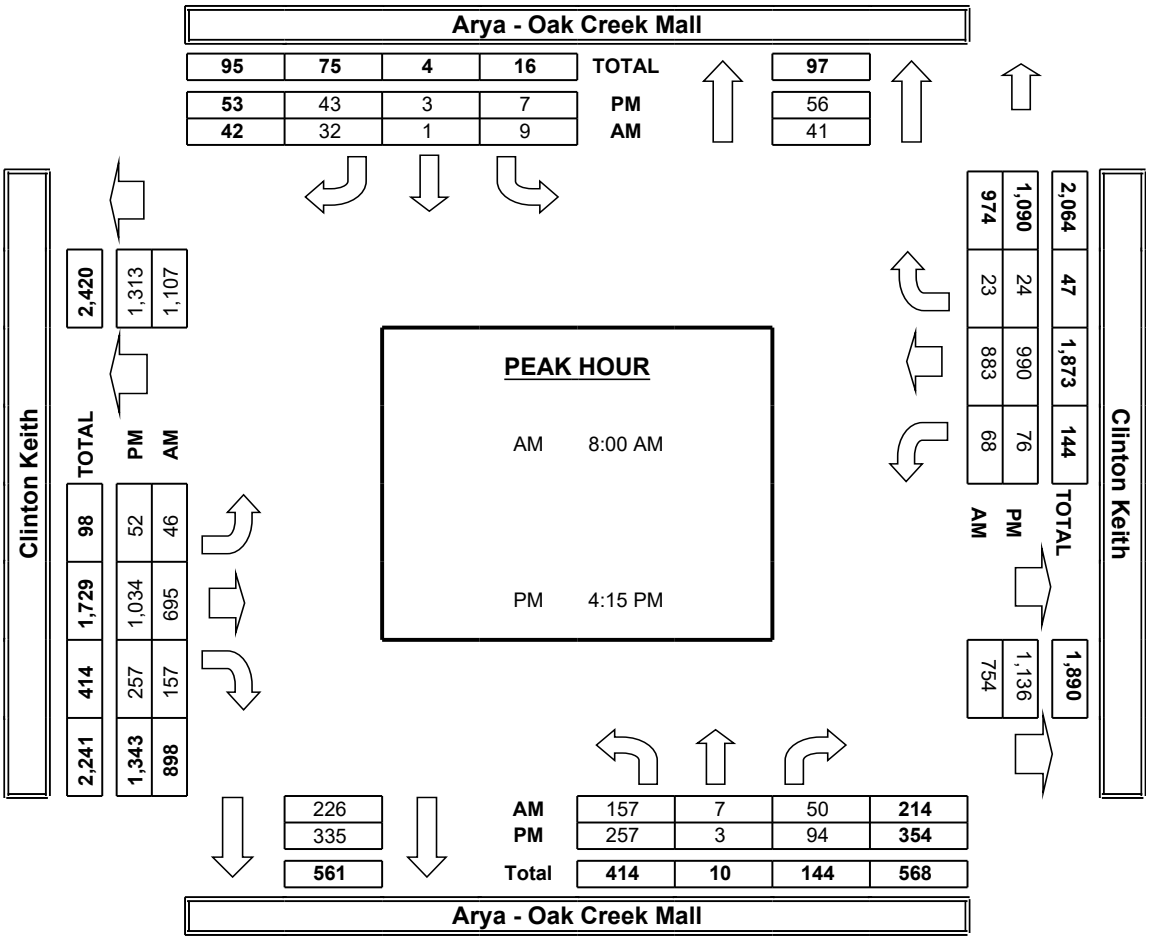
		NORTHBOUND Arya - Oak Creek Mall			SOUTHBOUND Arya - Oak Creek Mall			EASTBOUND Clinton Keith			WESTBOUND Clinton Keith				U-TURNS				
	LANES:	NL 0.5	NT 0.5	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2.5	ER 0.5	WL 1	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	31	0	4	0	0	5	10	87	20	15	148	3	323	0	0	9	0	9
	7:15 AM	38	1	2	2	0	9	10	123	33	18	193	7	436	0	0	7	0	7
	7:30 AM	41	2	15	2	0	11	11	146	28	10	202	9	477	0	0	7	0	7
	7:45 AM	28	1	12	2	0	12	12	180	43	11	222	7	530	0	0	7	0	7
	8:00 AM	36	2	13	5	1	10	14	158	30	21	203	8	501	0	0	10	0	10
	8:15 AM	39	1	15	2	0	5	11	168	38	19	204	4	506	0	0	8	0	8
	8:30 AM	37	0	12	0	0	10	12	185	44	9	211	6	526	0	0	9	0	9
	8:45 AM	45	4	10	2	0	7	9	184	45	19	265	5	595	0	0	8	0	8
	VOLUMES	295	11	83	15	1	69	89	1,231	281	122	1,648	49	3,894	0	0	65	0	65
	APPROACH %	76%	3%	21%	18%	1%	81%	6%	77%	18%	7%	91%	3%						
	APP/DEPART	389	/	84	85	/	404	1,601	/	1,329	1,819	/	2,077	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	157	7	50	9	1	32	46	695	157	68	883	23	2,128					
	APPROACH %	73%	3%	23%	21%	2%	76%	5%	77%	17%	7%	91%	2%						
	PEAK HR FACTOR		0.907			0.656			0.932			0.843		0.894					
	APP/DEPART	214	/	41	42	/	226	898	/	754	974	/	1,107	0					
PM	4:00 PM	61	3	22	4	0	4	11	269	72	26	233	6	711	0	0	5	1	6
	4:15 PM	72	2	27	0	1	12	16	261	57	16	244	6	714	0	0	6	1	7
	4:30 PM	54	1	25	3	0	10	6	263	66	18	263	4	713	0	0	3	0	3
	4:45 PM	65	0	18	3	2	8	18	228	69	25	233	9	678	0	0	10	0	10
	5:00 PM	66	0	24	1	0	13	12	282	65	17	250	5	735	0	0	4	0	4
	5:15 PM	84	2	17	4	1	8	11	260	64	20	220	6	697	0	0	8	0	8
	5:30 PM	71	2	21	3	0	10	11	264	62	16	217	10	687	0	0	4	0	4
	5:45 PM	58	3	22	4	0	11	19	250	59	17	194	4	641	0	0	11	0	11
	VOLUMES	531	13	176	22	4	76	104	2,077	514	155	1,854	50	5,576	0	0	51	2	53
	APPROACH %	74%	2%	24%	22%	4%	75%	4%	77%	19%	8%	90%	2%						
	APP/DEPART	720	/	116	102	/	671	2,695	/	2,277	2,059	/	2,512	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	257	3	94	7	3	43	52	1,034	257	76	990	24	2,840					
	APPROACH %	73%	1%	27%	13%	6%	81%	4%	77%	19%	7%	91%	2%						
	PEAK HR FACTOR		0.876			0.946			0.935			0.956		0.966					
	APP/DEPART	354	/	56	53	/	335	1,343	/	1,136	1,090	/	1,313	0					



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TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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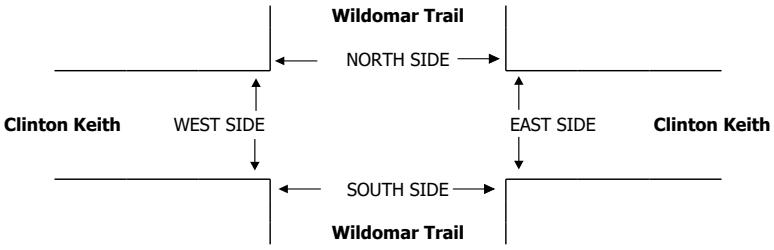
DATE:					
Thu, Jul 28, 22	LOCATION:	Wildomar	PROJECT #:	SC3548	
	NORTH & SOUTH:	Wildomar Trail	LOCATION #:	5	
	EAST & WEST:	Clinton Keith	CONTROL:	SIGNAL	

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

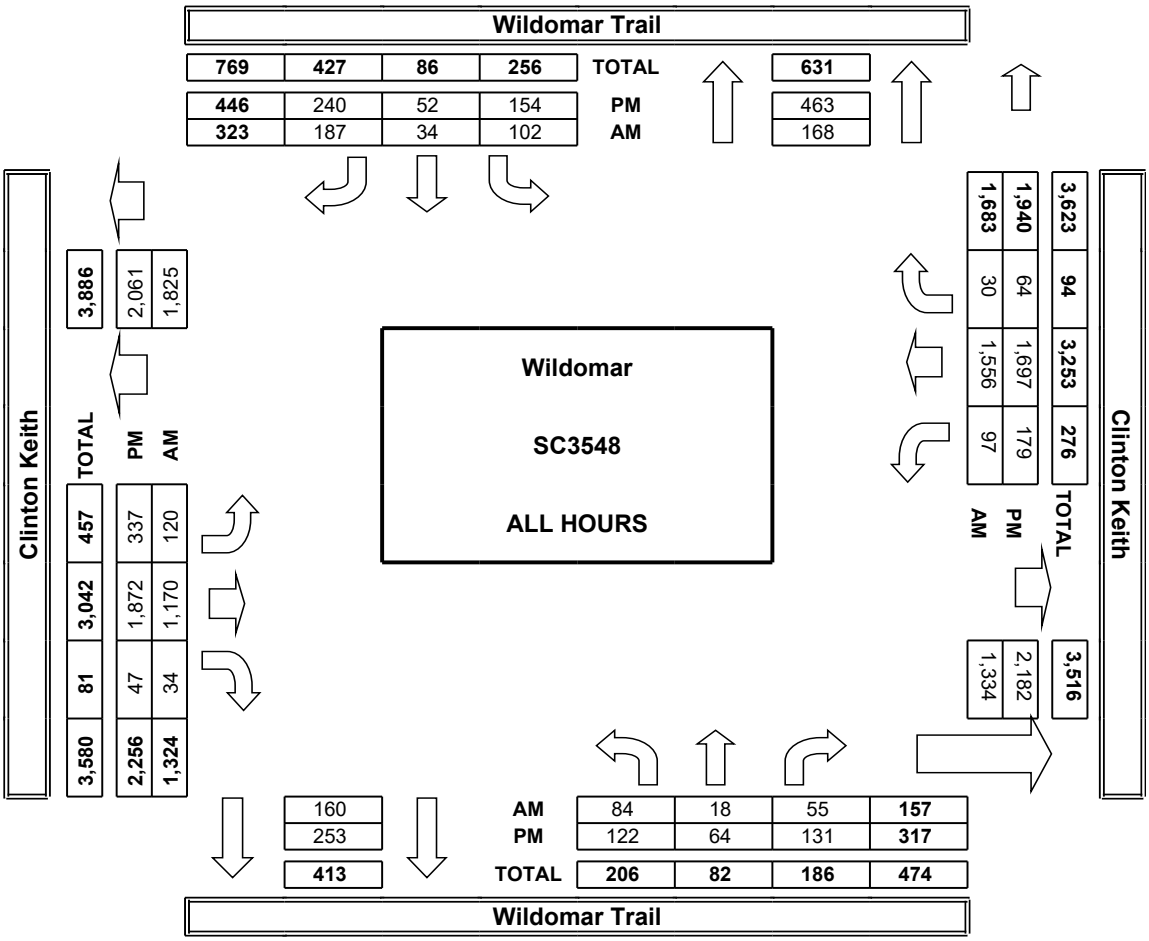
☑ Add U-Turns to Left Turns

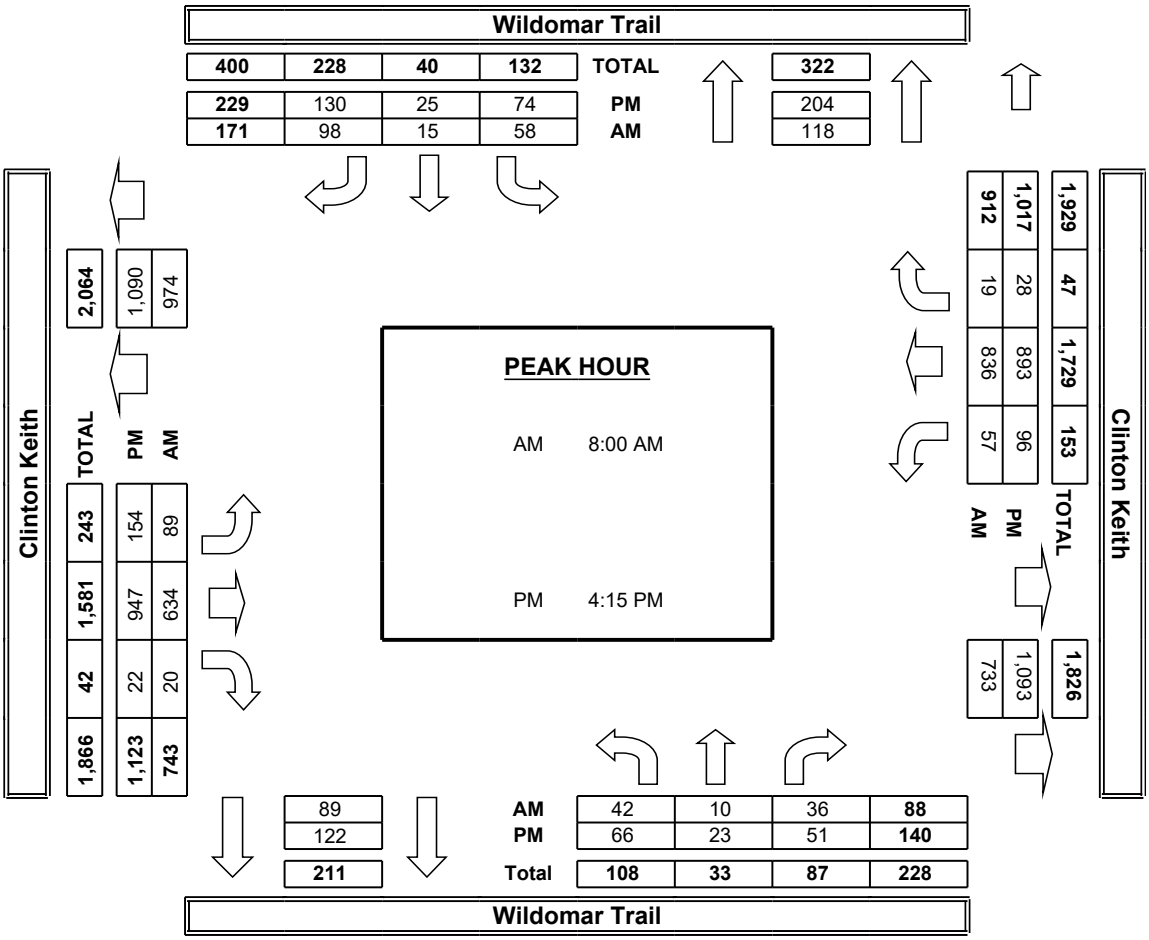
		NORTHBOUND Wildomar Trail			SOUTHBOUND Wildomar Trail			EASTBOUND Clinton Keith			WESTBOUND Clinton Keith				U-TURNS				
	LANES:	NL 1	NT 1	NR 0.5	SL 1	ST 1	SR 1	EL 1	ET 2.5	ER 0.5	WL 1	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	10	3	5	7	6	14	5	86	3	9	142	3	293	0	0	0	0	0
	7:15 AM	9	2	1	7	2	18	6	121	3	9	191	4	373	0	0	0	1	1
	7:30 AM	11	1	7	13	5	32	9	143	6	7	184	2	420	0	0	0	1	1
	7:45 AM	12	2	6	17	6	25	11	186	2	15	203	2	487	0	0	0	0	0
	8:00 AM	7	2	6	10	6	26	15	151	4	13	199	4	443	0	0	0	2	2
	8:15 AM	9	3	13	16	2	21	26	161	5	17	197	2	472	0	0	0	2	2
	8:30 AM	13	2	6	10	6	19	18	166	7	12	195	4	458	1	0	0	0	1
	8:45 AM	13	3	11	22	1	32	30	156	4	15	245	9	541	1	0	0	1	2
	VOLUMES	84	18	55	102	34	187	120	1,170	34	97	1,556	30	3,487	2	0	0	7	9
	APPROACH %	54%	11%	35%	32%	11%	58%	9%	88%	3%	6%	92%	2%						
	APP/DEPART	157	/	168	323	/	160	1,324	/	1,334	1,683	/	1,825	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	42	10	36	58	15	98	89	634	20	57	836	19	1,914					
	APPROACH %	48%	11%	41%	34%	9%	57%	12%	85%	3%	6%	92%	2%						
	PEAK HR FACTOR		0.815			0.777			0.967			0.848		0.884					
	APP/DEPART	88	/	118	171	/	89	743	/	733	912	/	974	0					
PM	4:00 PM	10	7	16	23	4	27	56	246	6	24	228	10	657	0	0	0	1	1
	4:15 PM	12	5	12	15	5	31	47	235	4	23	222	4	615	0	0	1	8	9
	4:30 PM	19	6	10	21	8	30	32	236	7	23	236	7	635	0	0	0	1	1
	4:45 PM	13	7	12	13	5	31	39	220	5	22	223	8	598	0	0	0	6	6
	5:00 PM	22	5	17	25	7	38	36	256	6	28	212	9	661	0	0	0	6	6
	5:15 PM	15	7	14	16	7	20	51	224	8	22	211	10	605	0	0	0	0	0
	5:30 PM	17	13	29	23	10	25	45	235	5	20	200	10	632	0	0	1	0	1
	5:45 PM	14	14	21	18	6	38	31	220	6	17	165	6	556	0	0	0	3	3
	VOLUMES	122	64	131	154	52	240	337	1,872	47	179	1,697	64	4,959	0	0	2	25	27
	APPROACH %	38%	20%	41%	35%	12%	54%	15%	83%	2%	9%	87%	3%						
	APP/DEPART	317	/	463	446	/	253	2,256	/	2,182	1,940	/	2,061	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	66	23	51	74	25	130	154	947	22	96	893	28	2,509					
	APPROACH %	47%	16%	36%	32%	11%	57%	14%	84%	2%	9%	88%	3%						
	PEAK HR FACTOR		0.795			0.818			0.942			0.956		0.949					
	APP/DEPART	140	/	204	229	/	122	1,123	/	1,093	1,017	/	1,090	0					



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TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

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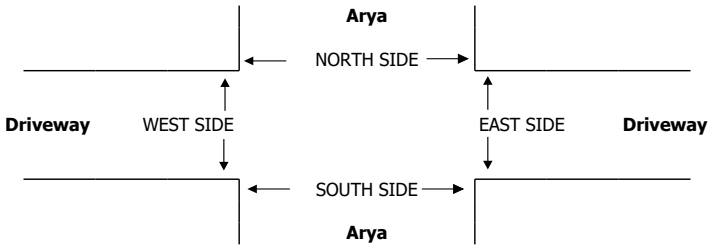
DATE:	LOCATION:	Wildomar	PROJECT #:	SC3548
Thu, Jul 28, 22	NORTH & SOUTH:	Arya	LOCATION #:	6
	EAST & WEST:	Driveway	CONTROL:	NO CONTROL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

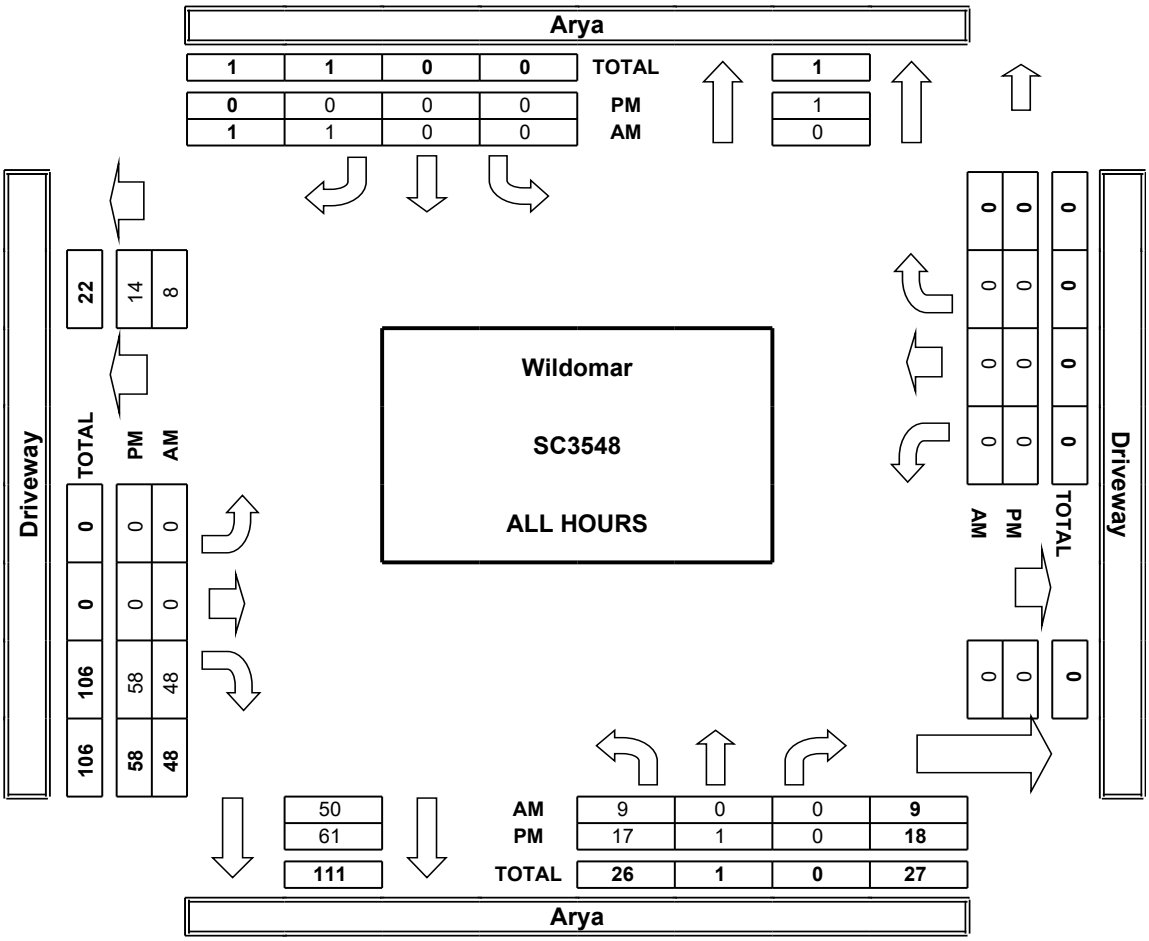
☑ Add U-Turns to Left Turns

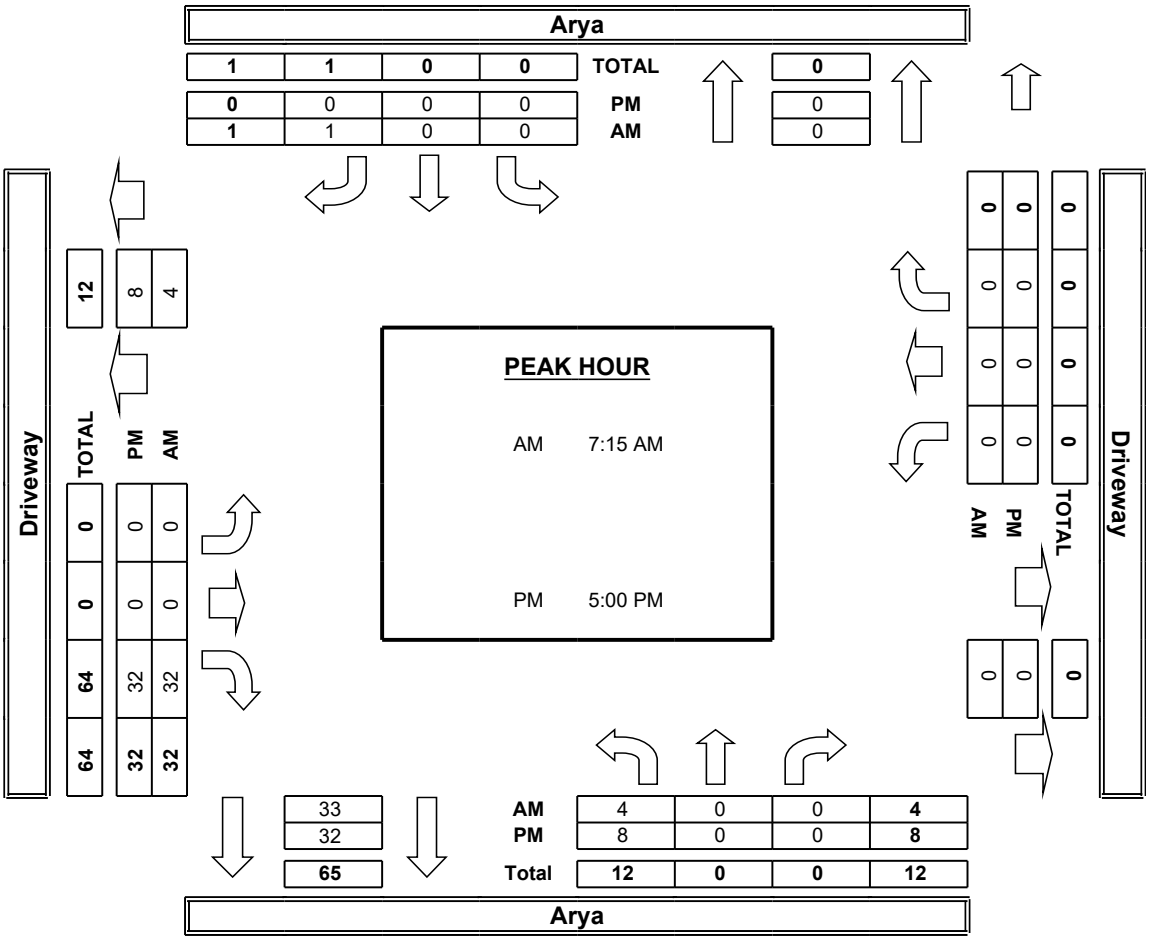
		NORTHBOUND (Arya)			SOUTHBOUND (Arya)			EASTBOUND (Driveway)			WESTBOUND (Driveway)				U-TURNS				
	LANES:	NL 1	NT 0	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 1	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	1	0	0	6	0	0	0	7	0	0	0	0	0
	7:30 AM	3	0	0	0	0	0	0	0	11	0	0	0	14	1	0	0	0	1
	7:45 AM	1	0	0	0	0	0	0	0	8	0	0	0	9	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	7	0	0	0	7	0	0	0	0	0
	8:15 AM	2	0	0	0	0	0	0	0	2	0	0	0	4	0	0	0	0	0
	8:30 AM	1	0	0	0	0	0	0	0	7	0	0	0	8	0	0	0	0	0
	8:45 AM	2	0	0	0	0	0	0	0	7	0	0	0	9	1	0	0	0	1
	VOLUMES	9	0	0	0	0	1	0	0	48	0	0	0	58	2	0	0	0	2
	APPROACH %	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%	0%	0%						
	APP/DEPART	9	/	0	1	/	50	48	/	0	0	/	8	0					
	BEGIN PEAK HR	7:15 AM																	
	VOLUMES	4	0	0	0	0	1	0	0	32	0	0	0	37					
	APPROACH %	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%	0%	0%						
	PEAK HR FACTOR	0.333			0.250			0.727			0.000			0.661					
	APP/DEPART	4	/	0	1	/	33	32	/	0	0	/	4	0					
PM	4:00 PM	2	1	0	0	0	0	0	0	7	0	0	0	10	1	0	0	0	1
	4:15 PM	4	0	0	0	0	0	0	0	5	0	0	0	9	0	0	0	0	0
	4:30 PM	1	0	0	0	0	0	0	0	8	0	0	0	9	1	0	0	0	1
	4:45 PM	2	0	0	0	0	0	0	0	6	0	0	0	8	1	0	0	0	1
	5:00 PM	2	0	0	0	0	0	0	0	6	0	0	0	8	0	0	0	0	0
	5:15 PM	1	0	0	0	0	0	0	0	6	0	0	0	7	0	0	0	0	0
	5:30 PM	1	0	0	0	0	0	0	0	10	0	0	0	11	0	0	0	0	0
	5:45 PM	4	0	0	0	0	0	0	0	10	0	0	0	14	0	0	0	0	0
	VOLUMES	17	1	0	0	0	0	0	0	58	0	0	0	76	3	0	0	0	3
	APPROACH %	94%	6%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%						
	APP/DEPART	18	/	1	0	/	61	58	/	0	0	/	14	0					
	BEGIN PEAK HR	5:00 PM																	
	VOLUMES	8	0	0	0	0	0	0	0	32	0	0	0	40					
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%						
	PEAK HR FACTOR	0.500			0.000			0.800			0.000			0.714					
	APP/DEPART	8	/	0	0	/	32	32	/	0	0	/	8	0					



AimTD LLC

TURNING MOVEMENT COUNTS





APPENDIX D

HCM ANALYSIS SHEETS

EXISTING CONDITIONS

NEC I-15 & Clinton Keith

Vistro File: C:\...\CCG22001 Base 022223.vistro
Report File: C:\...\E AM.pdf

Scenario 1 E AM
2/24/2023

Intersection Analysis Summary

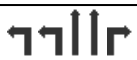
ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hidden Springs Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	SB Left	0.532	25.0	C
2	I-15 SB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Left	0.757	16.7	B
3	I-15 NB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	NB Right	0.694	12.8	B
4	Oak Creek Mall-Arya Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Left	0.476	37.3	D
5	Wildomar Trl/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	0.473	12.4	B
6	Arya Rd/Catt Rd	All-way stop	HCM 6th Edition	NB Left	0.045	6.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hidden Springs Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	25.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.532

Intersection Setup

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	54	8	124	279	40	66	65	800	35	144	543	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	54	8	124	279	40	66	65	800	35	144	543	239
Peak Hour Factor	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	2	35	78	11	18	18	223	10	40	151	67
Total Analysis Volume [veh/h]	60	9	138	311	45	74	72	892	39	161	605	266
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	36	0	22	38	0	16	26	0	11	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	24	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	R
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	7	7	18	19	6	47	47	7	48	48
g / C, Green / Cycle	0.06	0.07	0.07	0.19	0.20	0.06	0.50	0.50	0.07	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.05	0.17	0.07	0.04	0.18	0.02	0.05	0.17	0.17
s, saturation flow rate [veh/h]	1781	1619	1589	1781	1685	1781	5094	1589	3459	3560	1589
c, Capacity [veh/h]	106	118	116	338	342	114	2525	788	254	1799	803
d1, Uniform Delay [s]	43.53	42.84	42.85	37.85	32.52	43.46	14.67	12.41	42.84	14.02	13.98
k, delay calibration	0.11	0.11	0.11	0.12	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.62	5.32	5.50	11.53	0.61	5.73	0.39	0.12	2.60	0.51	1.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.63	0.63	0.92	0.35	0.63	0.35	0.05	0.63	0.34	0.33
d, Delay for Lane Group [s/veh]	48.15	48.16	48.35	49.39	33.13	49.19	15.06	12.53	45.44	14.53	15.09
Lane Group LOS	D	D	D	D	C	D	B	B	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.50	1.85	1.83	8.06	2.38	1.82	3.84	0.44	1.92	3.83	3.49
50th-Percentile Queue Length [ft/ln]	37.51	46.25	45.78	201.51	59.59	45.52	96.12	11.06	47.88	95.68	87.27
95th-Percentile Queue Length [veh/ln]	2.70	3.33	3.30	12.72	4.29	3.28	6.92	0.80	3.45	6.89	6.28
95th-Percentile Queue Length [ft/ln]	67.52	83.25	82.40	317.91	107.26	81.93	173.02	19.91	86.19	172.22	157.08

Movement, Approach, & Intersection Results

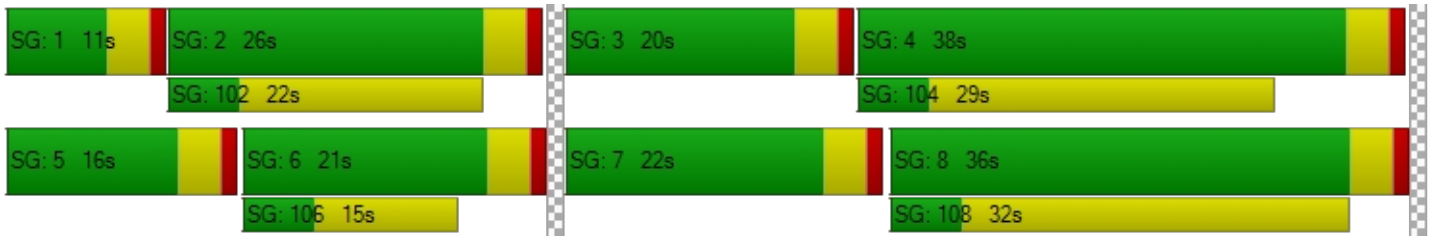
d_M, Delay for Movement [s/veh]	48.15	48.16	48.26	49.39	33.13	33.13	49.19	15.06	12.53	45.44	14.53	15.09
Movement LOS	D	D	D	D	C	C	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	48.22			44.89			17.41			19.49		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	25.02											
Intersection LOS	C											
Intersection V/C	0.532											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.97	38.97	38.97	38.97
l_p,int, Pedestrian LOS Score for Intersection	2.392	2.197	2.841	3.019
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	673	715	463	358
d_b, Bicycle Delay [s]	20.92	19.62	28.09	32.06
l_b,int, Bicycle LOS Score for Intersection	1.901	2.269	2.111	2.411
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: I-15 SB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	16.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.757

Intersection Setup

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	0	0	0	352	1	315	0	640	560	298	615	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	352	1	315	0	640	560	298	615	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8920	0.8920	0.8920	1.0000	0.8920	0.8920	0.8920	0.8920	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	99	0	88	0	179	157	84	172	0
Total Analysis Volume [veh/h]	0	0	0	395	1	353	0	717	628	334	689	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	7	7	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	40	0	0	11	0	14	25	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	31	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	R	C	R	L	C
C, Cycle Length [s]		65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		12	12	12	33	33	8	45
g / C, Green / Cycle		0.18	0.18	0.18	0.51	0.51	0.13	0.70
(v / s)_i Volume / Saturation Flow Rate		0.11	0.11	0.13	0.14	0.40	0.10	0.14
s, saturation flow rate [veh/h]		1781	1781	2813	5094	1589	3459	5094
c, Capacity [veh/h]		319	320	505	2587	807	445	3554
d1, Uniform Delay [s]		24.68	24.68	25.08	9.18	13.04	27.38	3.44
k, delay calibration		0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.96	1.96	1.77	0.27	7.28	2.58	0.12
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.62	0.62	0.70	0.28	0.78	0.75	0.19
d, Delay for Lane Group [s/veh]		26.64	26.64	26.85	9.45	20.32	29.96	3.56
Lane Group LOS		C	C	C	A	C	C	A
Critical Lane Group		No	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		2.84	2.84	2.54	1.73	7.85	2.54	0.72
50th-Percentile Queue Length [ft/ln]		70.95	70.96	63.45	43.25	196.30	63.52	18.06
95th-Percentile Queue Length [veh/ln]		5.11	5.11	4.57	3.11	12.45	4.57	1.30
95th-Percentile Queue Length [ft/ln]		127.72	127.74	114.21	77.85	311.18	114.33	32.51

Movement, Approach, & Intersection Results

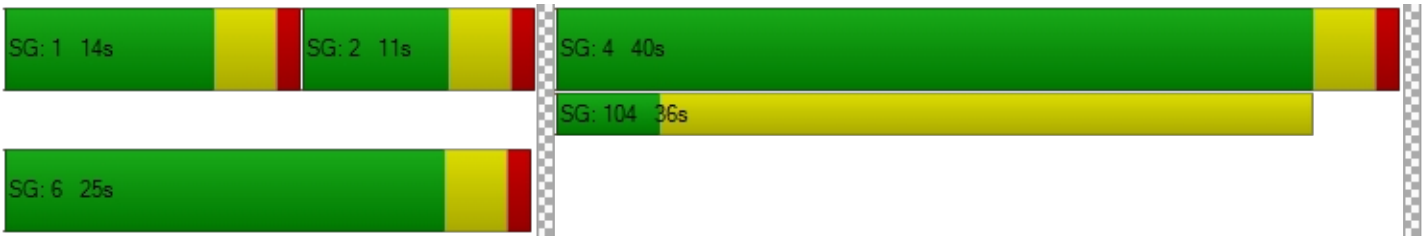
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	26.64	26.64	26.85	0.00	9.45	20.32	29.96	3.56	0.00
Movement LOS				C	C	C		A	C	C	A	
d_A, Approach Delay [s/veh]	0.00			26.74			14.53			12.18		
Approach LOS	A			C			B			B		
d_I, Intersection Delay [s/veh]	16.69											
Intersection LOS	B											
Intersection V/C	0.757											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	24.16	24.16
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.911	3.066
Crosswalk LOS	F	F	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1106	215	645
d_b, Bicycle Delay [s]	32.54	6.49	25.91	14.92
I_b,int, Bicycle LOS Score for Intersection	4.132	2.795	2.299	2.122
Bicycle LOS	D	C	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: I-15 NB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	12.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	279	3	211	0	0	0	282	706	0	0	635	472
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	279	3	211	0	0	0	282	706	0	0	635	472
Peak Hour Factor	0.9010	0.9010	0.9010	1.0000	1.0000	1.0000	0.9010	0.9010	1.0000	1.0000	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	1	59	0	0	0	78	196	0	0	176	131
Total Analysis Volume [veh/h]	310	3	234	0	0	0	313	784	0	0	705	524
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	50
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	7	7	0	0	7	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	20	0	0	0	0	11	30	0	0	19	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		L	C	C	R
C, Cycle Length [s]	50	50	50		50	50	50	50
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	8		7	34	23	23
g / C, Green / Cycle	0.16	0.16	0.16		0.14	0.68	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.11	0.11	0.11		0.09	0.15	0.14	0.33
s, saturation flow rate [veh/h]	1781	1712	1589		3459	5094	5094	1589
c, Capacity [veh/h]	292	281	261		483	3446	2329	727
d1, Uniform Delay [s]	19.65	19.65	19.65		20.43	3.11	8.58	11.03
k, delay calibration	0.11	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.49	2.59	2.79		1.47	0.15	0.34	6.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.66	0.66		0.65	0.23	0.30	0.72
d, Delay for Lane Group [s/veh]	22.13	22.24	22.44		21.90	3.26	8.92	17.14
Lane Group LOS	C	C	C		C	A	A	B
Critical Lane Group	No	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.08	2.01	1.88		1.66	0.55	1.34	4.87
50th-Percentile Queue Length [ft/ln]	52.07	50.28	47.10		41.61	13.64	33.53	121.73
95th-Percentile Queue Length [veh/ln]	3.75	3.62	3.39		3.00	0.98	2.41	8.49
95th-Percentile Queue Length [ft/ln]	93.72	90.51	84.78		74.90	24.55	60.35	212.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.18	22.24	22.40	0.00	0.00	0.00	21.90	3.26	0.00	0.00	8.92	17.14
Movement LOS	C	C	C				C	A			A	B
d_A, Approach Delay [s/veh]	22.27			0.00			8.58			12.43		
Approach LOS	C			A			A			B		
d_I, Intersection Delay [s/veh]	12.83											
Intersection LOS	B											
Intersection V/C	0.694											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	16.86	16.86	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.089	2.184	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	639	0	1038	599
d_b, Bicycle Delay [s]	11.61	25.05	5.80	12.30
l_b,int, Bicycle LOS Score for Intersection	2.462	4.132	2.163	2.236
Bicycle LOS	B	D	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Oak Creek Mall-Arya Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	37.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.476

Intersection Setup

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	157	7	50	9	1	32	46	695	157	68	883	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	157	7	50	9	1	32	46	695	157	68	883	23
Peak Hour Factor	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	2	14	3	0	9	13	194	44	19	247	6
Total Analysis Volume [veh/h]	176	8	56	10	1	36	51	777	176	76	988	26
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	21	45	0	18	42	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	0	0	10	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	60	60	60	5	22	22	6	23	23
g / C, Green / Cycle	0.60	0.60	0.60	0.05	0.22	0.22	0.06	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.19	0.04	0.04	0.03	0.18	0.18	0.04	0.19	0.19
s, saturation flow rate [veh/h]	951	1589	1056	1781	3560	1700	1781	3560	1846
c, Capacity [veh/h]	639	950	675	98	779	372	113	809	419
d1, Uniform Delay [s]	12.91	8.38	10.21	45.98	37.25	37.33	45.82	36.76	36.77
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.14	0.12	0.20	4.24	2.30	4.91	6.78	2.21	4.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.29	0.06	0.07	0.52	0.83	0.83	0.67	0.83	0.83
d, Delay for Lane Group [s/veh]	14.05	8.50	10.41	50.22	39.55	42.23	52.61	38.97	40.95
Lane Group LOS	B	A	B	D	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.64	0.51	0.44	1.34	7.64	7.64	2.05	7.88	8.41
50th-Percentile Queue Length [ft/ln]	65.95	12.77	10.92	33.59	190.91	190.92	51.28	197.12	210.30
95th-Percentile Queue Length [veh/ln]	4.75	0.92	0.79	2.42	12.17	12.17	3.69	12.49	13.17
95th-Percentile Queue Length [ft/ln]	118.71	22.98	19.66	60.46	304.21	304.23	92.31	312.25	329.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.05	14.05	8.50	10.41	10.41	10.41	50.22	40.02	42.23	52.61	39.62	40.95
Movement LOS	B	B	A	B	B	B	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	12.75			10.41			40.92			40.55		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	37.31											
Intersection LOS	D											
Intersection V/C	0.476											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.258	1.786	3.158	0.000
Crosswalk LOS	B	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	660	660	820	760
d_b, Bicycle Delay [s]	22.45	22.45	17.41	19.22
l_b,int, Bicycle LOS Score for Intersection	1.956	1.637	2.112	2.159
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Wildomar Trl/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.473

Intersection Setup

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	42	10	36	58	15	98	89	634	20	57	836	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	10	36	58	15	98	89	634	20	57	836	19
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	3	10	16	4	28	25	179	6	16	236	5
Total Analysis Volume [veh/h]	48	11	41	66	17	111	101	717	23	64	946	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	33	0	0	33	0	12	26	0	11	25	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	10	10	10	6	43	43	5	42	42
g / C, Green / Cycle	0.14	0.14	0.14	0.14	0.14	0.09	0.62	0.62	0.07	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.04	0.03	0.05	0.01	0.07	0.06	0.14	0.14	0.04	0.27	0.01
s, saturation flow rate [veh/h]	1262	1642	1352	1870	1589	1781	3560	1840	1781	3560	1589
c, Capacity [veh/h]	225	225	206	256	218	154	2207	1141	128	2155	962
d1, Uniform Delay [s]	29.70	26.92	31.42	26.31	28.03	30.99	5.86	5.86	31.30	7.43	5.53
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.47	0.52	0.89	0.11	1.84	4.69	0.23	0.45	3.03	0.65	0.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	0.23	0.32	0.07	0.51	0.66	0.22	0.22	0.50	0.44	0.02
d, Delay for Lane Group [s/veh]	30.17	27.44	32.30	26.42	29.86	35.68	6.09	6.31	34.33	8.09	5.57
Lane Group LOS	C	C	C	C	C	D	A	A	C	A	A
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.76	0.78	1.10	0.25	1.77	1.79	1.35	1.47	1.11	3.30	0.11
50th-Percentile Queue Length [ft/ln]	19.02	19.43	27.39	6.14	44.17	44.87	33.75	36.72	27.87	82.45	2.84
95th-Percentile Queue Length [veh/ln]	1.37	1.40	1.97	0.44	3.18	3.23	2.43	2.64	2.01	5.94	0.20
95th-Percentile Queue Length [ft/ln]	34.23	34.98	49.30	11.05	79.50	80.76	60.74	66.09	50.16	148.42	5.12

Movement, Approach, & Intersection Results

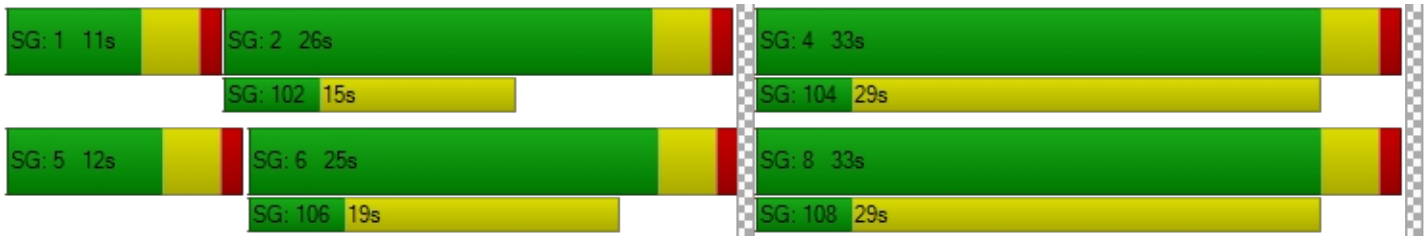
d_M, Delay for Movement [s/veh]	30.17	27.44	27.44	32.30	26.42	29.86	35.68	6.16	6.31	34.33	8.09	5.57
Movement LOS	C	C	C	C	C	C	D	A	A	C	A	A
d_A, Approach Delay [s/veh]	28.75			30.39			9.71			9.66		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	12.42											
Intersection LOS	B											
Intersection V/C	0.473											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.59	26.59	26.59	26.59
l_p,int, Pedestrian LOS Score for Intersection	1.995	2.200	2.922	2.935
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	828	828	628	600
d_b, Bicycle Delay [s]	12.01	12.01	16.46	17.16
l_b,int, Bicycle LOS Score for Intersection	1.725	1.880	2.022	2.410
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Arya Rd/Catt Rd

Control Type:	All-way stop	Delay (sec / veh):	6.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.045

Intersection Setup

Name	Arya Road		Arya Road		Catt Road	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Arya Road		Arya Road		Catt Road	
Base Volume Input [veh/h]	4	0	0	1	0	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	0	1	0	32
Peak Hour Factor	0.6610	0.6610	0.6610	0.6610	0.6610	0.6610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	0	0	0	12
Total Analysis Volume [veh/h]	6	0	0	2	0	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	852	1050	1074
Degree of Utilization, x	0.01	0.00	0.04

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.02	0.01	0.14
95th-Percentile Queue Length [ft]	0.53	0.14	3.50
Approach Delay [s/veh]	7.25	6.43	6.51
Approach LOS	A	A	A
Intersection Delay [s/veh]	6.59		
Intersection LOS	A		

NEC I-15 & Clinton Keith

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Report File: C:\...\E PM.pdf

Scenario 2 E PM
2/24/2023

Intersection Analysis Summary

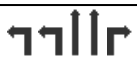
ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hidden Springs Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	SB Left	0.736	31.1	C
2	I-15 SB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Left	0.598	14.2	B
3	I-15 NB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Right	0.813	16.0	B
4	Oak Creek Mall-Arya Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	NB Left	1.406	61.4	E
5	Wildomar Trl/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	0.572	14.9	B
6	Arya Rd/Catt Rd	All-way stop	HCM 6th Edition	NB Left	0.042	6.7	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hidden Springs Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	31.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.736

Intersection Setup

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	125	50	198	319	51	127	94	781	47	208	795	430
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	125	50	198	319	51	127	94	781	47	208	795	430
Peak Hour Factor	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	13	52	84	13	34	25	207	12	55	210	114
Total Analysis Volume [veh/h]	132	53	210	338	54	134	99	826	50	220	841	455
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	25	36	0	22	33	0	11	26	0	11	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	24	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	R
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	10	10	18	19	7	44	44	7	44	44
g / C, Green / Cycle	0.09	0.11	0.11	0.19	0.20	0.07	0.46	0.46	0.07	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.07	0.08	0.08	0.19	0.11	0.06	0.16	0.03	0.06	0.24	0.29
s, saturation flow rate [veh/h]	1781	1689	1589	1781	1661	1781	5094	1589	3459	3560	1589
c, Capacity [veh/h]	167	180	170	338	336	127	2348	733	258	1652	738
d1, Uniform Delay [s]	42.19	41.27	41.28	38.56	34.13	43.44	16.50	14.27	43.52	17.89	19.15
k, delay calibration	0.11	0.11	0.11	0.16	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.03	6.17	6.58	27.75	1.46	9.79	0.42	0.18	7.87	1.12	3.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.75	0.75	1.00	0.56	0.78	0.35	0.07	0.85	0.51	0.62
d, Delay for Lane Group [s/veh]	50.22	47.45	47.86	66.31	35.58	53.23	16.91	14.45	51.39	19.01	22.99
Lane Group LOS	D	D	D	F	D	D	B	B	D	B	C
Critical Lane Group	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.38	3.36	3.19	10.32	3.99	2.62	3.81	0.62	2.82	6.45	7.96
50th-Percentile Queue Length [ft/ln]	84.39	83.95	79.65	258.07	99.75	65.40	95.34	15.54	70.39	161.20	198.88
95th-Percentile Queue Length [veh/ln]	6.08	6.04	5.73	15.60	7.18	4.71	6.86	1.12	5.07	10.61	12.58
95th-Percentile Queue Length [ft/ln]	151.90	151.11	143.37	389.95	179.55	117.71	171.61	27.97	126.70	265.31	314.52

Movement, Approach, & Intersection Results

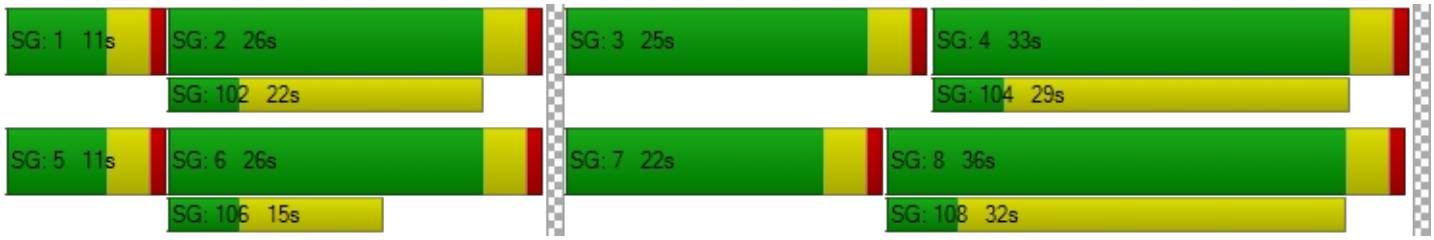
d_M, Delay for Movement [s/veh]	50.22	47.45	47.70	66.31	35.58	35.58	53.23	16.91	14.45	51.39	19.01	22.99
Movement LOS	D	D	D	F	D	D	D	B	B	D	B	C
d_A, Approach Delay [s/veh]	48.51			55.33			20.48			24.91		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	31.06											
Intersection LOS	C											
Intersection V/C	0.736											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.97	38.97	38.97	38.97
l_p,int, Pedestrian LOS Score for Intersection	2.444	2.313	2.888	3.082
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	673	610	463	463
d_b, Bicycle Delay [s]	20.92	22.96	28.09	28.09
l_b,int, Bicycle LOS Score for Intersection	2.211	2.428	2.096	2.810
Bicycle LOS	B	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: I-15 SB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	14.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.598

Intersection Setup

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	0	0	0	489	1	388	0	860	439	218	1057	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	489	1	388	0	860	439	218	1057	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9770	0.9770	0.9770	1.0000	0.9770	0.9770	0.9770	0.9770	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	125	0	99	0	220	112	56	270	0
Total Analysis Volume [veh/h]	0	0	0	501	1	397	0	880	449	223	1082	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	7	7	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	42	0	0	11	0	12	23	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	31	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	R	C	R	L	C
C, Cycle Length [s]		65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		13	13	13	33	33	7	44
g / C, Green / Cycle		0.20	0.20	0.20	0.51	0.51	0.11	0.68
(v / s)_i Volume / Saturation Flow Rate		0.14	0.14	0.14	0.17	0.28	0.06	0.21
s, saturation flow rate [veh/h]		1781	1781	2813	5094	1589	3459	5094
c, Capacity [veh/h]		356	356	563	2591	809	370	3449
d1, Uniform Delay [s]		24.26	24.26	24.27	9.50	10.96	27.76	4.31
k, delay calibration		0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2.55	2.55	1.63	0.36	2.74	1.58	0.24
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.70	0.70	0.71	0.34	0.56	0.60	0.31
d, Delay for Lane Group [s/veh]		26.82	26.81	25.90	9.86	13.70	29.34	4.55
Lane Group LOS		C	C	C	A	B	C	A
Critical Lane Group		No	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		3.64	3.64	2.81	2.20	4.36	1.66	1.42
50th-Percentile Queue Length [ft/ln]		90.95	90.95	70.14	55.12	108.90	41.56	35.59
95th-Percentile Queue Length [veh/ln]		6.55	6.55	5.05	3.97	7.78	2.99	2.56
95th-Percentile Queue Length [ft/ln]		163.72	163.72	126.26	99.22	194.47	74.81	64.06

Movement, Approach, & Intersection Results

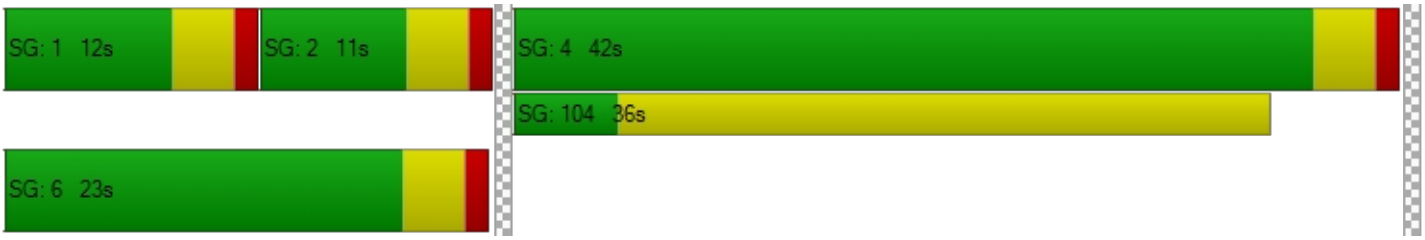
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	26.82	26.81	25.90	0.00	9.86	13.70	29.34	4.55	0.00
Movement LOS				C	C	C		A	B	C	A	
d_A, Approach Delay [s/veh]	0.00			26.41			11.16			8.79		
Approach LOS	A			C			B			A		
d_I, Intersection Delay [s/veh]	14.16											
Intersection LOS	B											
Intersection V/C	0.598											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	24.16	24.16
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.970	3.125
Crosswalk LOS	F	F	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1168	215	584
d_b, Bicycle Delay [s]	32.54	5.63	25.91	16.31
l_b,int, Bicycle LOS Score for Intersection	4.132	3.043	2.291	2.277
Bicycle LOS	D	C	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: I-15 NB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	16.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.813

Intersection Setup

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	513	3	330	0	0	0	326	1024	0	0	750	563
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	513	3	330	0	0	0	326	1024	0	0	750	563
Peak Hour Factor	0.9750	0.9750	0.9750	1.0000	1.0000	1.0000	0.9750	0.9750	1.0000	1.0000	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	132	1	85	0	0	0	84	263	0	0	192	144
Total Analysis Volume [veh/h]	526	3	338	0	0	0	334	1050	0	0	769	577
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	55
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	7	7	0	0	7	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	17	0	0	0	0	12	38	0	0	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		L	C	C	R
C, Cycle Length [s]	55	55	55		55	55	55	55
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12		7	35	24	24
g / C, Green / Cycle	0.22	0.22	0.22		0.13	0.64	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.17	0.17	0.18		0.10	0.21	0.15	0.36
s, saturation flow rate [veh/h]	1781	1741	1589		3459	5094	5094	1589
c, Capacity [veh/h]	386	378	345		458	3251	2207	689
d1, Uniform Delay [s]	20.27	20.33	20.55		22.99	4.55	10.44	13.92
k, delay calibration	0.11	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.13	3.39	4.70		2.24	0.26	0.44	11.66
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.77	0.81		0.73	0.32	0.35	0.84
d, Delay for Lane Group [s/veh]	23.41	23.72	25.25		25.23	4.82	10.88	25.58
Lane Group LOS	C	C	C		C	A	B	C
Critical Lane Group	No	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.55	3.55	3.56		2.07	1.24	1.83	7.45
50th-Percentile Queue Length [ft/ln]	88.77	88.73	88.98		51.66	31.12	45.75	186.34
95th-Percentile Queue Length [veh/ln]	6.39	6.39	6.41		3.72	2.24	3.29	11.93
95th-Percentile Queue Length [ft/ln]	159.79	159.71	160.16		92.99	56.02	82.35	298.27

Movement, Approach, & Intersection Results

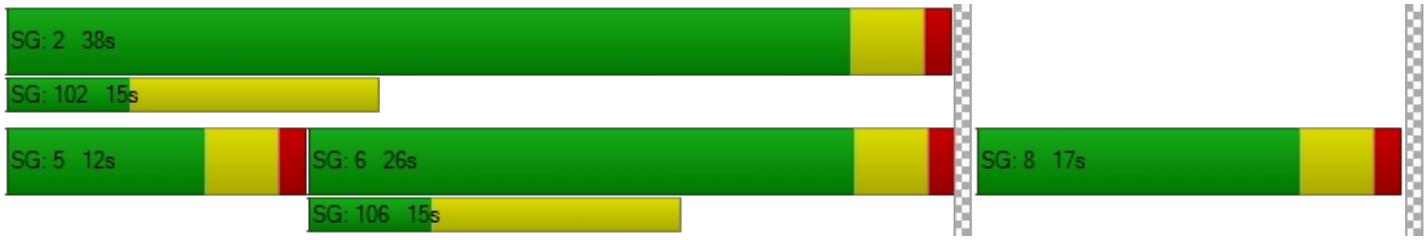
d_M, Delay for Movement [s/veh]	23.55	23.72	25.02	0.00	0.00	0.00	25.23	4.82	0.00	0.00	10.88	25.58
Movement LOS	C	C	C				C	A			B	C
d_A, Approach Delay [s/veh]	24.11			0.00			9.74			17.18		
Approach LOS	C			A			A			B		
d_I, Intersection Delay [s/veh]	15.99											
Intersection LOS	B											
Intersection V/C	0.813											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.28	19.28	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.198	2.213	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	472	0	1234	799
d_b, Bicycle Delay [s]	16.08	27.55	4.04	9.94
l_b,int, Bicycle LOS Score for Intersection	2.990	4.132	2.321	2.300
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Oak Creek Mall-Arya Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	61.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.406

Intersection Setup

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	257	3	94	7	3	43	52	1034	257	76	990	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	257	3	94	7	3	43	52	1034	257	76	990	24
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	1	24	2	1	11	13	268	67	20	256	6
Total Analysis Volume [veh/h]	266	3	97	7	3	45	54	1070	266	79	1025	25
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	47	0	0	47	0	11	22	0	11	22	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	11	0	0	2	0	0	9	0
Pedestrian Clearance [s]	0	10	0	0	24	0	0	14	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	43	43	43	5	19	19	6	20	20
g / C, Green / Cycle	0.54	0.54	0.54	0.06	0.24	0.24	0.07	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.90	0.06	0.11	0.03	0.25	0.25	0.04	0.19	0.19
s, saturation flow rate [veh/h]	300	1589	494	1781	3560	1686	1781	3560	1847
c, Capacity [veh/h]	250	852	316	109	860	407	129	900	467
d1, Uniform Delay [s]	26.18	9.17	14.50	36.36	30.34	30.34	36.02	27.72	27.72
k, delay calibration	0.50	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	77.86	0.06	0.26	3.46	46.07	59.74	4.65	6.25	11.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.07	0.11	0.17	0.50	1.05	1.05	0.61	0.77	0.77
d, Delay for Lane Group [s/veh]	104.04	9.23	14.76	39.82	76.41	90.08	40.67	33.97	39.25
Lane Group LOS	F	A	B	D	F	F	D	C	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.26	0.78	0.48	1.11	13.43	14.26	1.63	6.67	7.61
50th-Percentile Queue Length [ft/ln]	256.53	19.48	12.02	27.65	335.72	356.54	40.81	166.81	190.32
95th-Percentile Queue Length [veh/ln]	16.29	1.40	0.87	1.99	20.02	21.08	2.94	10.91	12.14
95th-Percentile Queue Length [ft/ln]	407.26	35.07	21.63	49.77	500.60	526.98	73.45	272.71	303.44

Movement, Approach, & Intersection Results

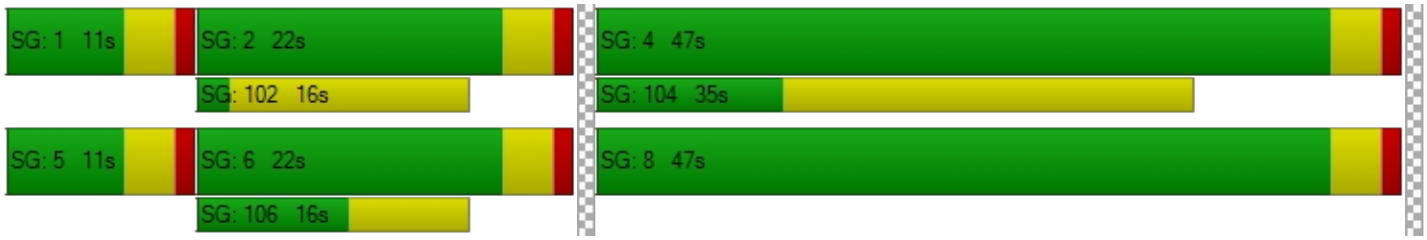
d_M, Delay for Movement [s/veh]	104.04	104.04	9.23	14.76	14.76	14.76	39.82	78.49	90.08	40.67	35.69	39.25
Movement LOS	F	F	A	B	B	B	D	E	F	D	D	D
d_A, Approach Delay [s/veh]	78.91			14.76			79.21			36.12		
Approach LOS	E			B			E			D		
d_I, Intersection Delay [s/veh]	61.42											
Intersection LOS	E											
Intersection V/C	1.406											

Other Modes

g_Walk,mi, Effective Walk Time [s]	6.0	13.0	15.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.23	28.06	26.41	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.304	1.773	3.341	0.000
Crosswalk LOS	B	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1075	1075	450	450
d_b, Bicycle Delay [s]	8.56	8.56	24.03	24.03
l_b,int, Bicycle LOS Score for Intersection	2.164	1.650	2.324	2.181
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Wildomar Trl/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.572

Intersection Setup

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	66	23	51	74	25	130	154	947	22	96	893	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	23	51	74	25	130	154	947	22	96	893	28
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	6	13	19	7	34	41	249	6	25	235	7
Total Analysis Volume [veh/h]	70	24	54	78	26	137	162	998	23	101	941	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	33	0	0	33	0	14	26	0	11	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	12	12	8	40	40	6	39	39
g / C, Green / Cycle	0.17	0.17	0.17	0.17	0.17	0.11	0.58	0.58	0.09	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.06	0.05	0.06	0.01	0.09	0.09	0.19	0.19	0.06	0.26	0.02
s, saturation flow rate [veh/h]	1223	1666	1321	1870	1589	1781	3560	1848	1781	3560	1589
c, Capacity [veh/h]	250	275	223	308	262	202	2056	1068	154	1960	875
d1, Uniform Delay [s]	28.75	25.63	30.77	24.77	26.73	30.27	7.70	7.70	30.99	9.62	7.21
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.61	0.56	0.94	0.12	1.62	7.20	0.42	0.82	4.69	0.85	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.28	0.35	0.08	0.52	0.80	0.33	0.33	0.66	0.48	0.03
d, Delay for Lane Group [s/veh]	29.36	26.19	31.71	24.89	28.35	37.47	8.13	8.52	35.68	10.46	7.29
Lane Group LOS	C	C	C	C	C	D	A	A	D	B	A
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.10	1.14	1.28	0.36	2.12	2.96	2.33	2.54	1.79	3.98	0.20
50th-Percentile Queue Length [ft/ln]	27.44	28.38	32.10	9.05	52.97	74.08	58.33	63.51	44.87	99.57	4.93
95th-Percentile Queue Length [veh/ln]	1.98	2.04	2.31	0.65	3.81	5.33	4.20	4.57	3.23	7.17	0.35
95th-Percentile Queue Length [ft/ln]	49.39	51.08	57.79	16.29	95.35	133.35	104.99	114.31	80.76	179.23	8.87

Movement, Approach, & Intersection Results

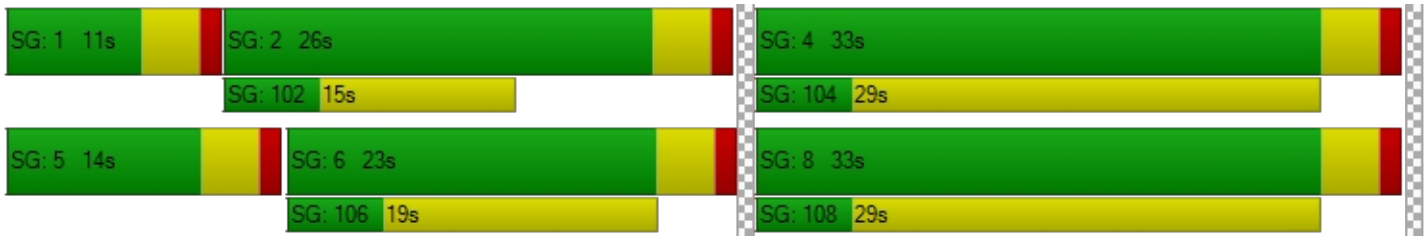
d_M, Delay for Movement [s/veh]	29.36	26.19	26.19	31.71	24.89	28.35	37.47	8.26	8.52	35.68	10.46	7.29
Movement LOS	C	C	C	C	C	C	D	A	A	D	B	A
d_A, Approach Delay [s/veh]	27.69			29.07			12.26			12.75		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	14.86											
Intersection LOS	B											
Intersection V/C	0.572											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.59	26.59	26.59	26.59
l_p,int, Pedestrian LOS Score for Intersection	2.026	2.231	3.007	3.000
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	828	828	628	543
d_b, Bicycle Delay [s]	12.01	12.01	16.46	18.59
l_b,int, Bicycle LOS Score for Intersection	1.804	1.957	2.210	2.444
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Arya Rd/Catt Rd

Control Type:	All-way stop	Delay (sec / veh):	6.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	Arya Road		Arya Road		Catt Road	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Arya Road		Arya Road		Catt Road	
Base Volume Input [veh/h]	8	0	0	0	0	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	0	0	0	0	32
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	0	0	0	11
Total Analysis Volume [veh/h]	11	0	0	0	0	45
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	854	894	1072
Degree of Utilization, x	0.01	0.00	0.04

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.04	0.00	0.13
95th-Percentile Queue Length [ft]	0.98	0.00	3.28
Approach Delay [s/veh]	7.27	0.00	6.51
Approach LOS	A	A	A
Intersection Delay [s/veh]	6.66		
Intersection LOS	A		

OPENING YEAR PLUS PROJECT CONDITIONS

NEC I-15 & Clinton Keith

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Report File: C:\...\EAP AM.pdf

Scenario 3 EAP AM
2/24/2023

Intersection Analysis Summary

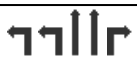
ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hidden Springs Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	SB Left	0.556	26.2	C
2	I-15 SB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Left	0.791	17.5	B
3	I-15 NB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	NB Right	0.731	13.4	B
4	Oak Creek Mall-Arya Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Left	0.509	39.0	D
5	Wildomar Trl/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	0.536	12.7	B
6	Arya Rd/Catt Rd	All-way stop	HCM 6th Edition	NB Left	0.087	7.1	A
7	Project Dwy/Catt Road	Two-way stop	HCM 6th Edition	NB Right	0.026	8.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hidden Springs Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	26.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.556

Intersection Setup

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	54	8	124	279	40	66	65	800	35	144	543	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	0	0	5	0	0	4	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	8	129	292	42	69	68	837	36	150	569	250
Peak Hour Factor	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	2	36	81	12	19	19	233	10	42	159	70
Total Analysis Volume [veh/h]	62	9	144	326	47	77	76	933	40	167	634	279
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	36	0	22	45	0	15	26	0	11	22	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	24	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	R
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	7	7	18	19	6	47	47	7	48	48
g / C, Green / Cycle	0.06	0.07	0.07	0.19	0.20	0.06	0.50	0.50	0.07	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.05	0.18	0.07	0.04	0.18	0.03	0.05	0.18	0.18
s, saturation flow rate [veh/h]	1781	1618	1589	1781	1685	1781	5094	1589	3459	3560	1589
c, Capacity [veh/h]	108	119	116	338	341	116	2523	787	255	1795	801
d1, Uniform Delay [s]	43.51	42.90	42.91	38.25	32.67	43.46	14.84	12.43	42.90	14.24	14.19
k, delay calibration	0.11	0.11	0.11	0.14	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.77	5.86	6.04	19.05	0.65	6.22	0.42	0.12	2.85	0.55	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.65	0.65	0.97	0.36	0.66	0.37	0.05	0.66	0.35	0.35
d, Delay for Lane Group [s/veh]	48.28	48.76	48.95	57.29	33.32	49.69	15.26	12.56	45.75	14.78	15.39
Lane Group LOS	D	D	D	E	C	D	B	B	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.55	1.94	1.92	9.18	2.49	1.93	4.07	0.45	2.00	4.07	3.71
50th-Percentile Queue Length [ft/ln]	38.81	48.48	48.00	229.44	62.37	48.31	101.67	11.36	49.89	101.65	92.86
95th-Percentile Queue Length [veh/ln]	2.79	3.49	3.46	14.15	4.49	3.48	7.32	0.82	3.59	7.32	6.69
95th-Percentile Queue Length [ft/ln]	69.86	87.26	86.40	353.65	112.27	86.96	183.00	20.45	89.80	182.98	167.14

Movement, Approach, & Intersection Results

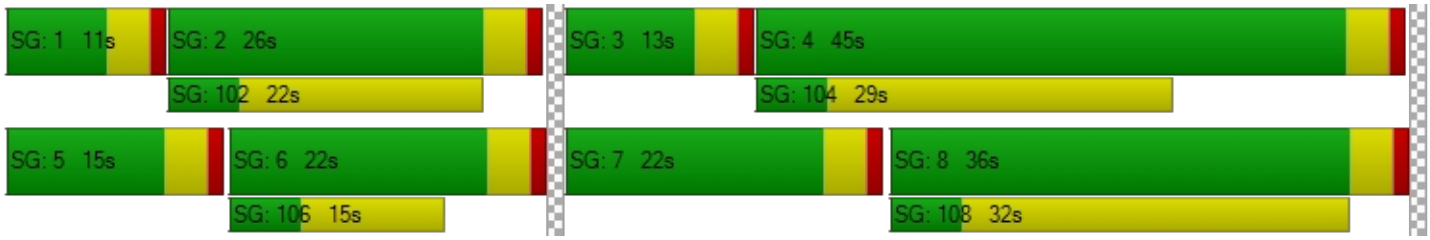
d_M, Delay for Movement [s/veh]	48.28	48.76	48.86	57.29	33.32	33.32	49.69	15.26	12.56	45.75	14.78	15.39
Movement LOS	D	D	D	E	C	C	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	48.69			50.69			17.65			19.73		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	26.16											
Intersection LOS	C											
Intersection V/C	0.556											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.97	38.97	38.97	38.97
l_p,int, Pedestrian LOS Score for Intersection	2.395	2.209	2.852	3.032
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	673	862	463	379
d_b, Bicycle Delay [s]	20.92	15.38	28.09	31.24
l_b,int, Bicycle LOS Score for Intersection	1.914	2.302	2.137	2.451
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: I-15 SB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.791

Intersection Setup

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	0	0	0	352	1	315	0	640	560	298	615	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0404	1.0404	1.0404	1.0000	1.0404	1.0404	1.0404	1.0404	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	8	0	0	0	7	0	7	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	374	1	328	0	673	583	317	645	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8920	0.8920	0.8920	1.0000	0.8920	0.8920	0.8920	0.8920	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	105	0	92	0	189	163	89	181	0
Total Analysis Volume [veh/h]	0	0	0	419	1	368	0	754	654	355	723	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	7	7	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	40	0	0	11	0	14	25	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	31	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	R	C	R	L	C
C, Cycle Length [s]		65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		12	12	12	32	32	9	45
g / C, Green / Cycle		0.19	0.19	0.19	0.50	0.50	0.13	0.69
(v / s)_i Volume / Saturation Flow Rate		0.12	0.12	0.13	0.15	0.41	0.10	0.14
s, saturation flow rate [veh/h]		1781	1781	2813	5094	1589	3459	5094
c, Capacity [veh/h]		331	331	523	2525	788	464	3521
d1, Uniform Delay [s]		24.47	24.47	24.83	9.72	14.07	27.21	3.62
k, delay calibration		0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2.01	2.01	1.74	0.30	9.88	2.66	0.13
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.63	0.63	0.70	0.30	0.83	0.77	0.21
d, Delay for Lane Group [s/veh]		26.48	26.48	26.58	10.03	23.95	29.88	3.75
Lane Group LOS		C	C	C	B	C	C	A
Critical Lane Group		No	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		3.00	3.00	2.63	1.90	9.06	2.70	0.80
50th-Percentile Queue Length [ft/ln]		75.10	75.11	65.84	47.57	226.58	67.49	19.94
95th-Percentile Queue Length [veh/ln]		5.41	5.41	4.74	3.43	14.00	4.86	1.44
95th-Percentile Queue Length [ft/ln]		135.19	135.20	118.51	85.63	350.01	121.47	35.90

Movement, Approach, & Intersection Results

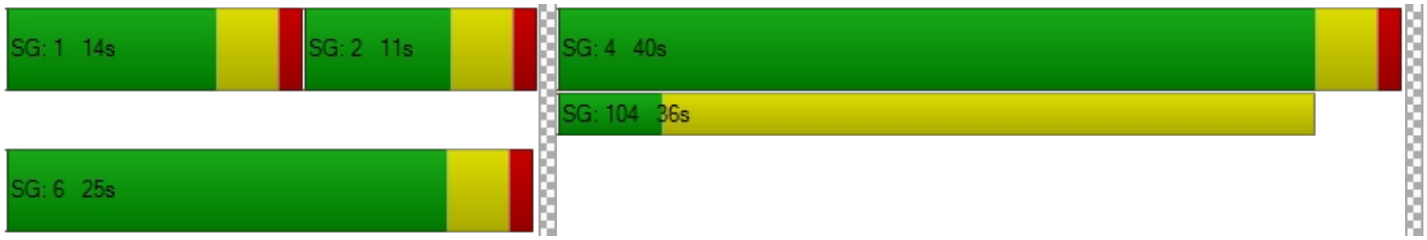
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	26.48	26.48	26.58	0.00	10.03	23.95	29.88	3.75	0.00
Movement LOS				C	C	C		B	C	C	A	
d_A, Approach Delay [s/veh]	0.00			26.53			16.50			12.35		
Approach LOS	A			C			B			B		
d_I, Intersection Delay [s/veh]	17.55											
Intersection LOS	B											
Intersection V/C	0.791											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	24.16	24.16
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.927	3.078
Crosswalk LOS	F	F	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1106	215	645
d_b, Bicycle Delay [s]	32.54	6.49	25.91	14.92
l_b,int, Bicycle LOS Score for Intersection	4.132	2.860	2.334	2.153
Bicycle LOS	D	C	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: I-15 NB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	13.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.731

Intersection Setup

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	279	3	211	0	0	0	282	706	0	0	635	472
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0000	1.0000	1.0000	1.0404	1.0404	1.0000	1.0000	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	0	0	0	0	15	0	0	12	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	290	3	228	0	0	0	293	750	0	0	673	498
Peak Hour Factor	0.9010	0.9010	0.9010	1.0000	1.0000	1.0000	0.9010	0.9010	1.0000	1.0000	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	1	63	0	0	0	81	208	0	0	187	138
Total Analysis Volume [veh/h]	322	3	253	0	0	0	325	832	0	0	747	553
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	50
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	7	7	0	0	7	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	20	0	0	0	0	11	30	0	0	19	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		L	C	C	R
C, Cycle Length [s]	50	50	50		50	50	50	50
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	9		7	34	23	23
g / C, Green / Cycle	0.17	0.17	0.17		0.14	0.67	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.11	0.11	0.11		0.09	0.16	0.15	0.35
s, saturation flow rate [veh/h]	1781	1706	1589		3459	5094	5094	1589
c, Capacity [veh/h]	305	292	272		484	3410	2292	715
d1, Uniform Delay [s]	19.46	19.46	19.46		20.50	3.28	8.90	11.65
k, delay calibration	0.11	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.48	2.60	2.81		1.63	0.17	0.38	7.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.67	0.67		0.67	0.24	0.33	0.77
d, Delay for Lane Group [s/veh]	21.94	22.06	22.27		22.13	3.45	9.28	19.61
Lane Group LOS	C	C	C		C	A	A	B
Critical Lane Group	No	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.19	2.11	1.99		1.74	0.62	1.47	5.61
50th-Percentile Queue Length [ft/ln]	54.74	52.76	49.65		43.52	15.47	36.68	140.29
95th-Percentile Queue Length [veh/ln]	3.94	3.80	3.57		3.13	1.11	2.64	9.50
95th-Percentile Queue Length [ft/ln]	98.53	94.97	89.36		78.34	27.84	66.02	237.42

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.99	22.06	22.22	0.00	0.00	0.00	22.13	3.45	0.00	0.00	9.28	19.61
Movement LOS	C	C	C				C	A			A	B
d_A, Approach Delay [s/veh]	22.08			0.00			8.69			13.67		
Approach LOS	C			A			A			B		
d_I, Intersection Delay [s/veh]	13.38											
Intersection LOS	B											
Intersection V/C	0.731											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	16.86	16.86	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.099	2.197	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	639	0	1038	599
d_b, Bicycle Delay [s]	11.61	25.05	5.80	12.30
l_b,int, Bicycle LOS Score for Intersection	2.513	4.132	2.196	2.275
Bicycle LOS	B	D	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Oak Creek Mall-Arya Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	39.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.509

Intersection Setup

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	157	7	50	9	1	32	46	695	157	68	883	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	9	0	19	23	0	0	0	0	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	7	52	18	1	52	71	723	163	71	919	33
Peak Hour Factor	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	2	15	5	0	15	20	202	46	20	257	9
Total Analysis Volume [veh/h]	182	8	58	20	1	58	79	809	182	79	1028	37
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	15	0	12	32	0	12	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	7	0	0	14	0	0	10	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	59	59	59	6	22	22	6	22	22
g / C, Green / Cycle	0.59	0.59	0.59	0.06	0.22	0.22	0.06	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.21	0.04	0.08	0.04	0.19	0.19	0.04	0.20	0.20
s, saturation flow rate [veh/h]	921	1589	1020	1781	3560	1700	1781	3560	1837
c, Capacity [veh/h]	616	941	445	114	798	381	114	798	412
d1, Uniform Delay [s]	12.85	8.65	10.85	45.84	37.07	37.13	45.84	37.50	37.51
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.12	0.11	0.11	0.20
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.30	0.13	0.87	7.29	2.45	5.83	7.29	3.36	10.75
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.06	0.18	0.69	0.84	0.84	0.69	0.88	0.88
d, Delay for Lane Group [s/veh]	14.15	8.77	11.72	53.13	39.52	42.96	53.13	40.86	48.25
Lane Group LOS	B	A	B	D	D	D	D	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.70	0.54	0.81	2.14	7.96	8.02	2.14	8.54	9.66
50th-Percentile Queue Length [ft/ln]	67.55	13.52	20.18	53.60	199.08	200.56	53.60	213.44	241.56
95th-Percentile Queue Length [veh/ln]	4.86	0.97	1.45	3.86	12.59	12.67	3.86	13.33	14.76
95th-Percentile Queue Length [ft/ln]	121.60	24.33	36.33	96.48	314.78	316.69	96.48	333.24	369.01

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.15	14.15	8.77	11.72	11.72	11.72	53.13	40.11	42.96	53.13	43.20	48.25
Movement LOS	B	B	A	B	B	B	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	12.89			11.72			41.56			44.05		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	38.95											
Intersection LOS	D											
Intersection V/C	0.509											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	4.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	46.08	41.41	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.262	1.825	3.185	0.000
Crosswalk LOS	B	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	220	560	140
d_b, Bicycle Delay [s]	40.50	39.61	25.92	43.25
l_b,int, Bicycle LOS Score for Intersection	1.969	1.690	2.148	2.189
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Wildomar Trl/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	12.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.536

Intersection Setup

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	42	10	36	58	15	98	89	634	20	57	836	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	3	3	3	3	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	10	37	60	16	105	96	663	24	59	873	20
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	3	10	17	5	30	27	188	7	17	247	6
Total Analysis Volume [veh/h]	53	11	42	68	18	119	109	750	27	67	988	23
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	33	0	0	33	0	12	26	0	11	25	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	10	10	10	6	43	43	5	42	42
g / C, Green / Cycle	0.14	0.14	0.14	0.14	0.14	0.09	0.61	0.61	0.07	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.04	0.03	0.05	0.01	0.07	0.06	0.14	0.14	0.04	0.28	0.01
s, saturation flow rate [veh/h]	1252	1641	1351	1870	1589	1781	3560	1837	1781	3560	1589
c, Capacity [veh/h]	227	229	209	261	222	157	2192	1131	130	2138	955
d1, Uniform Delay [s]	29.69	26.78	31.32	26.16	28.01	31.00	6.04	6.05	31.25	7.73	5.67
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.52	0.51	0.90	0.11	2.00	5.36	0.25	0.49	3.10	0.72	0.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.23	0.23	0.33	0.07	0.54	0.69	0.23	0.23	0.51	0.46	0.02
d, Delay for Lane Group [s/veh]	30.21	27.29	32.21	26.27	30.01	36.35	6.29	6.53	34.35	8.46	5.72
Lane Group LOS	C	C	C	C	C	D	A	A	C	A	A
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.84	0.79	1.13	0.26	1.90	1.96	1.46	1.58	1.17	3.57	0.13
50th-Percentile Queue Length [ft/ln]	21.04	19.73	28.18	6.48	47.53	48.96	36.41	39.54	29.17	89.28	3.17
95th-Percentile Queue Length [veh/ln]	1.51	1.42	2.03	0.47	3.42	3.52	2.62	2.85	2.10	6.43	0.23
95th-Percentile Queue Length [ft/ln]	37.87	35.52	50.72	11.66	85.55	88.12	65.54	71.17	52.50	160.70	5.71

Movement, Approach, & Intersection Results

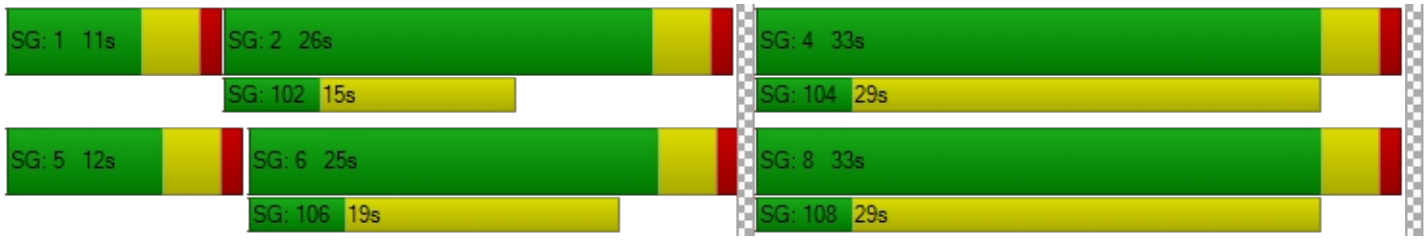
d_M, Delay for Movement [s/veh]	30.21	27.29	27.29	32.21	26.27	30.01	36.35	6.37	6.53	34.35	8.46	5.72
Movement LOS	C	C	C	C	C	C	D	A	A	C	A	A
d_A, Approach Delay [s/veh]	28.75			30.41			10.06			10.01		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	12.74											
Intersection LOS	B											
Intersection V/C	0.536											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.59	26.59	26.59	26.59
l_p,int, Pedestrian LOS Score for Intersection	2.000	2.205	2.943	2.949
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	828	828	628	600
d_b, Bicycle Delay [s]	12.01	12.01	16.46	17.16
l_b,int, Bicycle LOS Score for Intersection	1.735	1.898	2.047	2.449
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Arya Rd/Catt Rd

Control Type:	All-way stop	Delay (sec / veh):	7.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.087

Intersection Setup

Name	Arya Road		Arya Road		Catt Road	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Arya Road		Arya Road		Catt Road	
Base Volume Input [veh/h]	4	0	0	1	0	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0404	1.0404	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	32	0	0	0	0	28
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	0	0	1	0	60
Peak Hour Factor	0.6610	0.6610	0.6610	0.6610	0.6610	0.6610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	0	0	0	23
Total Analysis Volume [veh/h]	54	0	0	2	0	91
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	836	1012	1041
Degree of Utilization, x	0.06	0.00	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.21	0.01	0.29
95th-Percentile Queue Length [ft]	5.17	0.15	7.17
Approach Delay [s/veh]	7.60	6.57	6.79
Approach LOS	A	A	A
Intersection Delay [s/veh]	7.09		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 7: Project Dwy/Catt Road

Control Type:	Two-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	Project Driveway		Catt Road		Catt Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Project Driveway		Catt Road		Catt Road	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	0	0	32	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	28	0	0	32	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	0	0	8	0
Total Analysis Volume [veh/h]	0	28	0	0	32	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	0.00	8.41	0.00	0.00	7.26	0.00
Movement LOS		A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.08	0.00	0.00	0.06	0.06
95th-Percentile Queue Length [ft/ln]	0.00	1.99	0.00	0.00	1.51	1.51
d_A, Approach Delay [s/veh]	8.41		0.00		7.26	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.80					
Intersection LOS	A					

NEC I-15 & Clinton Keith

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Report File: C:\...\EAP PM.pdf

Scenario 4 EAP PM
2/24/2023

Intersection Analysis Summary

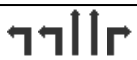
ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hidden Springs Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	0.764	32.3	C
2	I-15 SB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Left	0.637	14.6	B
3	I-15 NB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Right	0.871	17.4	B
4	Oak Creek Mall-Arya Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Right	1.114	62.7	E
5	Wildomar Trl/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	0.611	15.4	B
6	Arya Rd/Catt Rd	All-way stop	HCM 6th Edition	NB Left	0.149	7.7	A
7	Project Dwy/Catt Road	Two-way stop	HCM 6th Edition	NB Right	0.068	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hidden Springs Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	32.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.764

Intersection Setup

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	125	50	198	319	51	127	94	781	47	208	795	430
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	4	0	0	0	11	0	0	11	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	130	52	206	336	53	132	98	824	49	216	838	451
Peak Hour Factor	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	14	54	89	14	35	26	218	13	57	222	119
Total Analysis Volume [veh/h]	138	55	218	356	56	140	104	872	52	229	887	477
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	29	36	0	26	33	0	19	26	0	12	19	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	24	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	11	11	22	23	7	44	44	8	44	44
g / C, Green / Cycle	0.10	0.11	0.11	0.22	0.23	0.07	0.43	0.43	0.08	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.08	0.20	0.12	0.06	0.17	0.03	0.07	0.25	0.30
s, saturation flow rate [veh/h]	1781	1689	1589	1781	1661	1781	5094	1589	3459	3560	1589
c, Capacity [veh/h]	173	183	173	387	379	134	2210	690	279	1565	699
d1, Uniform Delay [s]	44.25	43.40	43.41	38.36	33.79	45.49	19.36	16.59	45.31	20.95	22.47
k, delay calibration	0.11	0.11	0.11	0.21	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.16	6.57	6.99	15.58	1.09	9.31	0.53	0.21	5.91	1.49	5.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.77	0.77	0.92	0.52	0.78	0.39	0.08	0.82	0.57	0.68
d, Delay for Lane Group [s/veh]	52.40	49.97	50.40	53.94	34.88	54.80	19.89	16.80	51.22	22.44	27.82
Lane Group LOS	D	D	D	D	C	D	B	B	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.72	3.69	3.50	10.08	4.24	2.87	4.61	0.73	3.01	7.80	9.67
50th-Percentile Queue Length [ft/ln]	92.92	92.32	87.51	251.93	106.04	71.71	115.14	18.25	75.26	195.09	241.68
95th-Percentile Queue Length [veh/ln]	6.69	6.65	6.30	15.28	7.62	5.16	8.13	1.31	5.42	12.39	14.77
95th-Percentile Queue Length [ft/ln]	167.25	166.17	157.52	382.09	190.48	129.08	203.13	32.86	135.46	309.63	369.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.40	49.97	50.23	53.94	34.88	34.88	54.80	19.89	16.80	51.22	22.44	27.82
Movement LOS	D	D	D	D	C	C	D	B	B	D	C	C
d_A, Approach Delay [s/veh]	50.92			47.17			23.27			28.19		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	32.31											
Intersection LOS	C											
Intersection V/C	0.764											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.44	41.44	41.44	41.44
l_p,int, Pedestrian LOS Score for Intersection	2.452	2.333	2.906	3.102
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	640	580	440	300
d_b, Bicycle Delay [s]	23.15	25.24	30.45	36.16
l_b,int, Bicycle LOS Score for Intersection	2.238	2.470	2.125	2.874
Bicycle LOS	B	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: I-15 SB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.637

Intersection Setup

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	0	0	0	489	1	388	0	860	439	218	1057	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0404	1.0404	1.0404	1.0000	1.0404	1.0404	1.0404	1.0404	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	19	0	0	0	15	0	19	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	528	1	404	0	910	457	246	1115	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9770	0.9770	0.9770	1.0000	0.9770	0.9770	0.9770	0.9770	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	135	0	103	0	233	117	63	285	0
Total Analysis Volume [veh/h]	0	0	0	540	1	414	0	931	468	252	1141	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	7	7	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	40	0	0	11	0	14	25	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	31	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	R	C	R	L	C
C, Cycle Length [s]		65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		14	14	14	32	32	7	43
g / C, Green / Cycle		0.21	0.21	0.21	0.50	0.50	0.11	0.67
(v / s)_i Volume / Saturation Flow Rate		0.15	0.15	0.15	0.18	0.29	0.07	0.22
s, saturation flow rate [veh/h]		1781	1781	2813	5094	1589	3459	5094
c, Capacity [veh/h]		378	378	597	2526	788	373	3388
d1, Uniform Delay [s]		23.84	23.84	23.71	10.13	11.74	27.96	4.71
k, delay calibration		0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2.54	2.54	1.46	0.42	3.28	2.14	0.27
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.72	0.72	0.69	0.37	0.59	0.68	0.34
d, Delay for Lane Group [s/veh]		26.38	26.38	25.16	10.55	15.02	30.11	4.98
Lane Group LOS		C	C	C	B	B	C	A
Critical Lane Group		Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		3.89	3.89	2.88	2.46	4.84	1.91	1.63
50th-Percentile Queue Length [ft/ln]		97.32	97.31	72.01	61.38	120.93	47.80	40.85
95th-Percentile Queue Length [veh/ln]		7.01	7.01	5.18	4.42	8.44	3.44	2.94
95th-Percentile Queue Length [ft/ln]		175.17	175.16	129.61	110.49	211.11	86.05	73.53

Movement, Approach, & Intersection Results

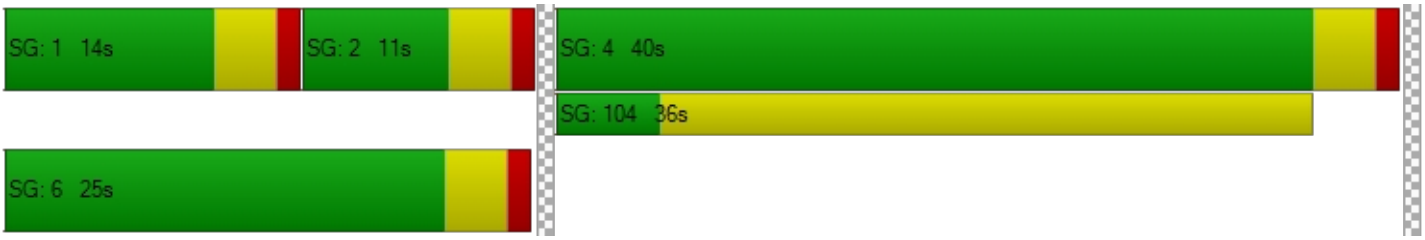
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	26.38	26.38	25.16	0.00	10.55	15.02	30.11	4.98	0.00
Movement LOS				C	C	C		B	B	C	A	
d_A, Approach Delay [s/veh]	0.00			25.85			12.04			9.53		
Approach LOS	A			C			B			A		
d_I, Intersection Delay [s/veh]	14.63											
Intersection LOS	B											
Intersection V/C	0.637											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	24.16	24.16
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.990	3.144
Crosswalk LOS	F	F	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1106	215	645
d_b, Bicycle Delay [s]	32.54	6.49	25.91	14.92
l_b,int, Bicycle LOS Score for Intersection	4.132	3.135	2.329	2.326
Bicycle LOS	D	C	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: I-15 NB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	17.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.871

Intersection Setup

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	513	3	330	0	0	0	326	1024	0	0	750	563
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0000	1.0000	1.0000	1.0404	1.0404	1.0000	1.0000	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	19	0	0	0	0	34	0	0	34	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	534	3	362	0	0	0	339	1099	0	0	814	605
Peak Hour Factor	0.9750	0.9750	0.9750	1.0000	1.0000	1.0000	0.9750	0.9750	1.0000	1.0000	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	137	1	93	0	0	0	87	282	0	0	209	155
Total Analysis Volume [veh/h]	548	3	371	0	0	0	348	1127	0	0	835	621
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	55
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	7	7	0	0	7	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	0	0	11	39	0	0	28	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		L	C	C	R
C, Cycle Length [s]	55	55	55		55	55	55	55
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12		7	35	24	24
g / C, Green / Cycle	0.22	0.22	0.22		0.13	0.64	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.17	0.18	0.19		0.10	0.22	0.16	0.39
s, saturation flow rate [veh/h]	1781	1736	1589		3459	5094	5094	1589
c, Capacity [veh/h]	391	381	349		448	3241	2212	690
d1, Uniform Delay [s]	20.44	20.53	20.85		23.32	4.70	10.60	14.54
k, delay calibration	0.11	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.71	4.19	6.65		2.92	0.30	0.49	16.98
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.81	0.87		0.78	0.35	0.38	0.90
d, Delay for Lane Group [s/veh]	24.15	24.71	27.50		26.23	5.00	11.09	31.52
Lane Group LOS	C	C	C		C	A	B	C
Critical Lane Group	No	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.82	3.86	4.05		2.21	1.39	2.02	9.14
50th-Percentile Queue Length [ft/ln]	95.50	96.42	101.14		55.21	34.67	50.55	228.44
95th-Percentile Queue Length [veh/ln]	6.88	6.94	7.28		3.98	2.50	3.64	14.09
95th-Percentile Queue Length [ft/ln]	171.91	173.55	182.05		99.38	62.41	91.00	352.37

Movement, Approach, & Intersection Results

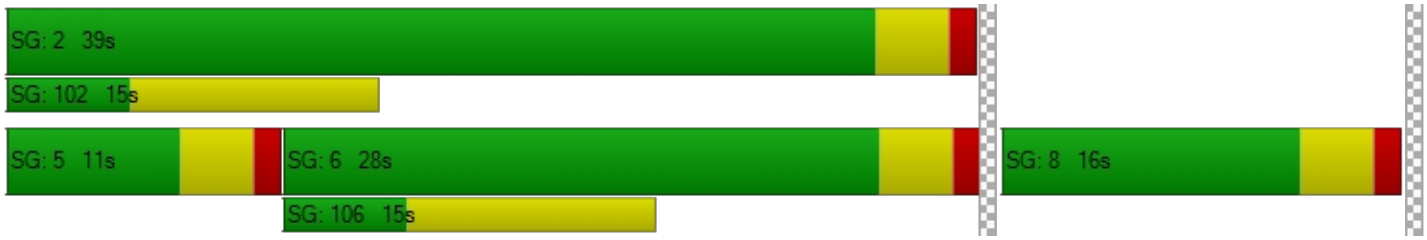
d_M, Delay for Movement [s/veh]	24.39	24.71	27.01	0.00	0.00	0.00	26.23	5.00	0.00	0.00	11.09	31.52
Movement LOS	C	C	C				C	A			B	C
d_A, Approach Delay [s/veh]	25.44			0.00			10.01			19.80		
Approach LOS	C			A			B			B		
d_I, Intersection Delay [s/veh]	17.40											
Intersection LOS	B											
Intersection V/C	0.871											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.33	19.33	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.216	2.232	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	435	0	1268	870
d_b, Bicycle Delay [s]	16.90	27.59	3.69	8.81
l_b,int, Bicycle LOS Score for Intersection	3.081	4.132	2.371	2.360
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Oak Creek Mall-Arya Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	62.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.114

Intersection Setup

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	257	3	94	7	3	43	52	1034	257	76	990	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	53	53	0	0	0	0	24
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	267	3	98	28	3	98	107	1076	267	79	1030	49
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	1	25	7	1	25	28	278	69	20	267	13
Total Analysis Volume [veh/h]	276	3	101	29	3	101	111	1114	276	82	1066	51
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	51	0	0	51	0	11	23	0	11	28	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	3	0	0	10	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	24	0	0	14	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	49	49	49	7	22	22	6	22	22
g / C, Green / Cycle	0.55	0.55	0.55	0.08	0.25	0.25	0.07	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.65	0.06	0.56	0.06	0.26	0.26	0.05	0.21	0.21
s, saturation flow rate [veh/h]	426	1589	239	1781	3560	1686	1781	3560	1827
c, Capacity [veh/h]	313	872	180	139	892	422	121	856	439
d1, Uniform Delay [s]	24.28	9.80	24.45	40.82	33.73	33.73	41.00	32.75	32.76
k, delay calibration	0.50	0.11	0.44	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	29.25	0.06	21.31	10.17	46.59	59.88	6.53	11.14	19.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.12	0.74	0.80	1.06	1.06	0.68	0.86	0.86
d, Delay for Lane Group [s/veh]	53.53	9.86	45.76	50.99	80.32	93.61	47.53	43.89	52.32
Lane Group LOS	D	A	D	D	F	F	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.72	0.92	2.65	2.78	15.22	15.97	1.97	8.83	10.10
50th-Percentile Queue Length [ft/ln]	217.92	22.94	66.19	69.48	380.46	399.35	49.36	220.87	252.49
95th-Percentile Queue Length [veh/ln]	13.56	1.65	4.77	5.00	22.32	23.27	3.55	13.71	15.31
95th-Percentile Queue Length [ft/ln]	338.96	41.30	119.15	125.06	558.12	581.84	88.85	342.74	382.78

Movement, Approach, & Intersection Results

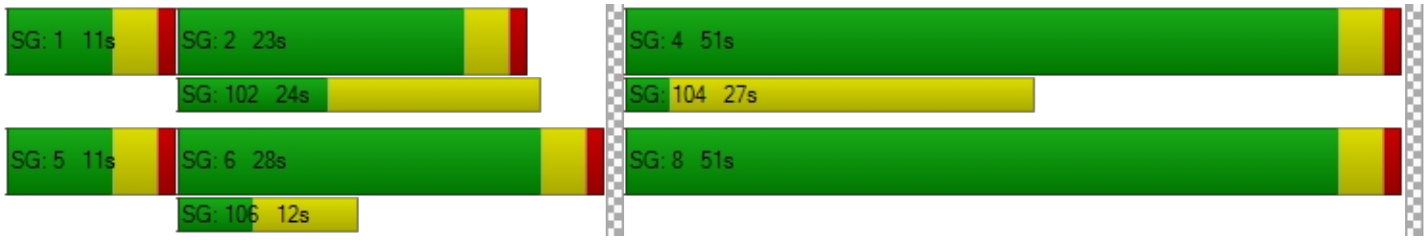
d_M, Delay for Movement [s/veh]	53.53	53.53	9.86	45.76	45.76	45.76	50.99	82.35	93.61	47.53	46.48	52.32
Movement LOS	D	D	A	D	D	D	D	F	F	D	D	D
d_A, Approach Delay [s/veh]	41.92			45.76			82.10			46.80		
Approach LOS	D			D			F			D		
d_I, Intersection Delay [s/veh]	62.67											
Intersection LOS	E											
Intersection V/C	1.114											

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	9.0	7.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.09	36.45	38.27	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.308	1.862	3.400	0.000
Crosswalk LOS	B	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1044	1044	422	533
d_b, Bicycle Delay [s]	10.27	10.27	28.01	24.20
l_b,int, Bicycle LOS Score for Intersection	2.187	1.779	2.385	2.219
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Wildomar Trl/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	15.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	66	23	51	74	25	130	154	947	22	96	893	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	0	0	0	8	7	7	7	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	77	24	53	77	26	143	167	992	30	100	937	29
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	6	14	20	7	38	44	261	8	26	247	8
Total Analysis Volume [veh/h]	81	25	56	81	27	151	176	1045	32	105	987	31
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	33	0	0	33	0	14	26	0	11	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	12	12	9	40	40	6	38	38
g / C, Green / Cycle	0.17	0.17	0.17	0.17	0.17	0.12	0.57	0.57	0.09	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.07	0.05	0.06	0.01	0.09	0.10	0.20	0.20	0.06	0.28	0.02
s, saturation flow rate [veh/h]	1206	1667	1317	1870	1589	1781	3560	1842	1781	3560	1589
c, Capacity [veh/h]	253	282	226	316	269	217	2037	1054	156	1914	855
d1, Uniform Delay [s]	28.79	25.41	30.65	24.53	26.71	29.96	8.01	8.01	30.99	10.35	7.63
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.72	0.56	0.96	0.11	1.84	7.09	0.47	0.91	5.00	1.00	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.32	0.29	0.36	0.09	0.56	0.81	0.35	0.35	0.67	0.52	0.04
d, Delay for Lane Group [s/veh]	29.51	25.97	31.60	24.64	28.55	37.06	8.48	8.92	35.99	11.35	7.71
Lane Group LOS	C	C	C	C	C	D	A	A	D	B	A
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.28	1.17	1.33	0.37	2.35	3.20	2.55	2.77	1.88	4.44	0.21
50th-Percentile Queue Length [ft/ln]	31.95	29.31	33.28	9.33	58.74	80.01	63.72	69.16	46.88	111.08	5.31
95th-Percentile Queue Length [veh/ln]	2.30	2.11	2.40	0.67	4.23	5.76	4.59	4.98	3.38	7.90	0.38
95th-Percentile Queue Length [ft/ln]	57.51	52.76	59.90	16.80	105.74	144.02	114.70	124.49	84.39	197.50	9.55

Movement, Approach, & Intersection Results

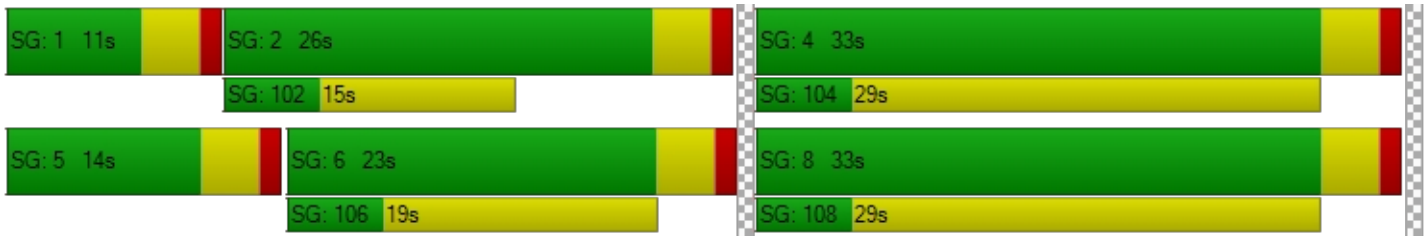
d_M, Delay for Movement [s/veh]	29.51	25.97	25.97	31.60	24.64	28.55	37.06	8.62	8.92	35.99	11.35	7.71
Movement LOS	C	C	C	C	C	C	D	A	A	D	B	A
d_A, Approach Delay [s/veh]	27.74			29.10			12.62			13.55		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	15.40											
Intersection LOS	B											
Intersection V/C	0.611											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.59	26.59	26.59	26.59
l_p,int, Pedestrian LOS Score for Intersection	2.035	2.240	3.042	3.019
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	828	828	628	543
d_b, Bicycle Delay [s]	12.01	12.01	16.46	18.59
l_b,int, Bicycle LOS Score for Intersection	1.827	1.987	2.249	2.486
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Arya Rd/Catt Rd

Control Type:	All-way stop	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.149

Intersection Setup

Name	Arya Road		Arya Road		Catt Road	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Arya Road		Arya Road		Catt Road	
Base Volume Input [veh/h]	8	0	0	0	0	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0404	1.0404	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	77	0	0	0	0	74
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	85	0	0	0	0	106
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	0	0	0	0	37
Total Analysis Volume [veh/h]	119	0	0	0	0	148
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	815	828	995
Degree of Utilization, x	0.15	0.00	0.15

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.51	0.00	0.52
95th-Percentile Queue Length [ft]	12.75	0.00	13.03
Approach Delay [s/veh]	8.17	0.00	7.25
Approach LOS	A	A	A
Intersection Delay [s/veh]	7.66		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 7: Project Dwy/Catt Road

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.068

Intersection Setup

Name	Project Driveway		Catt Road		Catt Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Project Driveway		Catt Road		Catt Road	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	74	0	0	77	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	74	0	0	77	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	19	0	0	19	0
Total Analysis Volume [veh/h]	0	74	0	0	77	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.07	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	9.76	8.56	0.00	0.00	7.33	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.00	0.00	0.15	0.15
95th-Percentile Queue Length [ft/ln]	5.48	5.48	0.00	0.00	3.73	3.73
d_A, Approach Delay [s/veh]	8.56		0.00		7.33	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.93					
Intersection LOS	A					

OPENING YEAR PLUS PROJECT PLUS CUMULATIVE CONDITIONS

NEC I-15 & Clinton Keith

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Report File: C:\...\EACP AM.pdf

Scenario 5 EACP AM
2/24/2023

Intersection Analysis Summary

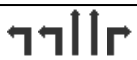
ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hidden Springs Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	SB Left	0.686	31.9	C
2	I-15 SB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Right	0.920	25.2	C
3	I-15 NB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Right	0.929	19.3	B
4	Oak Creek Mall-Arya Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Right	0.655	40.2	D
5	Wildomar Trl/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	0.822	27.1	C
6	Arya Rd/Catt Rd	All-way stop	HCM 6th Edition	NB Left	0.185	8.0	A
7	Project Dwy/Catt Road	Two-way stop	HCM 6th Edition	NB Right	0.026	8.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hidden Springs Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	54	8	124	279	40	66	65	800	35	144	543	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	0	0	5	0	0	4	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	47	72	0	0	0	170	0	48	182	80
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	8	176	364	42	69	68	1007	36	198	751	330
Peak Hour Factor	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	2	49	101	12	19	19	281	10	55	209	92
Total Analysis Volume [veh/h]	62	9	196	406	47	77	76	1123	40	221	837	368
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	22	36	0	27	41	0	12	26	0	11	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	24	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	9	9	23	26	6	45	45	7	46	46
g / C, Green / Cycle	0.06	0.09	0.09	0.23	0.26	0.06	0.45	0.45	0.07	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.03	0.06	0.06	0.23	0.07	0.04	0.22	0.03	0.06	0.24	0.23
s, saturation flow rate [veh/h]	1781	1611	1589	1781	1685	1781	5094	1589	3459	3560	1589
c, Capacity [veh/h]	104	142	140	410	437	111	2299	717	245	1636	730
d1, Uniform Delay [s]	45.98	44.48	44.48	38.46	29.63	45.97	19.34	15.46	46.18	19.12	19.03
k, delay calibration	0.11	0.11	0.11	0.28	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.31	6.87	7.01	30.98	0.35	7.15	0.75	0.15	11.63	1.15	2.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.73	0.73	0.99	0.28	0.68	0.49	0.06	0.90	0.51	0.50
d, Delay for Lane Group [s/veh]	51.29	51.34	51.49	69.44	29.98	53.11	20.08	15.61	57.81	20.26	21.50
Lane Group LOS	D	D	D	E	C	D	C	B	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.65	2.75	2.72	13.26	2.41	2.06	6.09	0.54	3.11	6.89	6.30
50th-Percentile Queue Length [ft/ln]	41.26	68.63	68.02	331.60	60.28	51.55	152.21	13.41	77.63	172.24	157.60
95th-Percentile Queue Length [veh/ln]	2.97	4.94	4.90	19.24	4.34	3.71	10.14	0.97	5.59	11.19	10.42
95th-Percentile Queue Length [ft/ln]	74.28	123.54	122.44	480.92	108.50	92.79	253.38	24.13	139.74	279.85	260.54

Movement, Approach, & Intersection Results

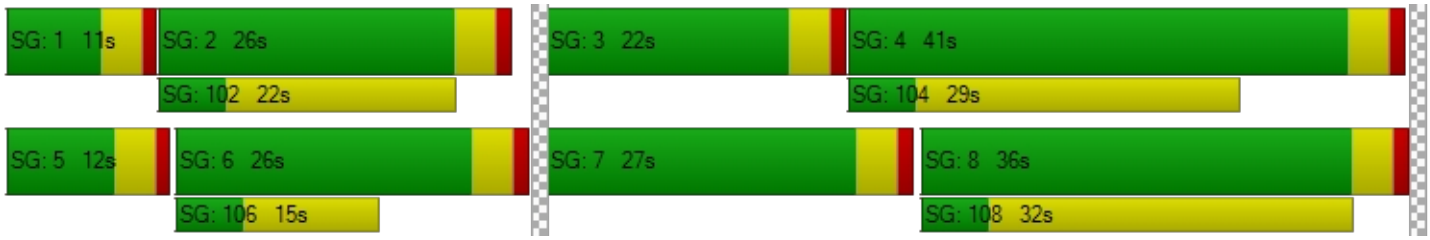
d_M, Delay for Movement [s/veh]	51.29	51.34	51.42	69.44	29.98	29.98	53.11	20.08	15.61	57.81	20.26	21.50
Movement LOS	D	D	D	E	C	C	D	C	B	E	C	C
d_A, Approach Delay [s/veh]	51.39			60.21			21.96			26.40		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	31.92											
Intersection LOS	C											
Intersection V/C	0.686											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.44	41.44	41.44	41.44
l_p,int, Pedestrian LOS Score for Intersection	2.419	2.266	2.909	3.116
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	640	739	440	440
d_b, Bicycle Delay [s]	23.15	19.88	30.45	30.45
l_b,int, Bicycle LOS Score for Intersection	2.000	2.434	2.241	2.736
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: I-15 SB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	25.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.920

Intersection Setup

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	0	0	0	352	1	315	0	640	560	298	615	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0404	1.0404	1.0404	1.0000	1.0404	1.0404	1.0404	1.0404	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	8	0	0	0	7	0	7	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	206	0	29	0	270	19	192	281	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	580	1	357	0	943	602	509	926	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8920	0.8920	0.8920	1.0000	0.8920	0.8920	0.8920	0.8920	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	163	0	100	0	264	169	143	260	0
Total Analysis Volume [veh/h]	0	0	0	650	1	400	0	1057	675	571	1038	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	7	7	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	40	0	0	18	0	17	35	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	31	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	R	C	R	L	C
C, Cycle Length [s]		75	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	18	18	32	32	13	49
g / C, Green / Cycle		0.23	0.23	0.23	0.43	0.43	0.17	0.66
(v / s)_i Volume / Saturation Flow Rate		0.18	0.18	0.14	0.21	0.42	0.17	0.20
s, saturation flow rate [veh/h]		1781	1781	2813	5094	1589	3459	5094
c, Capacity [veh/h]		419	419	662	2195	685	602	3352
d1, Uniform Delay [s]		26.86	26.86	25.59	15.35	21.15	30.69	5.51
k, delay calibration		0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		3.12	3.12	0.89	0.76	31.08	8.71	0.24
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.78	0.78	0.60	0.48	0.99	0.95	0.31
d, Delay for Lane Group [s/veh]		29.98	29.98	26.48	16.11	52.23	39.40	5.76
Lane Group LOS		C	C	C	B	D	D	A
Critical Lane Group		Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		5.57	5.57	3.13	4.14	16.43	5.63	1.92
50th-Percentile Queue Length [ft/ln]		139.18	139.17	78.20	103.54	410.86	140.83	47.90
95th-Percentile Queue Length [veh/ln]		9.44	9.44	5.63	7.46	23.08	9.53	3.45
95th-Percentile Queue Length [ft/ln]		235.92	235.91	140.76	186.38	577.07	238.14	86.22

Movement, Approach, & Intersection Results

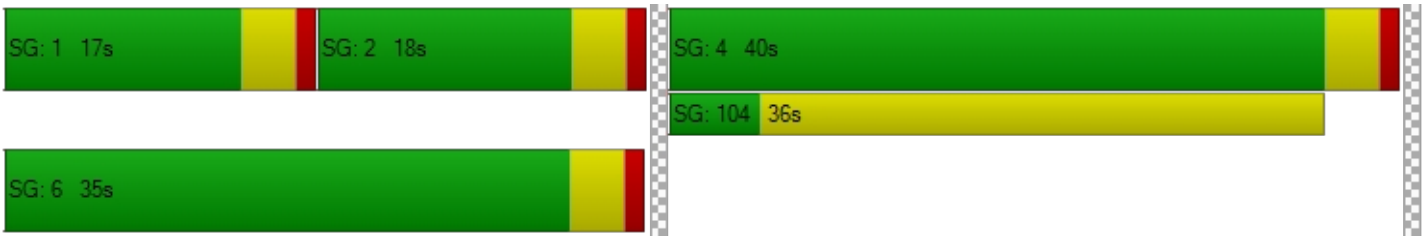
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	29.98	29.98	26.48	0.00	16.11	52.23	39.40	5.76	0.00
Movement LOS				C	C	C		B	D	D	A	
d_A, Approach Delay [s/veh]	0.00			28.65			30.19			17.70		
Approach LOS	A			C			C			B		
d_I, Intersection Delay [s/veh]	25.24											
Intersection LOS	C											
Intersection V/C	0.920											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	29.07	29.07
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	3.028	3.201
Crosswalk LOS	F	F	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	959	373	826
d_b, Bicycle Delay [s]	37.53	10.16	24.83	12.93
l_b,int, Bicycle LOS Score for Intersection	4.132	3.294	2.512	2.445
Bicycle LOS	D	C	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: I-15 NB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	19.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.929

Intersection Setup

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	279	3	211	0	0	0	282	706	0	0	635	472
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0000	1.0000	1.0000	1.0404	1.0404	1.0000	1.0000	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	0	0	0	0	15	0	0	12	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	29	0	239	0	0	0	19	457	0	0	444	166
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	319	3	467	0	0	0	312	1207	0	0	1117	664
Peak Hour Factor	0.9010	0.9010	0.9010	1.0000	1.0000	1.0000	0.9010	0.9010	1.0000	1.0000	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	89	1	130	0	0	0	87	335	0	0	310	184
Total Analysis Volume [veh/h]	354	3	518	0	0	0	346	1340	0	0	1240	737
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	7	7	0	0	7	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	0	0	11	44	0	0	33	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		L	C	C	R
C, Cycle Length [s]	60	60	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12		7	40	29	29
g / C, Green / Cycle	0.20	0.20	0.20		0.12	0.67	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.17	0.18	0.18		0.10	0.26	0.24	0.46
s, saturation flow rate [veh/h]	1781	1625	1589		3459	5094	5094	1589
c, Capacity [veh/h]	358	327	320		412	3393	2449	764
d1, Uniform Delay [s]	23.13	23.41	23.48		26.01	4.56	10.75	15.16
k, delay calibration	0.11	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.15	7.87	8.80		4.68	0.35	0.75	24.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.88	0.90		0.84	0.39	0.51	0.96
d, Delay for Lane Group [s/veh]	28.28	31.28	32.27		30.69	4.91	11.50	40.09
Lane Group LOS	C	C	C		C	A	B	D
Critical Lane Group	No	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.28	4.40	4.44		2.55	1.74	3.32	13.22
50th-Percentile Queue Length [ft/ln]	107.08	109.95	111.08		63.68	43.49	83.08	330.59
95th-Percentile Queue Length [veh/ln]	7.68	7.84	7.90		4.58	3.13	5.98	19.19
95th-Percentile Queue Length [ft/ln]	191.93	195.93	197.50		114.62	78.28	149.55	479.69

Movement, Approach, & Intersection Results

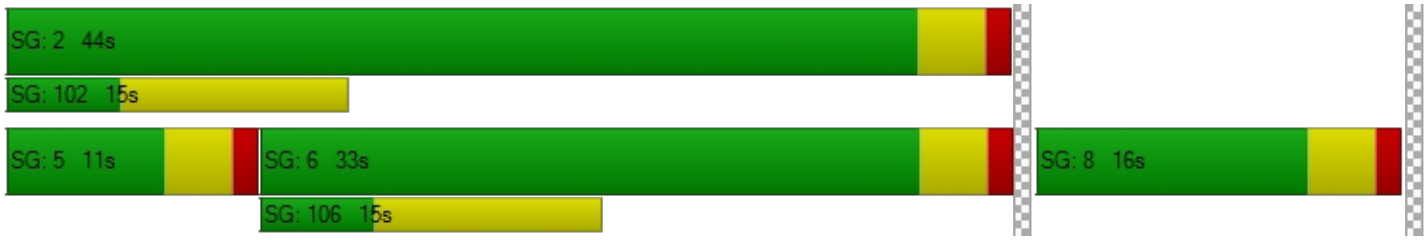
d_M, Delay for Movement [s/veh]	28.80	31.28	31.84	0.00	0.00	0.00	30.69	4.91	0.00	0.00	11.50	40.09
Movement LOS	C	C	C				C	A			B	D
d_A, Approach Delay [s/veh]	30.58			0.00			10.20			22.16		
Approach LOS	C			A			B			C		
d_I, Intersection Delay [s/veh]	19.34											
Intersection LOS	B											
Intersection V/C	0.929											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.76	21.76	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.205	2.274	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	399	0	1330	964
d_b, Bicycle Delay [s]	19.28	30.08	3.38	8.07
l_b,int, Bicycle LOS Score for Intersection	3.003	4.132	2.487	2.647
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Oak Creek Mall-Arya Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	40.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.655

Intersection Setup

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	157	7	50	9	1	32	46	695	157	68	883	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	9	0	19	23	0	0	0	0	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	15	0	15	25	671	0	0	594	25
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	7	52	33	1	67	96	1394	163	71	1513	58
Peak Hour Factor	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	2	15	9	0	19	27	390	46	20	423	16
Total Analysis Volume [veh/h]	182	8	58	37	1	75	107	1559	182	79	1692	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	23	0	0	23	0	12	39	0	11	38	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	14	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	46	46	46	8	35	35	6	34	34
g / C, Green / Cycle	0.46	0.46	0.46	0.08	0.35	0.35	0.06	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.19	0.04	0.12	0.06	0.33	0.33	0.04	0.33	0.33
s, saturation flow rate [veh/h]	999	1589	942	1781	3560	1772	1781	3560	1835
c, Capacity [veh/h]	534	737	485	134	1260	627	111	1214	626
d1, Uniform Delay [s]	19.87	14.92	17.11	45.50	30.98	31.04	45.99	32.19	32.21
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.40	0.11	0.11	0.42
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.85	0.21	1.13	10.34	3.32	18.23	8.08	5.33	23.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.08	0.23	0.80	0.92	0.93	0.71	0.95	0.96
d, Delay for Lane Group [s/veh]	21.72	15.13	18.24	55.83	34.30	49.26	54.07	37.52	55.86
Lane Group LOS	C	B	B	E	C	D	D	D	E
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.44	0.77	1.61	2.98	13.53	16.14	2.16	14.13	17.77
50th-Percentile Queue Length [ft/ln]	86.03	19.18	40.25	74.53	338.36	403.47	54.11	353.13	444.21
95th-Percentile Queue Length [veh/ln]	6.19	1.38	2.90	5.37	19.57	22.73	3.90	20.29	24.68
95th-Percentile Queue Length [ft/ln]	154.85	34.53	72.46	134.15	489.20	568.18	97.40	507.22	617.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.72	21.72	15.13	18.24	18.24	18.24	55.83	38.12	49.26	54.07	43.30	55.86
Movement LOS	C	C	B	B	B	B	E	D	D	D	D	E
d_A, Approach Delay [s/veh]	20.18			18.24			40.24			44.21		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	40.20											
Intersection LOS	D											
Intersection V/C	0.655											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
l_p,int, Pedestrian LOS Score for Intersection	2.262	1.864	3.388	3.139
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	380	380	700	680
d_b, Bicycle Delay [s]	32.81	32.81	21.13	21.78
l_b,int, Bicycle LOS Score for Intersection	1.969	1.746	2.576	2.569
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Wildomar Trl/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	27.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.822

Intersection Setup

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	42	10	36	58	15	98	89	634	20	57	836	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	3	3	3	3	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	115	0	128	95	591	0	0	491	138
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	10	37	175	16	233	191	1254	24	59	1364	158
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	3	10	49	5	66	54	355	7	17	386	45
Total Analysis Volume [veh/h]	53	11	42	198	18	264	216	1419	27	67	1543	179
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	33	0	0	33	0	20	25	0	32	37	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	27	27	16	85	85	6	75	75
g / C, Green / Cycle	0.21	0.21	0.21	0.21	0.21	0.12	0.65	0.65	0.05	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.15	0.01	0.17	0.12	0.27	0.27	0.04	0.43	0.11
s, saturation flow rate [veh/h]	1097	1641	1351	1870	1589	1781	3560	1852	1781	3560	1589
c, Capacity [veh/h]	253	337	273	384	327	220	2322	1208	89	2060	919
d1, Uniform Delay [s]	45.91	42.35	53.57	41.38	49.15	56.78	10.72	10.72	60.94	20.37	13.00
k, delay calibration	0.11	0.11	0.18	0.11	0.24	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.41	0.21	6.06	0.05	10.14	24.15	0.54	1.03	12.26	2.55	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	0.16	0.73	0.05	0.81	0.98	0.41	0.41	0.76	0.75	0.19
d, Delay for Lane Group [s/veh]	46.32	42.57	59.63	41.43	59.28	80.92	11.25	11.75	73.20	22.92	13.48
Lane Group LOS	D	D	E	D	E	F	B	B	E	C	B
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.52	1.43	6.81	0.47	9.08	8.55	6.45	6.88	2.49	17.54	2.61
50th-Percentile Queue Length [ft/ln]	37.89	35.78	170.27	11.84	226.93	213.64	161.31	172.01	62.24	438.47	65.27
95th-Percentile Queue Length [veh/ln]	2.73	2.58	11.09	0.85	14.02	13.34	10.62	11.18	4.48	24.41	4.70
95th-Percentile Queue Length [ft/ln]	68.20	64.41	277.27	21.31	350.46	333.49	265.46	279.56	112.04	610.17	117.49

Movement, Approach, & Intersection Results

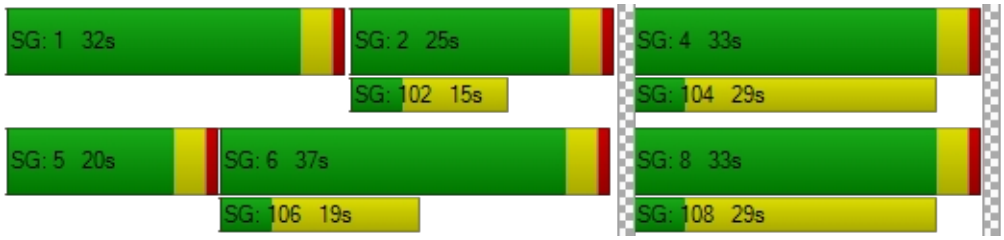
d_M, Delay for Movement [s/veh]	46.32	42.57	42.57	59.63	41.43	59.28	80.92	11.41	11.75	73.20	22.92	13.48
Movement LOS	D	D	D	E	D	E	F	B	B	E	C	B
d_A, Approach Delay [s/veh]	44.44			58.75			20.45			23.86		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	27.15											
Intersection LOS	C											
Intersection V/C	0.822											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	56.28	56.28	56.28	56.28
l_p,int, Pedestrian LOS Score for Intersection	2.030	2.366	3.179	3.375
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	446	446	323	508
d_b, Bicycle Delay [s]	39.21	39.21	45.67	36.16
l_b,int, Bicycle LOS Score for Intersection	1.735	2.352	2.474	3.036
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Arya Rd/Catt Rd

Control Type:	All-way stop	Delay (sec / veh):	8.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.185

Intersection Setup

Name	Arya Road		Arya Road		Catt Road	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Arya Road		Arya Road		Catt Road	
Base Volume Input [veh/h]	4	0	0	1	0	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0404	1.0404	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	32	0	0	0	0	28
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	49	13	43	0	0	30
Total Hourly Volume [veh/h]	85	13	43	1	0	90
Peak Hour Factor	0.6610	0.6610	0.6610	0.6610	0.6610	0.6610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	5	16	0	0	34
Total Analysis Volume [veh/h]	129	20	65	2	0	136
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	806	825	940
Degree of Utilization, x	0.18	0.08	0.14

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.67	0.26	0.51
95th-Percentile Queue Length [ft]	16.86	6.61	12.63
Approach Delay [s/veh]	8.47	7.75	7.48
Approach LOS	A	A	A
Intersection Delay [s/veh]	7.95		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 7: Project Dwy/Catt Road

Control Type:	Two-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	Project Driveway		Catt Road		Catt Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Project Driveway		Catt Road		Catt Road	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	0	0	32	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	28	0	0	32	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	0	0	8	0
Total Analysis Volume [veh/h]	0	28	0	0	32	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	8.99	8.41	0.00	0.00	7.26	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.06	0.06
95th-Percentile Queue Length [ft/ln]	1.99	1.99	0.00	0.00	1.51	1.51
d_A, Approach Delay [s/veh]	8.41		0.00		7.26	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.80					
Intersection LOS	A					

NEC I-15 & Clinton Keith

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Report File: C:\...\EACP PM.pdf

Scenario 7 EACP PM
2/24/2023

Intersection Analysis Summary

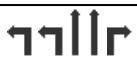
ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hidden Springs Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	WB Right	0.984	54.8	D
2	I-15 SB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Right	0.856	20.8	C
3	I-15 NB Ramps/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	1.083	36.0	D
4	Oak Creek Mall-Arya Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	SB Right	1.938	64.0	E
5	Wildomar Trl/Clinton Keith Rd	Signalized	HCM 6th Edition	SB Left	1.193	64.9	E
6	Arya Rd/Catt Rd	All-way stop	HCM 6th Edition	NB Left	0.381	9.9	A
7	Project Dwy/Catt Road	Two-way stop	HCM 6th Edition	NB Right	0.068	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hidden Springs Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	54.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.984

Intersection Setup

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hidden Springs Road			Hidden Springs Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	125	50	198	319	51	127	94	781	47	208	795	430
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	4	0	0	0	11	0	0	11	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	106	188	0	0	0	362	0	50	171	89
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	130	52	312	524	53	132	98	1186	49	266	1009	540
Peak Hour Factor	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450	0.9450
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	14	83	139	14	35	26	314	13	70	267	143
Total Analysis Volume [veh/h]	138	55	330	554	56	140	104	1255	52	281	1068	571
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	42	36	0	39	33	0	12	26	0	15	29	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	24	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	R
C, Cycle Length [s]	115	115	115	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	16	16	35	40	8	37	37	11	40	40
g / C, Green / Cycle	0.10	0.14	0.14	0.30	0.35	0.07	0.32	0.32	0.10	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.08	0.12	0.12	0.31	0.12	0.06	0.25	0.03	0.08	0.30	0.36
s, saturation flow rate [veh/h]	1781	1659	1589	1781	1661	1781	5094	1589	3459	3560	1589
c, Capacity [veh/h]	171	236	226	541	581	126	1624	507	335	1227	548
d1, Uniform Delay [s]	51.02	48.09	48.09	40.10	27.62	52.78	35.46	27.63	51.13	35.33	37.74
k, delay calibration	0.11	0.11	0.11	0.48	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.70	7.57	7.88	44.21	0.34	12.38	3.64	0.41	5.63	8.59	49.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.83	0.83	1.02	0.34	0.82	0.77	0.10	0.84	0.87	1.04
d, Delay for Lane Group [s/veh]	59.72	55.66	55.97	84.31	27.96	65.16	39.10	28.03	56.76	43.92	87.68
Lane Group LOS	E	E	E	F	C	E	D	C	E	D	F
Critical Lane Group	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.31	5.97	5.74	21.67	4.03	3.40	11.03	1.07	4.24	15.23	22.68
50th-Percentile Queue Length [ft/ln]	107.68	149.32	143.58	541.72	100.78	84.97	275.63	26.80	105.97	380.72	567.05
95th-Percentile Queue Length [veh/ln]	7.71	9.98	9.67	29.78	7.26	6.12	16.47	1.93	7.62	21.63	31.37
95th-Percentile Queue Length [ft/ln]	192.78	249.53	241.83	744.57	181.40	152.94	411.77	48.23	190.38	540.72	784.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	59.72	55.66	55.84	84.31	27.96	27.96	65.16	39.10	28.03	56.76	43.92	87.68
Movement LOS	E	E	E	F	C	C	E	D	C	E	D	F
d_A, Approach Delay [s/veh]	56.84			69.58			40.61			58.81		
Approach LOS	E			E			D			E		
d_I, Intersection Delay [s/veh]	54.77											
Intersection LOS	D											
Intersection V/C	0.984											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	48.89	48.89	48.89	48.89
l_p,int, Pedestrian LOS Score for Intersection	2.491	2.434	2.991	3.233
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	504	382	434
d_b, Bicycle Delay [s]	29.99	32.19	37.64	35.26
l_b,int, Bicycle LOS Score for Intersection	2.423	2.797	2.336	3.144
Bicycle LOS	B	C	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: I-15 SB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	20.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.856

Intersection Setup

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	I-15 Southbound Ramps			I-15 Southbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	0	0	0	489	1	388	0	860	439	218	1057	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0404	1.0404	1.0404	1.0000	1.0404	1.0404	1.0404	1.0404	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	19	0	0	0	15	0	19	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	250	0	57	0	595	62	229	598	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	778	1	461	0	1505	519	475	1713	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9770	0.9770	0.9770	1.0000	0.9770	0.9770	0.9770	0.9770	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	199	0	118	0	385	133	122	438	0
Total Analysis Volume [veh/h]	0	0	0	796	1	472	0	1540	531	486	1753	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	7	7	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	40	0	0	11	0	14	25	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	31	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	R	C	R	L	C
C, Cycle Length [s]		65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		19	19	19	24	24	10	38
g / C, Green / Cycle		0.29	0.29	0.29	0.37	0.37	0.15	0.59
(v / s)_i Volume / Saturation Flow Rate		0.22	0.22	0.17	0.30	0.33	0.14	0.34
s, saturation flow rate [veh/h]		1781	1781	2813	5094	1589	3459	5094
c, Capacity [veh/h]		517	518	817	1887	589	535	2988
d1, Uniform Delay [s]		21.12	21.12	19.70	18.50	19.38	27.08	8.49
k, delay calibration		0.11	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2.46	2.46	0.65	4.03	19.46	6.25	0.85
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.77	0.77	0.58	0.82	0.90	0.91	0.59
d, Delay for Lane Group [s/veh]		23.58	23.58	20.35	22.53	38.84	33.33	9.34
Lane Group LOS		C	C	C	C	D	C	A
Critical Lane Group		Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		5.46	5.46	2.90	6.94	9.94	3.97	4.31
50th-Percentile Queue Length [ft/ln]		136.56	136.55	72.39	173.56	248.58	99.28	107.86
95th-Percentile Queue Length [veh/ln]		9.30	9.29	5.21	11.26	15.11	7.15	7.72
95th-Percentile Queue Length [ft/ln]		232.38	232.37	130.30	281.58	377.86	178.71	193.02

Movement, Approach, & Intersection Results

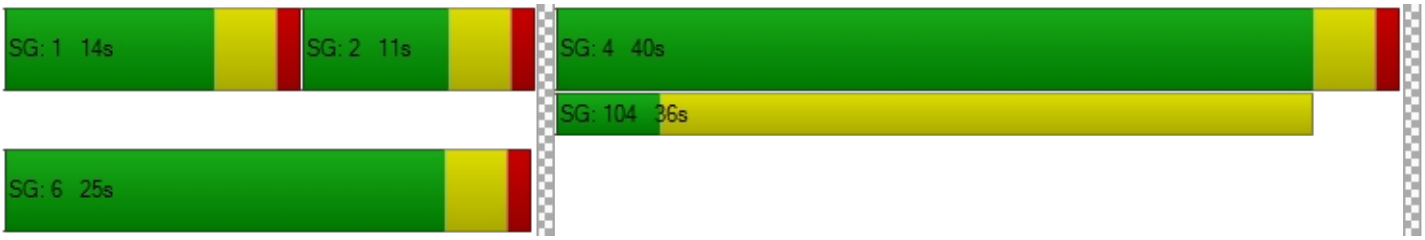
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	23.58	23.58	20.35	0.00	22.53	38.84	33.33	9.34	0.00
Movement LOS				C	C	C		C	D	C	A	
d_A, Approach Delay [s/veh]	0.00			22.38			26.71			14.55		
Approach LOS	A			C			C			B		
d_I, Intersection Delay [s/veh]	20.84											
Intersection LOS	C											
Intersection V/C	0.856											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	24.16	24.16
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	3.177	3.330
Crosswalk LOS	F	F	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1106	215	645
d_b, Bicycle Delay [s]	32.54	6.49	25.91	14.92
l_b,int, Bicycle LOS Score for Intersection	4.132	3.653	2.699	2.791
Bicycle LOS	D	D	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: I-15 NB Ramps/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	36.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.083

Intersection Setup

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 Northbound Ramps			I-15 Northbound Ramps			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	513	3	330	0	0	0	326	1024	0	0	750	563
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0000	1.0000	1.0000	1.0404	1.0404	1.0000	1.0000	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	19	0	0	0	0	34	0	0	34	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	57	0	289	0	0	0	62	783	0	0	770	206
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	591	3	651	0	0	0	401	1882	0	0	1584	811
Peak Hour Factor	0.9750	0.9750	0.9750	1.0000	1.0000	1.0000	0.9750	0.9750	1.0000	1.0000	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	152	1	167	0	0	0	103	483	0	0	406	208
Total Analysis Volume [veh/h]	606	3	668	0	0	0	411	1930	0	0	1625	832
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	7	7	0	0	7	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	23	0	0	0	0	12	52	0	0	40	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		L	C	C	R
C, Cycle Length [s]	75	75	75		75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19		8	48	36	36
g / C, Green / Cycle	0.25	0.25	0.25		0.11	0.64	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.24	0.26	0.27		0.12	0.38	0.32	0.52
s, saturation flow rate [veh/h]	1781	1667	1589		3459	5094	5094	1589
c, Capacity [veh/h]	452	423	403		376	3259	2435	760
d1, Uniform Delay [s]	27.52	28.06	28.06		33.52	7.85	15.05	19.63
k, delay calibration	0.16	0.19	0.21		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.36	28.22	44.74		51.97	0.80	1.47	61.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.94	1.01	1.06		1.09	0.59	0.67	1.09
d, Delay for Lane Group [s/veh]	40.88	56.28	72.80		85.49	8.65	16.51	81.30
Lane Group LOS	D	F	F		F	A	B	F
Critical Lane Group	No	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.78	10.51	11.87		6.03	5.03	6.68	24.64
50th-Percentile Queue Length [ft/ln]	219.38	262.76	296.78		150.72	125.86	167.06	616.02
95th-Percentile Queue Length [veh/ln]	13.63	15.88	18.06		10.39	8.71	10.92	35.04
95th-Percentile Queue Length [ft/ln]	340.84	397.05	451.39		259.73	217.85	273.05	876.02

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.47	56.28	66.81	0.00	0.00	0.00	85.49	8.65	0.00	0.00	16.51	81.30
Movement LOS	D	E	E				F	A			B	F
d_A, Approach Delay [s/veh]	56.66			0.00			22.14			38.45		
Approach LOS	E			A			C			D		
d_I, Intersection Delay [s/veh]	35.99											
Intersection LOS	D											
Intersection V/C	1.083											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.09	29.09	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.348	2.338	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	506	0	1278	959
d_b, Bicycle Delay [s]	20.96	37.55	4.89	10.18
I_b,int, Bicycle LOS Score for Intersection	3.667	4.132	2.847	2.911
Bicycle LOS	D	D	C	C

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Oak Creek Mall-Arya Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	64.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.938

Intersection Setup

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	257	3	94	7	3	43	52	1034	257	76	990	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	53	53	0	0	0	0	24
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	51	0	51	47	1025	0	0	924	47
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	267	3	98	79	3	149	154	2101	267	79	1954	96
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	1	25	20	1	39	40	544	69	20	506	25
Total Analysis Volume [veh/h]	276	3	101	82	3	154	159	2175	276	82	2023	99
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	25	0	0	17	0	13	25	0	13	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	24	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	14	14	9	57	57	6	55	55
g / C, Green / Cycle	0.16	0.16	0.16	0.10	0.64	0.64	0.07	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.35	0.06	1.16	0.09	0.45	0.47	0.05	0.39	0.40
s, saturation flow rate [veh/h]	794	1589	205	1781	3560	1767	1781	3560	1826
c, Capacity [veh/h]	207	255	87	180	2270	1126	123	2156	1106
d1, Uniform Delay [s]	40.59	33.90	39.95	39.97	10.84	11.18	40.92	11.54	11.59
k, delay calibration	0.49	0.11	0.50	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	185.30	1.00	822.77	13.28	1.94	4.35	6.15	1.53	3.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.35	0.40	2.76	0.89	0.71	0.74	0.67	0.65	0.65
d, Delay for Lane Group [s/veh]	225.88	34.90	862.72	53.25	12.79	15.53	47.08	13.07	14.60
Lane Group LOS	F	C	F	D	B	B	D	B	B
Critical Lane Group	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	15.22	2.03	21.72	4.09	9.76	11.05	1.96	8.49	9.24
50th-Percentile Queue Length [ft/ln]	380.39	50.63	542.92	102.16	243.93	276.19	49.11	212.20	231.09
95th-Percentile Queue Length [veh/ln]	24.44	3.65	37.14	7.36	14.88	16.50	3.54	13.27	14.23
95th-Percentile Queue Length [ft/ln]	610.92	91.13	928.41	183.89	372.00	412.46	88.39	331.65	355.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	225.88	225.88	34.90	862.72	862.72	862.72	53.25	13.49	15.53	47.08	13.54	14.60
Movement LOS	F	F	C	F	F	F	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	175.12			862.72			16.13			14.84		
Approach LOS	F			F			B			B		
d_I, Intersection Delay [s/veh]	63.97											
Intersection LOS	E											
Intersection V/C	1.938											

Other Modes

g_Walk,mi, Effective Walk Time [s]	4.0	9.0	4.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.10	36.46	41.10	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.318	1.960	3.698	0.000
Crosswalk LOS	B	A	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	467	289	467	422
d_b, Bicycle Delay [s]	26.46	32.95	26.46	28.02
l_b,int, Bicycle LOS Score for Intersection	2.187	1.954	2.995	2.772
Bicycle LOS	B	A	C	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Wildomar Trl/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	64.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.193

Intersection Setup

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	66	23	51	74	25	130	154	947	22	96	893	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	0	0	0	8	7	7	7	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	280	0	201	220	857	0	0	770	278
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	77	24	53	357	26	344	387	1849	30	100	1707	307
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	6	14	94	7	91	102	487	8	26	450	81
Total Analysis Volume [veh/h]	81	25	56	376	27	362	408	1948	32	105	1799	323
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	26	53	0	24	51	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	2	0	0	2	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	22	22	22	22	68	68	8	54	54
g / C, Green / Cycle	0.20	0.20	0.20	0.20	0.20	0.20	0.62	0.62	0.07	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.08	0.05	0.29	0.01	0.23	0.23	0.37	0.37	0.06	0.51	0.20
s, saturation flow rate [veh/h]	995	1667	1317	1870	1589	1781	3560	1855	1781	3560	1589
c, Capacity [veh/h]	236	334	253	375	318	357	2193	1142	133	1745	779
d1, Uniform Delay [s]	41.10	36.96	49.18	35.68	43.97	43.97	12.78	12.81	50.03	28.03	17.94
k, delay calibration	0.11	0.11	0.49	0.11	0.33	0.33	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.86	0.37	238.20	0.08	84.20	84.95	1.19	2.29	9.92	29.86	1.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.34	0.24	1.49	0.07	1.14	1.14	0.59	0.60	0.79	1.03	0.41
d, Delay for Lane Group [s/veh]	41.96	37.33	287.38	35.76	128.17	128.92	13.97	15.09	59.95	57.89	19.56
Lane Group LOS	D	D	F	D	F	F	B	B	E	F	B
Critical Lane Group	No	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.03	1.87	23.74	0.60	16.03	18.04	9.42	10.21	3.20	28.94	5.49
50th-Percentile Queue Length [ft/ln]	50.87	46.74	593.46	14.97	400.75	450.88	235.42	255.21	79.99	723.59	137.30
95th-Percentile Queue Length [veh/ln]	3.66	3.36	37.59	1.08	24.12	26.79	14.45	15.45	5.76	38.69	9.34
95th-Percentile Queue Length [ft/ln]	91.57	84.12	939.86	26.95	603.02	669.70	361.23	386.20	143.98	967.23	233.39

Movement, Approach, & Intersection Results

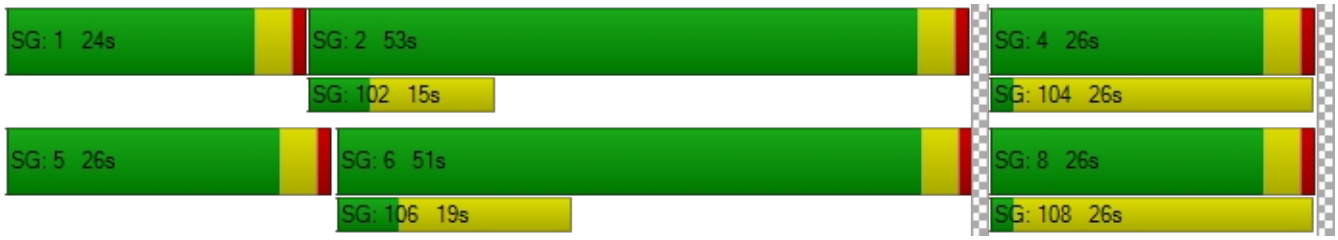
d_M, Delay for Movement [s/veh]	41.96	37.33	37.33	287.38	35.76	128.17	128.92	14.35	15.09	59.95	57.89	19.56
Movement LOS	D	D	D	F	D	F	F	B	B	E	F	B
d_A, Approach Delay [s/veh]	39.65			203.16			33.93			52.43		
Approach LOS	D			F			C			D		
d_I, Intersection Delay [s/veh]	64.89											
Intersection LOS	E											
Intersection V/C	1.193											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	6.0	6.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.36	46.36	49.16	49.16
l_p,int, Pedestrian LOS Score for Intersection	2.057	2.513	3.368	3.784
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	891	855
d_b, Bicycle Delay [s]	35.19	35.19	16.91	18.03
l_b,int, Bicycle LOS Score for Intersection	1.827	2.822	2.873	3.397
Bicycle LOS	A	C	C	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Arya Rd/Catt Rd

Control Type:	All-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.381

Intersection Setup

Name	Arya Road		Arya Road		Catt Road	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Arya Road		Arya Road		Catt Road	
Base Volume Input [veh/h]	8	0	0	0	0	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0404	1.0404	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	77	0	0	0	0	74
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	94	23	36	0	0	103
Total Hourly Volume [veh/h]	179	23	36	0	0	209
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	8	13	0	0	73
Total Analysis Volume [veh/h]	251	32	50	0	0	293
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	744	725	863
Degree of Utilization, x	0.38	0.07	0.34

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.79	0.22	1.51
95th-Percentile Queue Length [ft]	44.71	5.54	37.74
Approach Delay [s/veh]	10.79	8.33	9.30
Approach LOS	B	A	A
Intersection Delay [s/veh]	9.89		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 7: Project Dwy/Catt Road

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.068

Intersection Setup

Name	Project Driveway		Catt Road		Catt Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Project Driveway		Catt Road		Catt Road	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	74	0	0	77	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	74	0	0	77	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	19	0	0	19	0
Total Analysis Volume [veh/h]	0	74	0	0	77	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.07	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	9.76	8.56	0.00	0.00	7.33	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.00	0.00	0.15	0.15
95th-Percentile Queue Length [ft/ln]	5.48	5.48	0.00	0.00	3.73	3.73
d_A, Approach Delay [s/veh]	8.56		0.00		7.33	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.93					
Intersection LOS	A					

MITIGATION CONDITIONS

NEC I-15 & Clinton Keith

Vistro File: C:\...\CCG22001 Base 022223.vistro
Report File: C:\...\Mit AM.pdf

Scenario 8 Mit AM
3/8/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Oak Creek Mall-Arya Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	0.632	18.6	B
5	Wildomar Trl/Clinton Keith Rd	Signalized	HCM 6th Edition	EB Left	0.792	19.4	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Oak Creek Mall-Arya Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	18.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.632

Intersection Setup

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	157	7	50	9	1	32	46	695	157	68	883	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	9	0	19	23	0	0	0	0	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	15	0	15	25	671	0	0	594	25
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	7	52	33	1	67	96	1394	163	71	1513	58
Peak Hour Factor	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940	0.8940
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	2	15	9	0	19	27	390	46	20	423	16
Total Analysis Volume [veh/h]	182	8	58	37	1	75	107	1559	182	79	1692	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	34	0	0	34	0	12	24	0	12	24	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19	19	6	34	34	5	33	33
g / C, Green / Cycle	0.27	0.27	0.27	0.27	0.09	0.48	0.48	0.08	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.14	0.04	0.04	0.05	0.06	0.33	0.33	0.04	0.33	0.33
s, saturation flow rate [veh/h]	1323	1619	1068	1589	1781	3560	1772	1781	3560	1835
c, Capacity [veh/h]	322	432	387	424	156	1720	856	140	1688	870
d1, Uniform Delay [s]	28.24	19.61	22.22	19.74	31.00	13.87	13.90	31.10	14.35	14.36
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.55	0.16	0.11	0.20	5.27	2.14	4.29	3.55	2.30	4.41
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.15	0.10	0.18	0.69	0.67	0.68	0.57	0.69	0.69
d, Delay for Lane Group [s/veh]	29.80	19.77	22.33	19.94	36.27	16.01	18.19	34.65	16.65	18.77
Lane Group LOS	C	B	C	B	D	B	B	C	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.95	0.80	0.50	0.92	1.92	6.69	7.20	1.38	6.85	7.58
50th-Percentile Queue Length [ft/ln]	73.82	20.04	12.45	22.95	47.99	167.18	180.02	34.52	171.23	189.55
95th-Percentile Queue Length [veh/ln]	5.32	1.44	0.90	1.65	3.46	10.93	11.60	2.49	11.14	12.10
95th-Percentile Queue Length [ft/ln]	132.88	36.07	22.41	41.30	86.38	273.20	290.04	62.14	278.53	302.45

Movement, Approach, & Intersection Results

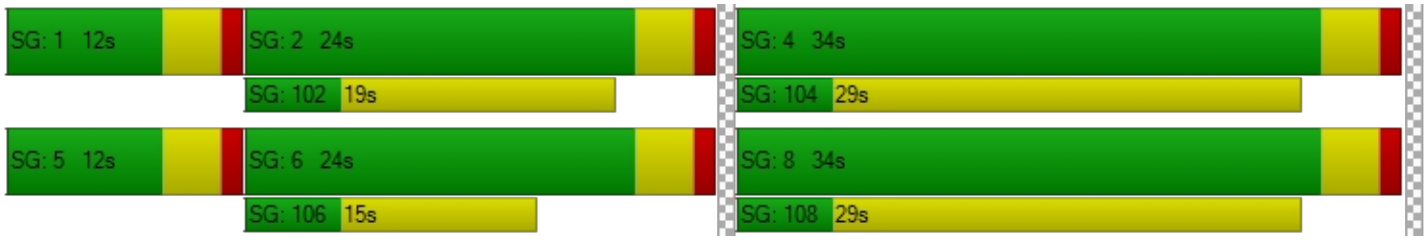
d_M, Delay for Movement [s/veh]	29.80	19.77	19.77	22.33	22.33	19.94	36.27	16.57	18.19	34.65	17.32	18.77
Movement LOS	C	B	B	C	C	B	D	B	B	C	B	B
d_A, Approach Delay [s/veh]	27.13			20.74			17.87			18.12		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	18.63											
Intersection LOS	B											
Intersection V/C	0.632											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.58	26.58	26.58	26.58
l_p,int, Pedestrian LOS Score for Intersection	2.244	2.024	3.371	3.121
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	857	857	571	571
d_b, Bicycle Delay [s]	11.43	11.43	17.86	17.86
l_b,int, Bicycle LOS Score for Intersection	1.969	1.746	2.576	2.569
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Wildomar Trl/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	19.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	42	10	36	58	15	98	89	634	20	57	836	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	3	3	3	3	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	115	0	128	95	591	0	0	491	138
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	10	37	175	16	233	191	1254	24	59	1364	158
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	3	10	49	5	66	54	355	7	17	386	45
Total Analysis Volume [veh/h]	53	11	42	198	18	264	216	1419	27	67	1543	179
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	33	0	0	33	0	14	20	0	17	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	17	17	17	10	36	36	5	31	31
g / C, Green / Cycle	0.24	0.24	0.24	0.24	0.24	0.14	0.51	0.51	0.07	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.15	0.01	0.17	0.12	0.27	0.27	0.04	0.32	0.32
s, saturation flow rate [veh/h]	1097	1641	1351	1870	1589	1781	3560	1852	1781	3560	1772
c, Capacity [veh/h]	325	395	352	450	383	255	1832	953	130	1583	788
d1, Uniform Delay [s]	23.40	20.85	27.30	20.37	24.20	29.26	11.26	11.26	31.25	15.94	15.96
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	0.15	1.41	0.04	2.22	7.64	1.06	2.02	3.10	2.94	5.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.16	0.13	0.56	0.04	0.69	0.85	0.52	0.52	0.51	0.73	0.73
d, Delay for Lane Group [s/veh]	23.64	21.00	28.71	20.41	26.42	36.91	12.32	13.29	34.35	18.88	21.78
Lane Group LOS	C	C	C	C	C	D	B	B	C	B	C
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.72	0.67	3.15	0.22	4.00	3.93	4.52	4.96	1.17	7.36	7.98
50th-Percentile Queue Length [ft/ln]	18.11	16.68	78.73	5.51	99.92	98.23	113.06	124.05	29.17	183.91	199.54
95th-Percentile Queue Length [veh/ln]	1.30	1.20	5.67	0.40	7.19	7.07	8.01	8.62	2.10	11.80	12.61
95th-Percentile Queue Length [ft/ln]	32.59	30.03	141.72	9.92	179.86	176.82	200.25	215.38	52.50	295.11	315.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.64	21.00	21.00	28.71	20.41	26.42	36.91	12.64	13.29	34.35	19.62	21.78
Movement LOS	C	C	C	C	C	C	D	B	B	C	B	C
d_A, Approach Delay [s/veh]	22.32			27.14			15.80			20.39		
Approach LOS	C			C			B			C		
d_I, Intersection Delay [s/veh]	19.35											
Intersection LOS	B											
Intersection V/C	0.792											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.59	26.59	26.59	26.59
l_p,int, Pedestrian LOS Score for Intersection	2.000	2.336	3.149	3.345
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	828	828	457	543
d_b, Bicycle Delay [s]	12.01	12.01	20.84	18.59
l_b,int, Bicycle LOS Score for Intersection	1.735	2.352	2.474	2.544
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



NEC I-15 & Clinton Keith

Vistro File: C:\...\CCG22001 Base 022223.vistro
Report File: C:\...\Mit PM.pdf

Scenario 9 Mit PM
3/8/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Oak Creek Mall-Arya Rd/Clinton Keith Rd	Signalized	HCM 6th Edition	NB Left	0.855	38.5	D
5	Wildomar Trl/Clinton Keith Rd	Signalized	HCM 6th Edition	SB Left	1.087	54.4	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Oak Creek Mall-Arya Rd/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	38.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.855

Intersection Setup

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Oak Creek Mall			Arya Road			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	257	3	94	7	3	43	52	1034	257	76	990	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	53	53	0	0	0	0	24
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	51	0	51	47	1025	0	0	924	47
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	267	3	98	79	3	149	154	2101	267	79	1954	96
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	1	25	20	1	39	40	544	69	20	506	25
Total Analysis Volume [veh/h]	276	3	101	82	3	154	159	2175	276	82	2023	99
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	33	0	0	33	0	13	46	0	11	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	24	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	29	29	9	43	43	6	40	40
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.10	0.48	0.48	0.07	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.22	0.07	0.08	0.10	0.09	0.45	0.47	0.05	0.39	0.40
s, saturation flow rate [veh/h]	1229	1596	1025	1589	1781	3560	1767	1781	3560	1826
c, Capacity [veh/h]	299	514	408	512	181	1692	839	124	1578	809
d1, Uniform Delay [s]	38.69	22.16	26.78	22.94	39.91	22.76	23.46	40.85	23.01	23.10
k, delay calibration	0.21	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	19.66	0.19	0.25	0.33	12.55	13.83	29.01	5.81	7.76	14.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.92	0.20	0.21	0.30	0.88	0.96	0.99	0.66	0.89	0.89
d, Delay for Lane Group [s/veh]	58.35	22.36	27.03	23.27	52.46	36.60	52.47	46.66	30.77	37.35
Lane Group LOS	E	C	C	C	D	D	D	D	C	D
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.74	1.59	1.46	2.45	4.05	18.43	22.84	1.96	14.42	16.38
50th-Percentile Queue Length [ft/ln]	193.48	39.83	36.62	61.16	101.36	460.81	571.07	48.88	360.44	409.47
95th-Percentile Queue Length [veh/ln]	12.30	2.87	2.64	4.40	7.30	25.47	30.68	3.52	20.64	23.02
95th-Percentile Queue Length [ft/ln]	307.54	71.69	65.92	110.09	182.45	636.83	767.02	87.98	516.11	575.40

Movement, Approach, & Intersection Results

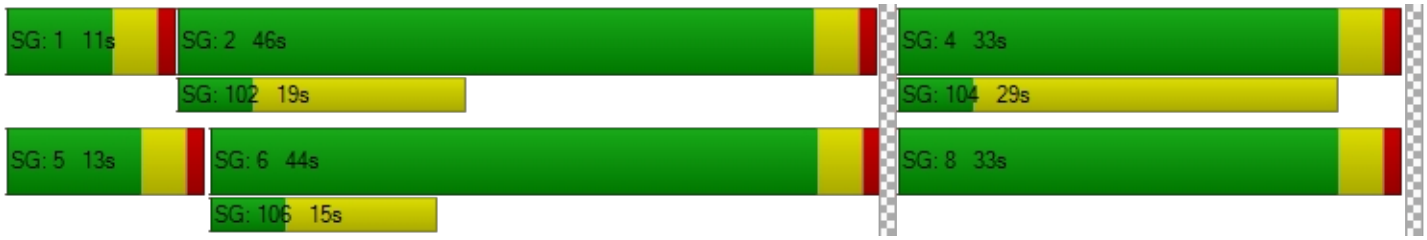
d_M, Delay for Movement [s/veh]	58.35	22.36	22.36	27.03	27.03	23.27	52.46	40.65	52.47	46.66	32.79	37.35
Movement LOS	E	C	C	C	C	C	D	D	D	D	C	D
d_A, Approach Delay [s/veh]	48.50			24.61			42.62			33.51		
Approach LOS	D			C			D			C		
d_I, Intersection Delay [s/veh]	38.55											
Intersection LOS	D											
Intersection V/C	0.855											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.47	36.47	36.47	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.313	2.104	3.693	0.000
Crosswalk LOS	B	B	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	644	644	933	888
d_b, Bicycle Delay [s]	20.69	20.69	12.82	13.91
l_b,int, Bicycle LOS Score for Intersection	2.187	1.954	2.995	2.772
Bicycle LOS	B	A	C	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Wildomar Trl/Clinton Keith Rd

Control Type:	Signalized	Delay (sec / veh):	54.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.087

Intersection Setup

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Wildomar Trail			Wildomar Trail			Clinton Keith Road			Clinton Keith Road		
Base Volume Input [veh/h]	66	23	51	74	25	130	154	947	22	96	893	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	0	0	0	8	7	7	7	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	280	0	201	220	857	0	0	770	278
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	77	24	53	357	26	344	387	1849	30	100	1707	307
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	6	14	94	7	91	102	487	8	26	450	81
Total Analysis Volume [veh/h]	81	25	56	376	27	362	408	1948	32	105	1799	323
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	34	0	0	34	0	27	59	0	12	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	24	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	30	30	30	23	55	55	8	40	40
g / C, Green / Cycle	0.29	0.29	0.29	0.29	0.29	0.22	0.53	0.53	0.07	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.08	0.05	0.29	0.01	0.23	0.23	0.37	0.37	0.06	0.40	0.41
s, saturation flow rate [veh/h]	995	1667	1317	1870	1589	1781	3560	1855	1781	3560	1730
c, Capacity [veh/h]	323	476	372	534	454	391	1870	974	133	1354	658
d1, Uniform Delay [s]	31.61	28.14	42.63	27.17	34.67	40.96	18.63	18.67	47.77	32.53	32.53
k, delay calibration	0.11	0.11	0.45	0.11	0.30	0.31	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.40	0.17	47.00	0.04	8.58	47.30	2.16	4.14	10.00	37.90	55.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.17	1.01	0.05	0.80	1.04	0.70	0.70	0.79	1.05	1.07
d, Delay for Lane Group [s/veh]	32.01	28.31	89.63	27.21	43.25	88.26	20.79	22.80	57.76	70.43	87.73
Lane Group LOS	C	C	F	C	D	F	C	C	E	F	F
Critical Lane Group	No	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.69	1.55	14.63	0.50	9.49	15.10	11.77	12.86	3.06	23.71	26.20
50th-Percentile Queue Length [ft/ln]	42.36	38.75	365.82	12.43	237.37	377.60	294.19	321.38	76.51	592.77	655.03
95th-Percentile Queue Length [veh/ln]	3.05	2.79	21.05	0.90	14.55	21.99	17.39	18.74	5.51	32.75	36.27
95th-Percentile Queue Length [ft/ln]	76.25	69.75	526.13	22.38	363.71	549.72	434.84	468.38	137.71	818.79	906.75

Movement, Approach, & Intersection Results

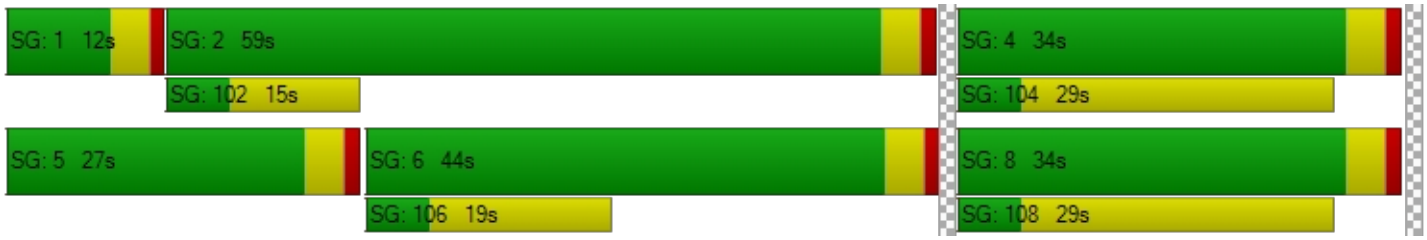
d_M, Delay for Movement [s/veh]	32.01	28.31	28.31	89.63	27.21	43.25	88.26	21.46	22.80	57.76	74.09	87.73
Movement LOS	C	C	C	F	C	D	F	C	C	E	E	F
d_A, Approach Delay [s/veh]	30.16			65.48			32.89			75.30		
Approach LOS	C			E			C			E		
d_I, Intersection Delay [s/veh]	54.35											
Intersection LOS	D											
Intersection V/C	1.087											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	43.88	43.88	43.88	43.88
l_p,int, Pedestrian LOS Score for Intersection	2.055	2.511	3.363	3.779
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	571	571	1048	762
d_b, Bicycle Delay [s]	26.78	26.78	11.90	20.11
l_b,int, Bicycle LOS Score for Intersection	1.827	2.822	2.873	2.784
Bicycle LOS	A	C	C	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



April 7, 2023

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. Brandon Humann
Catalyst Commercial Group
38605 Calistoga Drive, Suite 150
Murrietta, CA 92563

Subject: NEC I-15 & Clinton Keith Memo, City of Wildomar

Dear Mr. Humann:

TJW ENGINEERING, INC. (TJW) is pleased to present you with this traffic memo for the proposed NEC I-15 & Clinton Keith project located on the northeast corner of I-15 and Clinton Keith Road. A traffic impact analysis for the proposed project was completed on March 28th, 2023. Since the completion of the traffic study, a change in the square footage of the proposed retail space has taken place. This memo provides an overview of the changes to the traffic study due to the increase in retail space.

Project Description

The previously proposed project consisted of constructing a 108 linear foot car wash tunnel, 5,200 square feet of retail space, and a 2,350 square foot drive-thru restaurant. The proposed retail space has since been modified to 6,076 square feet of retail space resulting in an increase of 876 square feet. Site access will remain the same with one full-access driveway and a secondary emergency carwash exit on Catt Road.

Project Trip Generation

To determine if any traffic deficiencies would be created by the additional 876 square feet of retail space, a comparison of the trip generation was conducted. Utilizing the same methodology used in the previously conducted traffic study, **Table 1** and **Table 2** (attached) show the trip generation for the previous site plan and the new proposed site plan. The revised trip generation is proposed to increase by 32 daily trips, 3 AM peak hour trips, and 4 PM peak hour trips. The resulting increase in trip generation is minimal and is not likely to change the findings of the previous traffic study. Therefore, the recommended improvements presented in the previous traffic study would remain the same.

Fair Share Calculations

As the project is now generating additional trips over the previous site plan, the fair share calculations from the previous study would need to be revised. The fair share percentages were calculated using the same

methodology as the previous traffic study, the resulting fair share is identified in **Table 3** below. As discussed previously, the additional traffic trips are minimal with an addition of 3 AM peak hour trips and 4 PM peak hour trips. Due the minimal number of trips being added and rounding, the resulting fair share is consistent with the previous traffic study.

Table 3
Fair Share Analysis

Intersection		Peak Hour	Existing	Project	Cumulative Year With Project	Project % of Fair Share
4	Arya Road/ Clinton Keith Road	AM	2,128	61	3,618	4%
		PM	2,840	154	5,250	6%
5	Wildomar Trail/ Clinton Keith Road	AM	1,914	1,559	3,568	94%
		PM	2,509	2,608	5,261	95%

Conclusion

In summary the retail space is proposing an additional 876 square feet resulting in an additional 32 daily trips, 3 AM peak hour trips, and 4 PM peak hour trips. These additional trips are not anticipated to change the findings of the previous traffic study conducted on March 28th, 2023. Further, the fair share calculations will remain the same. Therefore, the additional 876 square feet of retail space will not result in any additional deficiencies.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

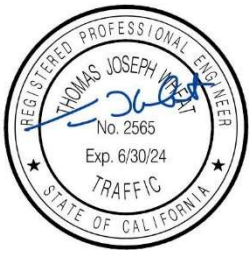
Sincerely,

Thomas Wheat, PE, TE
President

David Chew, PTP
Transportation Planner

Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*





Daniel Flores, EIT
Project Engineer

APPENDIX

Table 1

Project Trip Generation

Proposed Land Use[1]	Qty	Unit[2]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour					Pass-By %'s		
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume					
							In	Out	Total			In	Out	Total	AM	PM	Daily
Strip Retail Plaza (<40K) (822)	5.20	TSF	54.45	283	2.36	60:40	7	5	12	6.59	50:50	17	17	34	0%	34%	34%
Fast-Food Restaurant with Drive-Through Window (934)	2.35	TSF	467.48	1,094	44.61	51:49	53	51	104	33.03	52:48	40	37	77	49%	50%	50%
Automated Car Wash (948)[3]	108	LFWT	11.87	1,282	0.66	58:42	42	30	72	1.25	50:50	68	68	135	10%	34%	10%
Subtotal				**1,377**			**60**	**56**	**116**			**125**	**122**	**246**			
Pass-By Trips (Shopping Center)				-96			0	0	0			-6	-6	-12			
Pass-By Trips (Restaurant)				-547			-26	-25	-51			-20	-19	-39			
Pass-By Trips (Car Wash)				-128			-4	-3	-7			-23	-23	-46			
Total Pass-By				**-771**			**-30**	**-28**	**-58**			**-49**	**-47**	**-96**			
Total				**606**			**30**	**28**	**58**			**76**	**74**	**150**			

Table 2

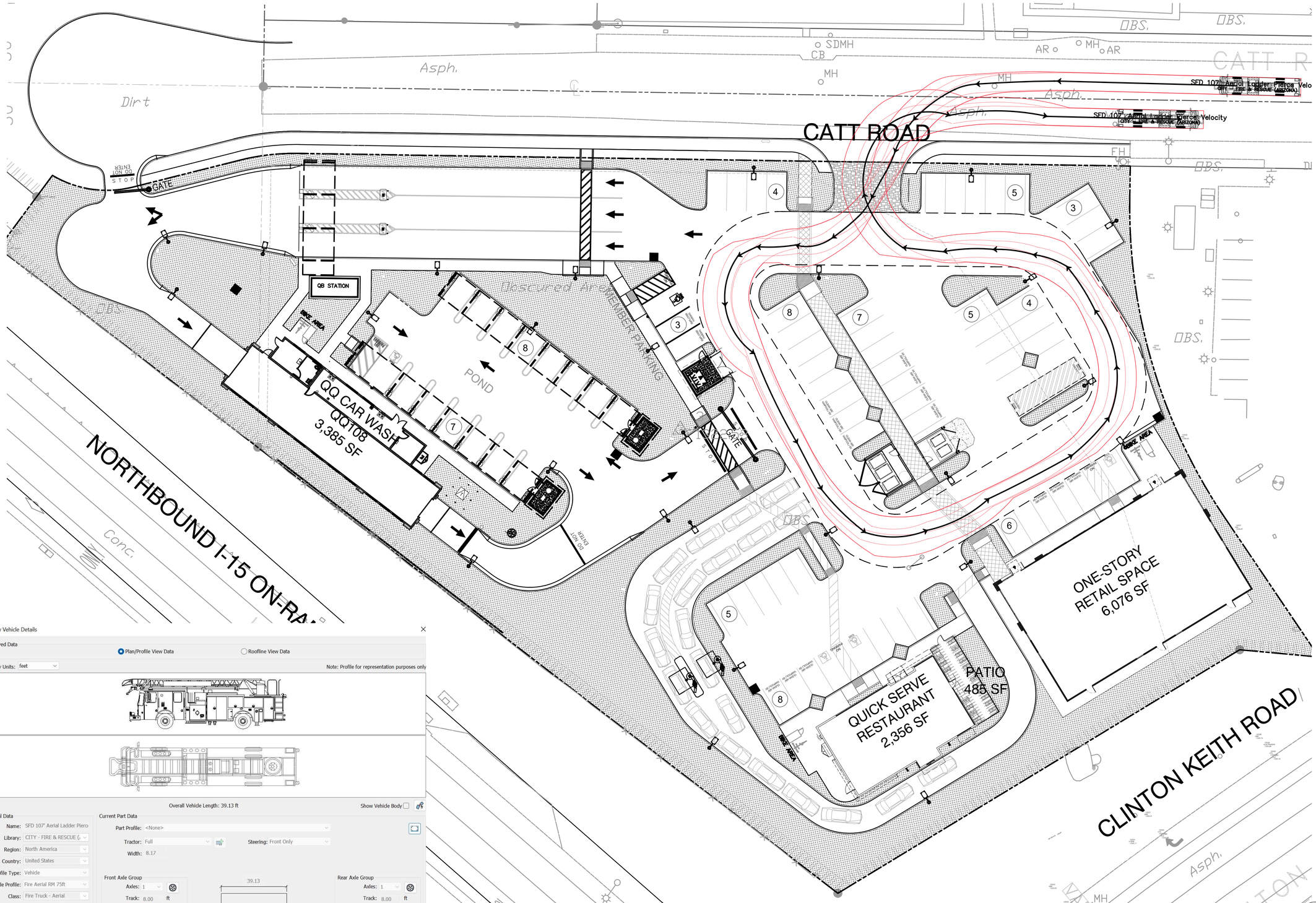
Proposed Trip Generation

Proposed Land Use[1]	Qty	Unit[2]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour					Pass-By %'s		
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume					
							In	Out	Total			In	Out	Total	AM	PM	Daily
Strip Retail Plaza (<40K) (822)	6.08	TSF	54.45	331	2.36	60:40	9	6	15	6.59	50:50	20	20	40	0%	34%	34%
Fast-Food Restaurant with Drive-Through Window (934)	2.35	TSF	467.48	1,094	44.61	51:49	53	51	104	33.03	52:48	40	37	77	49%	50%	50%
Automated Car Wash (948)[3]	108	LFWT	11.87	1,282	0.66	58:42	42	30	72	1.25	50:50	68	68	135	10%	34%	10%
Subtotal				**1,425**			**62**	**57**	**119**			**128**	**125**	**252**			
Pass-By Trips (Shopping Center)				-113			0	0	0			-7	-7	-14			
Pass-By Trips (Restaurant)				-547			-26	-25	-51			-20	-19	-39			
Pass-By Trips (Car Wash)				-128			-4	-3	-7			-23	-23	-46			
Total Pass-By				**-788**			**-30**	**-28**	**-58**			**-50**	**-48**	**-98**			
Total				**637**			**31**	**29**	**61**			**78**	**76**	**154**			

1: Rates from ITE Trip Generation 11th Edition, 2021 (Land Use 822, and 934), and Trip Generation Handbook, 3rd Edition.

2: TSF = Thousand Square Feet, LFWT = Linear Foot of Wash Tunnel.

3: Newport Pointe Commercial Center Project Traffic Impact Analysis Report, LLG, April 28, 2021.



TRUCK TURN EXHIBIT - FIRETRUCK

1" = 20'

1

PM DESIGN
Architectural Solutions Group
38 EXECUTIVE PARK
SUITE 310
IRVINE, CA 92614
PROJECT CONTACT: JEFF LIEDERMAN
PHONE: (949) 430-7051
EMAIL: jliederman@pmdginc.com
JEFF LIEDERMAN, ARCHITECT

SEAL:

CONSULTANT:

CATT CROSSING RETAIL CENTER
23825 CATT ROAD
WILDOMAR, CA

CATALYST COMMERCIAL GROUP

REV	DATE	DESCRIPTION
1	10.11.22	CUP SUBMITTAL
2	12.30.22	CUP RESUBMITTAL
3	03.07.23	CUP RESUBMITTAL
4	04.03.23	CUP RESUBMITTAL

DRAWN BY: MP
CHECKED BY: RK

ARCH. PROJECT NO.:
CCG21001.0

SHEET NAME:
TRUCK TURN EXHIBIT

SHEET NUMBER:
A1.1a

December 8, 2022

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. Brandon Humann
CATALYST COMMERCIAL GROUP
38605 Calistoga Drive, Suite 150
Murrieta, CA 92563

SUBJECT: NEC I-15 & Clinton Keith VMT Screening, City of Wildomar

Dear Mr. Humann,

*TJW Engineering, Inc. (*TJW*)* is pleased to submit this Vehicle Miles Traveled (VMT) Screening for the proposed project located at the northeast corner of I-15 & Clinton Keith in the City of Wildomar. The proposed project consists of constructing a 108 linear foot car wash tunnel, 5,200 square feet of retail space, and a 2,350 square foot drive-through restaurant. A site plan is attached for reference. The purpose of this memorandum is to conduct a VMT Screening review to determine if additional analysis is needed.

Proposed Project

The proposed project consists of constructing a 108 linear foot car wash tunnel, 5,200 square feet of retail space, and a 2,350 square foot drive-thru restaurant. Site access is planned via one full-access driveway and a secondary emergency carwash exit only on Catt Road.

Vehicle Miles Traveled (VMT) Screening

Senate Bill (SB) 743 was adopted in 2013 requiring the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act (CEQA). For land use projects, OPR has identified Vehicle Miles Traveled (VMT) as the new metric for transportation analysis under CEQA. The regulatory changes to the CEQA guidelines that implement SB 743 were approved on December 28th, 2018 with an implementation date of July 1st, 2020 as the new metric.

As the project falls within the City of Wildomar jurisdiction, the City of Wildomar Vehicle Miles Traveled (VMT) CEQA Threshold Policy Guidelines (June 2020) was consulted. The document outlines guidelines for CEQA analysis including screening criteria and requirements for VMT assessment of land use projects. The VMT guidelines provide several screening criteria for projects.

The City of Wildomar VMT CEQA Threshold Policy Guidelines (June 2020) indicates local-serving retail under 50,000 square feet are presumed to cause a less than significant impact and are not required to complete a VMT assessment. The proposed project includes a car wash, 5,200 square feet of retail space, and a 2,350 square foot drive-thru restaurant for local use. Therefore, the project is screened from a VMT analysis and is presumed to have a less-than-significant impact.

Summary

This memorandum provides an overview of the trip generation analysis for the proposed project. Based on the City of Wildomar VMT CEQA Threshold Policy Guidelines (June 2020), the guidelines outline local-serving retail projects less than 50,000 square feet may be presumed to have a less than significant impact on VMT and be screened from VMT analysis. Consistent with the City guidelines, the proposed project does not require additional VMT analysis.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

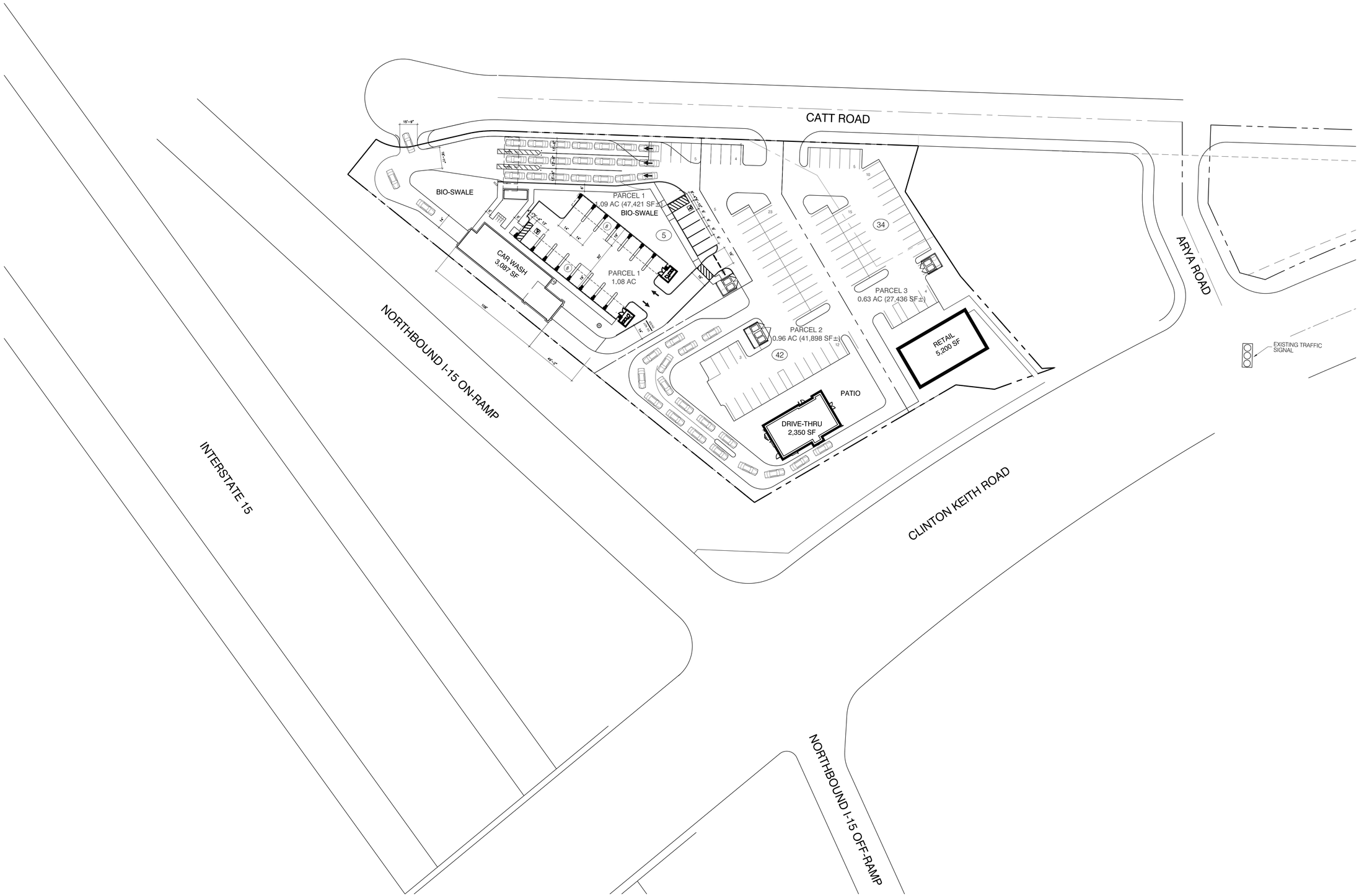
Thomas Wheat, PE, TE
President

Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*

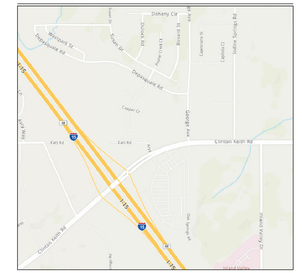




David Chew, PTP
Transportation Planner



VICINITY


Clinton Keith Rd
Cali Rd
Cougar Dr
Bella Springs Rd
Lawrence St
Bitterbrush Ln
Sky Ranch Rd
Wildomar Trl
Sunset Ave
Palomar St
Mission Trl
Inland Valley Dr
Central Ave
Elm St
Grand Ave
Baxter Rd
Mapleleaf Ln
Jackaroo Cir
Sage Brush Ln
Sage Brush Rd
Corydon Ln
Corydon Rd
Mission Trl
Palomar St
Sunset Ave
Central Ave
Grand Ave
Elm St
Baxter Rd
Inland Valley Dr

CITY OF WILDOMAR
PC - REGULAR MEETING
PUBLIC HEARING
Agenda Staff Report # 2.2
Meeting Date: May 3, 2023

SUBJECT: Tentative Parcel Map No. 38646 (Wildomar Commerce Center):

SUBMITTED BY: Matthew Bassi

PREPARED BY: Matthew Bassi

ACTION:
The Planning Division recommends the Planning Commission take the following actions:

1. Find and determine that the approval of Tentative Parcel Map No. 38646 does not require additional environmental review in accordance with Section 15162 of the California Environmental Quality Act (CEQA) guidelines; and

2. Adopt a Resolution entitled:

PC Resolution No. 2023-13

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, MAKING A DETERMINATION THAT ADDITIONAL ENVIRONMENTAL REVIEW IS NOT REQUIRED PER CEQA GUIDELINES SECTION 15162 AND APPROVING TENTATIVE PARCEL MAP NO. 38646, SUBJECT TO CONDTIONS, TO SUBDIVIDE A 26.8-ACRES SITE INTO SEVEN (7) PARCELS FOR FUTURE BUSINESS PARK/INDUSTRIAL/SERVICE COMMERICAL USES LOCATED AT THE SOUTHWEST CORNER OF ELIZABETH LANE AND CLINTON KEITH ROAD (APN: 380-250-052, -053, -054, -055, -056 & -057)

PROJECT DESCRIPTION:
The Applicant (Summit Development Corporation) is proposing to subdivide a 26.8-acre site into seven (7) parcels for the future business park, industrial, and service commercial uses. The site was originally subdivided by The Rancon Group under Parcel Map No. 36492 approved by the Planning Commission on October 1, 2014 (PA 12-0053). Parcel Map No. 36492 was recorded several years ago. At this time, Summit Development Corporation is in a purchase agreement with the Rancon Group and desires to develop the site with future

business park, industrial, and service commercial uses. In order to accommodate the newly proposed project, Summit needs to subdivide the site into parcels that match its proposed development plan.

Project Location/Vicinity:

The project site encompasses approximately 26.8 acres and is located at the SWC of Clinton Keith Road and Elizabeth Lane. The site is currently vacant and is located in the southeast part of the city east of the Inland Valley Hospital complex. The aerial photo below shows the project site and surrounding area. Attachment E includes the location exhibit for Commission consideration.

Surrounding Land Uses:

The project site is vacant land. There is a self-storage facility to the east and the Inland Valley Medical Center hospital to the southwest. The summary table in Attachment E lists the current land uses, general plan land use, and zoning designations for the site and abutting properties.

CEQA Addendum to Parcel Map No. 36492 for TPM No. 38646:

The City prepared an Initial Study/Mitigated Negative Declaration for the Rancon Medical Office/Retail Project Plot Plan and Tentative Parcel Map No. 36492 project to analyze the impacts associated with the construction and development of 294,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses, and a 3,000 square foot drive-through fast food restaurant at the vacant project site. The Approved Project included the approval of Tentative Parcel Map No. 36492 to subdivide 29.40 gross acres/25.99 net acres into 13 parcels for commercial, industrial, and open space uses.

Plot Plan No. 12-0053 of the Approved Project included two phases—Phase 1 would have included 96,240 square feet of commercial, retail, restaurant, office (including medical), and light industrial, and Phase 2 would have result in 198,660 square feet of building space on the southern portion of the project site. Ultimate development of the Approved Project would have resulted in 294,900 square feet of business park uses, 42,400 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses, and a 3,000-square foot drive-through fast food restaurant.

The Approved Project also consisted of several roadway improvements, including the dedication of approximately 3.41 acres to the City of Wildomar on Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive, and “Lot C” for right-of-way purposes. The Approved Project provided access via entry/exit points off of Clinton Keith Road, Elizabeth Lane, Bunny Trail, and “Lot C,” and Yamas Drive. Construction for Phase 1 of the Approved Project was anticipated to commence in fall of 2013, lasting for approximately 23 months, and construction for Phase 2 was anticipated to commence in spring of 2015, lasting for approximately 26 months.

The IS/MND was originally circulated for public review from November 20, 2013, to December 30, 2013, and the City adopted the IS/MND ("Adopted IS/MND") on October 1, 2014 (State Clearinghouse No. 2013111063). The IS/MND for the Approved Project found that impacts to Aesthetics, Agricultural Resources, Geology and Soils, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems would either result in no impact or less than significant impacts. Mitigation measures were identified for Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, and Transportation. While impacts to Air Quality and Greenhouse Gas Emissions were determined to be less than significant, the Approved Project voluntarily adopted mitigation measures to further reduce project impacts from construction and operational emissions. Upon implementation of the mitigation measures, all impacts were found to be reduced to a level of less than significant.

The City is preparing an addendum to the Adopted IS/MND ("Addendum") to amend the Approved Project, including revisions to the approved site plan (PA 22-0085). The changes proposed (see Section 3, Modified Project Description, in the Addendum) by the City will trigger a requirement for additional CEQA review since the changes proposed under the Modified Project were not initially part of the Approved Project, nor was the Modified Project analyzed for its impacts in the Adopted IS/MND. The discussion for the Addendum is provided in the Analysis section of this staff report and the findings are provided in PC Resolution No. 2023-13 (Attachment A).

Tentative Parcel Map No. 38646:

In accordance with Title 16.12 (Subdivisions) of the Wildomar Municipal Code (WMC), the proposed project requires approval of a Tentative Parcel Map to subdivide the 26.8-acre site into seven (7) parcels to develop the future business park, industrial, and service commercial project. The Planning Commission has the sole authority to review and make a decision on the proposed parcel map. The discussion for the TPM is provided in the Analysis section of this staff report and the Findings are provided in PC Resolution No. 2023-13 (Attachment A). The proposed 7-lot TPM No. 38646 exhibit is provided for Commission review (Attachment B).

PROJECT ANALYSIS:

CEQA Addendum Analysis:

According to Section 15164(a) of the CEQA Guidelines, an addendum shall be prepared if some changes or additions to a previously certified EIR are necessary, but none of the conditions enumerated in CEQA Guidelines Sections 15162(a)(1)-(3) calling for the preparation of a subsequent EIR has occurred. As stated in CEQA Guidelines Section 15162 (Subsequent EIRs and Negative Declarations):

When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as the complete or negative declaration was adopted, shows any of the following:

(a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
(b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
(d) Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The proposed changes from the Modified Project will not result in any of the conditions outlined in CEQA Guidelines Sections 15162(a)(1)-(3) because they will not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects requiring major revisions to the Adopted IS/MND. Accordingly, the Addendum provides the substantial evidence required by CEQA Guidelines Section 15164(e) to support the finding that a subsequent EIR is not required and an addendum to the Adopted IS/MND is the appropriate environmental document to address changes proposed by the Modified Project.

As stated in CEQA Guidelines Section 15164 (Addendum to an EIR):

a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

After careful consideration of the potential environmental impacts of the Modified Project, the City, as the lead agency, has determined that none of the conditions requiring preparation of a subsequent or supplemental EIR have occurred. The City, therefore, has determined that the circumstances described in CEQA Guidelines Section 15164 apply to the Modified Project, and an addendum to the Adopted IS/MND is appropriate. This Addendum compares the Modified Project to the designated land uses and impacts for the Approved Project as evaluated in the Adopted IS/MND.

A copy of the original MND adopted for Parcel Map No. 36492 is also provided (Attachment C). A copy of the proposed Addendum is provided for Planning Commission consideration (Attachment D). The findings for the adoption of the Addendum are provided in PC Resolution No. 2023-13 (Attachment A).

Tentative Parcel Map 38646 Analysis:

Tentative Parcel Map No 38646 must comply with the development standards of the I-P zone (Chapter 17.88) and Title 16.12 of the Wildomar Municipal Code. Based on these development standards related to lot size, lot depth, and lot width, staff has determined that the parcel map meets and exceeds these minimum standards. Attachment E includes the development standards table for Commission consideration.

Primary access to Parcels 1 – 3 will be provided via Clinton Keith Road and Elizabeth Lane. Clinton Keith Road (urban arterial highway) will be fully improved (south of the centerline) to its ultimate ½ width of 76 feet (consisting of a 55-foot roadway section and a 21-foot parkway with a meandering sidewalk and landscaping. Elizabeth Lane (industrial collector) will be fully improved (west of centerline) to its ultimate ½ width of 39 feet (consisting of a 28-foot roadway section and an 11-foot parkway with sidewalk and landscaping. Both streets are conditioned to

be dedicated, fully improved, and constructed as part of this development. Access to Parcels 4-6 will be provided via Elizabeth Land and Bunny Trial. Bunny Trail will be fully improved (north of centerline upon development) to its ultimate ½ width of 39 feet (consisting of a 28-foot roadway section and an 11-foot parkway with sidewalk and landscaping. A fourth street, Yamas Drive, will be improved to provide additional access to Parcels 4 - 6 on the west side of the industrial site. The applicant will be required to record a reciprocal parking and access agreement with the final map that will allow full access between all parcels.

The Planning Commission has the authority to approve Tentative Parcel Map No. 38646, subject to conditions. The findings to support the approval of the parcel map are discussed and outlined in PC Resolution No. 2023-13 (Attachment A). The proposed conditions of approval matrix is provided in Exhibit 1 of Attachment A.

ATTACHMENTS:

Attach A - PC Reso 2023-13-COAs.pdf
Attach B - TPM No. 38646 Exhibit.pdf
Attach C - Original PM 36492 MND Doc [10-1-14].pdf
Attach D - TPM 38646 CEQA Addenudm [March 2023].pdf
Attach E - Project Specifics Maps-Tables.pdf

ATTACHMENT A

PC Resolution No. 2023-13

TPM No. 38646

PC RESOLUTION NO. 2023-13

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, MAKING A DETERMINATION THAT ADDITIONAL ENVIRONMENTAL REVIEW IS NOT REQUIRED PER CEQA GUIDELINES SECTION 15162 AND APPROVING TENTATIVE PARCEL MAP NO. 38646, SUBJECT TO CONDITIONS, TO SUBDIVIDE A 26.8-ACRES SITE INTO SEVEN (7) PARCELS FOR FUTURE BUSINESS PARK, INDUSTRIAL, AND SERVICE COMMERCIAL USES LOCATED AT THE SOUTHWEST CORNER OF ELIZABETH LANE AND CLINTON KEITH ROAD (APN: 380-250-052, -053, -054, -055, -056 & -057)

WHEREAS, the Planning Department has received an application for Tentative Parcel Map No. 38646 (PA 22-0225) to subdivide a 26.8-acre site into five (5) parcels to develop the Wildomar Crossroads mixed-use project from:

Project Applicant:	Summit Development Corporation
Project Location:	SWC Elizabeth Lane and Clinton Keith Road
APN:	380-250-052, -053, -054, -055, -056 & -057
Project Area:	26.8 acres

WHEREAS, in accordance with the California Government Code Section 66452 – 66452.22 (Subdivision Map Act), the Wildomar Subdivision Ordinance (Title 16), and the Wildomar Zoning Ordinance (Title 17), the Planning Commission has the authority to review Tentative Parcel Map No. 38646; and

WHEREAS, in accordance with Government Code Section 66452.3, the City has provided the applicant with a copy of the staff report, resolution, and conditions of approval matrix for Tentative Parcel Map No. 38646 at least three (3) days prior to the May 3, 2023, Planning Commission meeting containing staff's recommendation to the Planning Commission; and

WHEREAS, in accordance with CEQA Guideline Section 15162, once a Mitigated Negative Declaration (MND) is adopted for a project and a subsequent discretionary approval (i.e., TPM No. 38646) is required for the project, the lead agency may determine, based on substantial evidence, that an Addendum to the original MND may be prepared provided none of the conditions stated in CEQA Guideline Section 15162(a) are present.; and

WHEREAS, in accordance with Section 16.12.140 of the Wildomar Municipal Code, the Planning Department on April 19, 2023, gave public notice to all property owners within a 600-foot radius of the project boundary notifying said property owners of the May 3, 2023, Planning Commission meeting at which time the Planning Commission would consider Tentative Parcel Map No. 38646; and

WHEREAS, In accordance with Ordinance No. 135, the Planning Department on April 21, 2023, posted two (2) public hearing notice "sign boards" on Elizabeth Lane and Clinton Keith Road notifying the general public of the May 3, 2023, Planning Commission meeting at which time the Planning Commission would consider Tentative Parcel Map No. 38646; and

WHEREAS, in accordance with Section 16.12.140 of the Wildomar Municipal Code, the Planning Department on April 21, 2023, published a legal notice in the "Press Enterprise", a local newspaper of general circulation, notifying the general public of the May 3, 2023, Planning Commission meeting at which time the Planning Commission would consider Tentative Parcel Map No. 38646; and

WHEREAS, in accordance with Section 16.12.140 of the Wildomar Municipal Code, the Planning Commission conducted the duly noticed public hearing on May 3, 2023, at which time interested persons had an opportunity to testify in support of, or opposition to, the proposed Tentative Parcel Map No. 38646, and at which time the Planning Commission received public testimony concerning the proposed Tentative Parcel Map No. 38646.

NOW, THEREFORE, the Planning Commission of the City of Wildomar does hereby resolve, determine and order as follows:

SECTION 1. CEQA ADDENDUM FINDINGS:

In accordance with Section 15162 of the California Environmental Quality Act (CEQA) Guidelines, the Planning Commission has evaluated the criteria related to the proposed Addendum and determined that there have been no significant changes in the project, no significant changes in the circumstances under which the project will be undertaken, and no new information has come to light regarding new or significant environmental effects. Preparation of an Addendum to an IS/MND is appropriate when none of the conditions specified in CEQA Guidelines Section 15162 are present and some changes or additions to the previously Adopted IS/MND are necessary.

As demonstrated in this Addendum, the Modified Project does not meet the criteria for preparing a supplemental or subsequent IS/MND. Under the Modified Project, the project site would be developed with slightly different uses than those proposed under the Approved Project, including more industrial uses and the elimination of the fast-food and medical office uses. The Modified Project also revises the Approved Project's site plan resulting in less total building square footage than Approved Project. These changes have been analyzed in this addendum where it has been determined that the Modified Project would not result in an increase in severity of any previously identified environmental impacts from the Adopted IS/MND.

Therefore, the Planning Commission determines that all other conditions surrounding the construction and operation of the Modified Project would be largely similar to the Approved Project, including the implementation of the roadway improvements under the Approved Project. While the Modified Project will result in slightly different conditions with respect to traffic, air pollution, greenhouse gas emissions,

and noise, no impact under the Modified Project will be greater than the Approved Project. No further analysis is required. Further, the Modified Project will require revisions to the current Mitigation Monitoring and Reporting Plan, which was adopted by the City with the Adopted IS/MND and which remains in effect. This includes the elimination of several Mitigation Measures that no longer apply to the Modified Project, including Mitigation Measures HAZ-2 and HAZ-3 and Mitigation Measure NOI-4. Mitigation Measure NOI-1 has been revised to reflect the recommendations made in Appendix 3. Mitigation Measures AQ-1, AQ-2, GHG-1, and TR-1, from the Approved Project, will be included as Conditions of Approval (COA-1 through COA-4) for the Modified Project. No new mitigation measures would be required for the Modified Project.

SECTION 2. MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP).

The Planning Commission finds that the Wildomar Crossroads Mixed-Use project is consistent with the MSHCP, and the project is not located in any MSHCP criteria cell area, and required mitigation is provided through payment of the MSHCP Mitigation Fee.

SECTION 3. TENTATIVE PARCEL MAP FINDINGS.

In accordance with Wildomar Municipal Code Title 16 and Government Code § 66473.1, § 66473.5, and § 66474, the Planning Commission, in light of the whole record before it, including but not limited to the Planning Department's staff report and all documents incorporated by reference therein, the City's General Plan, Subdivision Ordinance, Zoning Ordinance, standards for public streets and facilities, and any other evidence within the record or provided at the public hearing of this matter, hereby finds and determines as follows:

A. The proposed parcel map is consistent with the City's General Plan and any applicable specific plan as specified in Government Code Section 65451.

Evidence: The proposed Tentative Parcel Map No. 38646 is consistent with the City's General Plan in that the proposed subdivision of the 26.8-acre site into seven (7) parcels to accommodate the project is consistent with the existing land use designation of Business Park (BP). The BP land use designation is intended to provide for a variety of business park, industrial and service commercial uses in a business park setting. The land uses proposed for future development of the site meet this intent. Lastly, there is no specific plan governing this subdivision, but the proposed lot sizes are consistent with the I-P zone development standards, therefore, the proposed tentative parcel map meets this finding.

Lastly, the proposed project also promotes the following land use policies of the General Plan:

LU 2.1 The proposed project will accommodate a land use development that is in accordance with patterns and distribution of land uses that are depicted on the General Plan Land Use map proposed for the subject site.

LU 4.1 The proposed project will accommodate a land use development proposal that is located and designed to visually enhance and not degrade the character of the surrounding area.

LU 6.1 The proposed project will be developed in accordance with the proposed General Plan land use designation that ensures compatibility and minimizes impacts.

LU 23.7 The proposed project will be served by water and sewer along provided by EVMWD to meet the project demands.

LU 24.1 The proposed project will accommodate the development of new business park, industrial and service commercial uses that will provide jobs and sales tax revenues.

B. The design or improvement of the proposed subdivision is consistent with the City's General Plan and any applicable specific plan.

Evidence: The proposed seven (7) lot subdivision to accommodate the project has been designed to meet City design and improvement standards. Both Elizabeth Lane, Clinton Keith Road, and Bunny Trail will be dedicated and improved per the Circulation Element and Public Works road standards, including full public improvements such as curb, gutter, sidewalks, etc. These improvements will ensure safe and efficient pedestrian and vehicular circulation, including emergency vehicle access on-site and off-site. Further, all streets, utilities, and drainage facilities have been designed and are required to be constructed in conformance with City standards. There is no specific plan governing this project. Therefore, the proposed tentative parcel map meets this finding.

C. The site is physically suitable for the type and proposed density of development.

Evidence: The project site encompasses approximately 26.8 acres that will be subdivided into seven (7) lots to accommodate the project and is suitable for the type and proposed density of development per the General Plan and Zoning requirements. Further, the site is adequate in size to accommodate the sizes of the future business park, industrial and service commercial uses including all required parking and circulation facilities. As the BP land use designation allows for a variety of these uses, the overall site design is physically capable of accommodating the total number of buildings, lots and uses. Since the proposed tentative parcel map meets and exceeds the I-P zone development standards in terms of lot sizes and lot widths, the project is consistent with the Zoning Ordinance. Given these facts, the proposed Tentative Parcel Map No. 38646 meets this finding.

D. The design of the subdivision or proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Evidence: The City originally prepared a Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP) for the original project and included mitigation measures still applicable to the project. Adoption of the proposed Addendum will continue to not cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat. Given these facts, the proposed Tentative Parcel Map No. 38646 meets this finding

E. The design of the subdivision or type of improvements is not likely to cause serious public health problems.

Evidence: The design of the subdivision is in conformance with the City's General Plan, Zoning Ordinance and Subdivision Ordinance. The design and construction of all improvements have been conditioned in accordance with all applicable City of Wildomar ordinances, codes, and standards including, but not limited to, the City's Municipal Code relating to stormwater runoff management and water quality. City ordinances, codes, and standards are intended to protect the health, safety, and welfare of the general public, including residents and visitors to the project. Given these facts, the proposed Tentative Parcel Map No. 38646 meets this finding.

F. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision.

Evidence: No easements of record or easements established by judgment of a court of competent jurisdiction for public access across the site have been disclosed in a search of the title records for the site and the City does not otherwise have any constructive or actual knowledge of any such easements.

SECTION 4. PLANNING COMMISSION ACTION

The Planning Commission hereby adopts PC Resolution No. 2023-13 approving Tentative Parcel Map No. 38646 (PA No. 22-0025), subject to conditions, as provided herein and attached hereto to this Resolution as Exhibit 1.

PASSED, APPROVED AND ADOPTED this 3rd day of May, 2023 by the following vote:

AYES:

NOES:

ABSENT:

RECUSED:

_____
Kim L. Strong
Planning Commission Chair

ATTEST:

_____
Matthew C. Bassi
Community Development Director/Minutes Secretary

APPROVED AS TO FORM:

_____
Stephanie Gutierrez
Assistant City Attorney

ATTACHMENT A - EXHIBIT 1 CONDITIONS OF APPROVAL – Wildomar Commerce Center			
Tentative Parcel Map No. 38646 (PA 22-0225)			
APN: 380-520-001 through -008 and 380-520-052 through -056			
Tentative Parcel Map No. 38646 Approval Date: May 3, 2023	**Tentative Parcel Map No. 38646 Expiration Date: May 3, 2026**		
Conditions of Approval	**Timing / Implementation**	**Enforcement / Monitoring Dept.**	**Verification (Date and Signature)**
PLANNING DIVISION CONDITIONS			
General/Standard Conditions			
1. The applicant shall review and sign below verifying the "Acceptance of the Conditions of Approval" and return the signed page to the Wildomar Planning Division no later than May 17, 2023. Applicant Signature: Date:	May 17, 2023	Planning Division	
2. The Applicant shall indemnify, protect, defend, and hold harmless, the City, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, from any and all claims, demands, law suits, writs of mandamus, and other actions and proceedings (whether legal, equitable, declaratory, administrative or adjudicatory in nature), and alternative dispute resolutions procedures (including, but not limited to arbitrations, mediations, and other such procedures), (collectively "Actions"), brought against the City, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, that challenge, attack, or seek to modify, set aside, void, or annul, the any action of, or any permit or approval issued by, the City and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof (including actions approved by the voters of the City), for or concerning the project, whether such Actions are brought under the California Environmental Quality Act, the Planning and Zoning Law, the Subdivision Map Act, Code of Civil Procedure Section 1085 or 1094.5, or any other state, federal, or local statute, law, ordinance, rule, regulation, or any decision	On-Going	Planning Division	

	of a court of competent jurisdiction. City shall promptly notify the Applicant of any Action brought and request that Applicant defend the City. It is expressly agreed that Applicant may select legal counsel providing the Applicant's defense and the City shall have the right to approve separate legal counsel providing the City's defense. The Applicant shall reimburse City for any attorneys' fees, costs and expenses directly and necessarily incurred by the City in the course of the defense. Applicant agrees that City will forward monthly invoices to Applicant for attorneys' fees, costs and expenses it has incurred related to its defense of any Action and Applicant agrees to timely payment within thirty (30) days of receipt of the invoice. Within fourteen (14) days of an Action being filed, Applicant agrees to post adequate security or a cash deposit with City in an amount to cover the City's estimated attorneys' fees, costs and expenses incurred by City in the course of the defense in order to ensure timely payment of the City's invoices. The amount of the security or cash deposit shall be determined by the City. City shall cooperate with Applicant in the defense of any Action.			
3.	In accordance with Section 66020.d.1 of the Government Code, the applicant has 90 days from project approval to file a protest of the imposition of fees, dedications, reservations, or other exactions being imposed on this project. Notice is hereby to the Applicant that the 90-day appeal hereby begins with approval of this project.	August 3, 2023	Planning Division	
4.	Approval of Tentative Parcel Map No. 38646 shall expire on May 3, 2026 if the final map has not been approved by City Council and recorded with the Riverside County Clerk. The applicant may file a request for an Extension of Time (EOT) in accordance with Section 16.12.240 of the WMC. The EOT written request must be submitted along with the required fee at least 30 days prior to the expiration date.	May 3, 2026	Planning Division	

ATTACHMENT A - EXHIBIT 1 CONDITIONS OF APPROVAL – Wildomar Commerce Center			
Tentative Parcel Map No. 38646 (PA 22-0225)			
APN: 380-520-001 through -008 and 380-520-052 through -056			
Tentative Parcel Map No. 38646 Approval Date: May 3, 2023	**Tentative Parcel Map No. 38646 Expiration Date: May 3, 2026**		
Conditions of Approval	**Timing / Implementation**	**Enforcement / Monitoring Dept.**	**Verification (Date and Signature)**
5.	Within 60 days of approval by the Planning Commission of Tentative Parcel Map No. 38646, the applicant shall pay any outstanding deposit account balances, as applicable for PA 22-0225. Failure to pay the outstanding balance by the due date may result in delays in the processing of the final map.	July 3, 2023	Planning Division	
6.	Tentative Parcel Map No. 38646 shall be subdivided in accordance with the tentative parcel map approved by the Planning Commission on May 3, 2023. The applicant may request a modification/revision to the approved tentative parcel map, if needed, in accordance with Section 16.12.220 of the WMC.	On-Going	Planning Division	
7.	The proposed development project under Plot Plan No. 22-0225 shall comply with the standards and requirements of the City's Light Pollution Ordinance (Chapter 8.64 of the WMC).	On-Going	Planning Division	
8.	The proposed Project shall comply with existing SCAQMD rules for the reduction of fugitive dust emissions in accordance with SCAQMD Rule 403.	On-Going	Planning Division	
9.	All grading shall conform to the California Building Code, Ordinance 457, and all other relevant laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.	On-Going	Planning Division	
10.	Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded per the requirements of Ordinance 457 (refer to dept. form 284-47). Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and	On-Going	Planning Division	

	3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer.			
11.	As required by Chapter 8.56 of the WMC, subsequent development on the site will need to comply with the County of Riverside, Department of Environmental Health, Local Enforcement Agency (LEA) for all activities related to potential hazardous materials.	On-Going	Planning Division	
12.	The proposed Project shall comply with the requirements of Chapter 9.48 of the WMC.	On-Going	Planning Division	
13.	If human remains are encountered during grading activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable timeframe. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.	On-Going	Planning & Engineering Depts.	

ATTACHMENT A - EXHIBIT 1 CONDITIONS OF APPROVAL – Wildomar Commerce Center			
Tentative Parcel Map No. 38646 (PA 22-0225)			
APN: 380-520-001 through -008 and 380-520-052 through -056			
Tentative Parcel Map No. 38646 Approval Date: May 3, 2023	**Tentative Parcel Map No. 38646 Expiration Date: May 3, 2026**		
Conditions of Approval	**Timing / Implementation**	**Enforcement / Monitoring Dept.**	**Verification (Date and Signature)**
MITIGATED NEGATIVE DECLARATION (IS/MND) – Original Mitigation Measures and Addendum Conditions Apply			
3.3 Air Quality			
14. **AQ-1** Construction Mitigation a. Install and maintain track-out control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.) b. Limit fugitive dust sources to 20 percent opacity. c. Require a dust control plan for earthmoving operations. d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. e. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. f. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours. g. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily. h. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period. i. Require high pressure injectors on diesel construction equipment.* Utilize only CARB Tier 3 or better certified equipment	During construction activities	City of Wildomar Planning and Public Works Departments	

	for construction activities.* k. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.* l. Suspend use of all construction equipment operations during second stage smog alerts.* * Would reduce impacts to GHG's as well			
15.	**AQ-2** <u>Operation Mitigation</u> a. Install EV charging facilities for a minimum of 1% of all parking spaces.* b. Provide preferential parking locations for EVs and CNG vehicles.* c. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.* d. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.* e. Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment **or** contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.* f. Provide secure, bicycle parking for employees.*	Implemented during site plan review and verified prior to Certificate of Occupancy	City of Wildomar Planning and Public Works Departments	

	g. Provide direct safe, direct bicycle access to adjacent bicycle routes.* h. Provide short-term bicycle parking for retail customers and other non-commute trips.* * Would reduce impacts to GHGs as well			
3.4 Biological Resources				
16.	**BIO-1** Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.	Implemented prior to any off- site grading	City of Wildomar Planning and Public Works Departments	
17.	**BIO-2** The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently $500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.	The fee must be paid prior to the issuance of a grading permit	City of Wildomar Planning and Public Works Departments	
18.	**BIO-3** Due to the presence of suitable habitat and in compliance with the MSHCP, a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.	Implemented 30 days prior to ground disturbance	City of Wildomar Planning and Engineering Departments	
19.	**BIO-4** If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding	Implemented prior to ground any disturbance for Phase 2	City of Wildomar Planning and Engineering Departments	

	seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the *Staff Report on Burrowing Owl Mitigation*.			
20.	**BIO-5** Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.	Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests	City of Wildomar Planning and Engineering Departments	
21.	**BIO-6** Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, Impacts to Jurisdictional Features, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and	Implemented prior to ground any disturbance in areas designated as jurisdictional features	City of Wildomar Planning and Engineering Departments	

	Game Code from the CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies: 1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank. On- and/or off-site replacement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.			
22.	**BIO-7** Prior to the issuance of any grading permit, the Project applicant shall comply with all of the provisions of the MSHCP, including payment of the MSHCP Local Development Mitigation Fee and compliance with Section 6.1.2 of the MSHCP pertaining to Riparian/Riverine Areas.	Prior to the issuance of a grading permit.	City of Wildomar Planning and Engineering Departments	
3.5 Cultural Resources				
23.	**CUL-1** Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation: If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and the Developer, the project archaeologist and the Pechanga Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Building and Planning Divisions	

	developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Commission and/or City Council. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique, as defined by relevant state and local law, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.			
24.	**CUL-2** At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe[1] to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-	Prior to the issuance of a grading permit	City of Wildomar Engineering and Planning Divisions	

[1] It is anticipated that the Pechanga Tribe will be the "appropriate" Tribe due to their prior and extensive coordination with the City and project applicant in determining potentially significant impacts and appropriate mitigation measures.

	site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.			
25.	**CUL-3** Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation: If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant" within 24 hours of receiving notification from the Coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.	As a condition of Project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Divisions	
26.	**CUL-4** All cultural materials – with the exception of sacred items, burial goods and human remains which will be addressed in the Treatment Agreement required in CUL-2, that are collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Divisions	

	curation facility which meets the standards set forth in 36 CRF Part 79 for federal repositories.			
27.	**CUL-5** All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Divisions	
28.	**CUL-6** To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified archaeologist shall monitor all construction activities that could potentially impact archaeological (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.	As a condition of future development approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Divisions	
29.	**CUL-7** A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of	As a condition of Project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Divisions	

	abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.			
30.	**CUL-8** Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Divisions	
31.	**CUL-9** Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).	As a condition of project approval, and implemented during ground-disturbing activities	City of Wildomar Engineering and Planning Divisions	
3.7 Greenhouse Gas Emissions				
32.	**GHG-1** Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.	During Construction Activities and Project Operations	City of Wildomar Planning and Building Departments	

ATTACHMENT A - EXHIBIT 1 CONDITIONS OF APPROVAL – Wildomar Commerce Center			
Tentative Parcel Map No. 38646 (PA 22-0225)			
APN: 380-520-001 through -008 and 380-520-052 through -056			
Tentative Parcel Map No. 38646 Approval Date: May 3, 2023	**Tentative Parcel Map No. 38646 Expiration Date: May 3, 2026**		
Conditions of Approval	**Timing / Implementation**	**Enforcement / Monitoring Dept.**	**Verification (Date and Signature)**
3.8 Hazards and Hazardous Materials			
33.	**HAZ-1** All spills or leakage of any hazardous products, including petroleum products, during regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan prepared for the Project development.	Prior to the issuance of a grading permit	City of Wildomar Engineering Department	
34.	**HAZ-2** Prior to the certificate of occupancy for office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.	Prior to the issuance of a building permit	City of Wildomar Building and Safety Department	
35.	**HAZ-3** As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).	Prior to the issuance of a building permit	City of Wildomar Building and Safety and Fire Departments	
36.	**HAZ-4** Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.	Prior to the issuance of a building permit	City of Wildomar Building and Safety and Fire Departments	

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3.9 Hydrology and Water Quality			
37. **HYD-1** Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.	Prior to the issuance of a grading permit	City of Wildomar Engineering Department	

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3.12 Noise			
38. **NOI-1** To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.	Implemented during Project operations	City of Wildomar Building Department	
39. **NOI-2** The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.	Implemented during Project operations	City of Wildomar Building Department	
40. **NOI-3** Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.	Implemented during Project operations	City of Wildomar Building Department	
41. **NOI-4** Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence. It is important to note that the barriers' attenuation will be accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.	Prior to the issuance of occupancy permits and during project operations	City of Wildomar Building and Planning Divisions	

42.	**NOI-5** Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.	Reviewed at building plan check	City of Wildomar Building Department	
3.16 Transportation/Traffic				
43.	**TR-1** The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service of the following recommended improvements are implemented, prior to the respective phase of development: On-Site Recommendations: **Roadways:** • Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line. • Construct partial width improvements on the westerly side of Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line. • Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.	Implemented during the appropriate Phase of proposed Project construction	City of Wildomar Public Works Department	

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	Intersections: Proposed Project's actual improvements necessary are shown in *italic, underlined*. The items that are not bold, italic, underlined are already existing). • Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics: Northbound: *One right-turn lane. Stop controlled.* Southbound: Not applicable. Eastbound: One through lane. *One right-turn lane.* Westbound: One through lane. • *Install a traffic signal* at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics: Northbound: *One left-turn lane.* One shared through and right-turn lane. Southbound: *One left-turn lane.* One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. *One right-turn lane.* Westbound: One left-turn lane. One through lane. One shared through and right-turn lane. • Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics: Northbound: One shared left-turn, through and right-turn lane. Southbound: One shared left-turn, through and right-turn lane. Eastbound: *One shared left-turn, through and right-turn lane. Stop controlled.*			

	Westbound: One shared left-turn, through and right-turn lane. Stop controlled. • Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW) with the following geometrics: Northbound: One shared left-turn and through lane. Southbound: One shared through and right-turn lane. Eastbound: *One shared left-turn and right-turn lane. Stop controlled.* Westbound: Not applicable. • Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics: Northbound: Not applicable. Southbound: One right-turn lane. Eastbound: *One shared left-turn and right-turn lane. Stop controlled* Westbound: Not applicable. • Construct the intersection of Project Driveway 4 (NS) and Bunny Trail (EW) with the following geometrics: Northbound: Not Applicable. Southbound: *One shared left-turn & right-turn lane. Stop controlled.* Eastbound: One shared left-turn and through lane. Westbound: One shared through and right-turn lane. • Construct the intersection of Yamas Drive (NS) and proposed Project Driveway 5(EW) with the following geometrics: Northbound: *One shared through and right-turn lane.* Southbound: *One shared left-turn and through lane.*			

	Eastbound: Not applicable. Westbound: *One shared left-turn and right-turn lane. Stop controlled.* • Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics: Northbound: *One shared through and right-turn lane.* Southbound: *One shared left-turn and through lane.* Eastbound: Not applicable. Westbound: *One shared left-turn & right-turn lane. Stop controlled.*			
Prior to Issuance of a Grading Permit				
44.	Prior to the issuance of a grading permit, the developer shall submit a final geotechnical soils reports to the City Engineer for review and approval prior to issuance of grading permit. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by the City of Wildomar.	On-Going	Planning Division	
45.	Prior to the issuance of the 1st grading permit the applicant shall receive approval of a haul permit for any import of material to the site or export of material off-site. The request for a haul permit shall include a haul route plan addressing the limitations of haul hours, number of loads per day and the posting of traffic control personnel at all approved entrances/exits onto public roads. This haul permit shall be in place prior to the issuance of the grading permit and the mobilization of equipment on the project site. If the proposed material source or disposal site was not previously evaluated by the mitigated negative declaration, a grading EA shall be approved by the planning director prior to the issuance of the haul permit.	Prior to Issuance of a Grading Permit	Planning & Engineering Depts.	

46.	Concurrent with the precise grading plan submittal, the applicant shall submit two sets of detailed landscape and irrigation plans, including on-site and public right-of-way areas. The landscaping and irrigation plans shall be approved by the Planning Division prior to the issuance of any grading permit for the project.	Prior to Issuance of a Grading Permit	Planning Division	
Prior to the Recordation of the Final Map				
47.	Prior to Final Map approval by the City Council, the Applicant shall submit one (1) electronic copy (MS Word Version) of the Covenants, Conditions, and Restrictions (CC&R's) for this project. The CC&R's shall be reviewed and approved by the Community Development Director, Public Works Director and City Attorney. The CC&R's shall include liability insurance and methods of maintaining landscaping, parking areas, private roads, exterior of all buildings (if applicable), and all landscaped and open areas including parkways, as well as a provision indicating that the homeowners association may not be terminated or dissolved without the permission of the City. The CC&R's shall be in the form and content approved by the Community Development Director Public Works Director and City Attorney and shall include such provisions as are required by this approval and as said officials deem necessary to protect the interests of the City and its residents. Said CC&R's shall be recorded concurrently with the final map and a copy of the recorded CC&R's shall be submitted to the Planning and Engineering Departments within 2 weeks of recordation.	Prior to Final Map Approval By City Council	Planning and Engineering Departments	

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PUBLIC WORKS/ENGINEERING/BUILDING DEPARTMENT CONDITIONS				
General Requirements/Conditions				
1.	The developer shall obtain City approval for any modifications or revisions to the approval of this project. Deviations not identified on the plans may not be approved by the City, potentially resulting in the need for the project to be redesigned. Amended entitlement approvals may be necessary as a result.	On-Going	Engineering Dept.	
2.	The Developer shall dedicate, design and construct all improvements in accordance the City of Wildomar Road Improvement Standards & Specification, Improvement Plan Check Policies and Guidelines, as further conditioned herein and to the satisfaction of the City Engineer.	On-Going	Engineering Dept.	
3.	The Developer shall be responsible for all costs associated with off-site right-of-way acquisition, including any costs associated with the eminent domain process, if necessary.	On-Going	Engineering Dept.	
4.	Should this project lie within any assessment/benefit district, the project proponent shall, make application for and pay for their reapportionment of the assessments or pay the unit fees in the benefit district unless said fees are otherwise deferred.	On-Going	Engineering Dept.	
5.	The developer shall annex into the City's Community Facility District (CFD 2022-1 Services) and pay associated costs for annexation. Should this project lie within any assessment/benefit district that duplicates the services to be covered under CFD 2022-1 then the developer shall de-annex from said assessment/benefit district.	Prior to Map Recordation	Engineering Dept.	
6.	The developer shall design and construct all driveways in accordance with the City of Wildomar Improvement Standards.	On-Going	Engineering Dept.	

7.	The improvement plans for the required public improvements must be prepared and shall be based upon a design profile extending a minimum of 300 feet beyond the project boundaries at a grade and alignment as approved by the City Engineer.	On-Going	Engineering Dept.	
8.	All above-ground utilities, including but not limited to communication and power that are 33KV in size or less, shall be undergrounded by the developer in accordance with City requirements. The undergrounding of utilities shall be reflected on the project improvement plans.	On-Going	Engineering Dept.	
9.	All flood control plans to be reviewed by the City or the Riverside County Flood Control District (RCFCD) shall be submitted through the City of Wildomar, unless otherwise directed by the City Engineer. For projects requiring RCFCD review the developer shall pay the appropriate fees to RCFCD.	On-Going	Engineering Dept.	
10.	Revised studies for this project shall be completed under the Substantial Conformance application, PA22-0085. Any additional conditions resulting from the revised studies shall be conditioned in association with the Substantial Conformance application.	On-Going	Engineering Dept.	
Prior to Recordation of the Final Map				
11.	Prior to final map approval, improvement plans shall be prepared, processed, approved and complete the improvements; or execute an Improvement Agreement and Improvement Security. This condition shall be in conformance with local regulations and the Subdivision Map Act. Should the developer execute an Improvement Agreement and Security, improvement plans will be required prior to issuance of Building Permit and construction complete prior to first certificate of occupancy. Refer to Conditions of Approval for the Plot Plan 12-0053.	Prior to Final Map Approval for All Phases	Public Works Dept.	

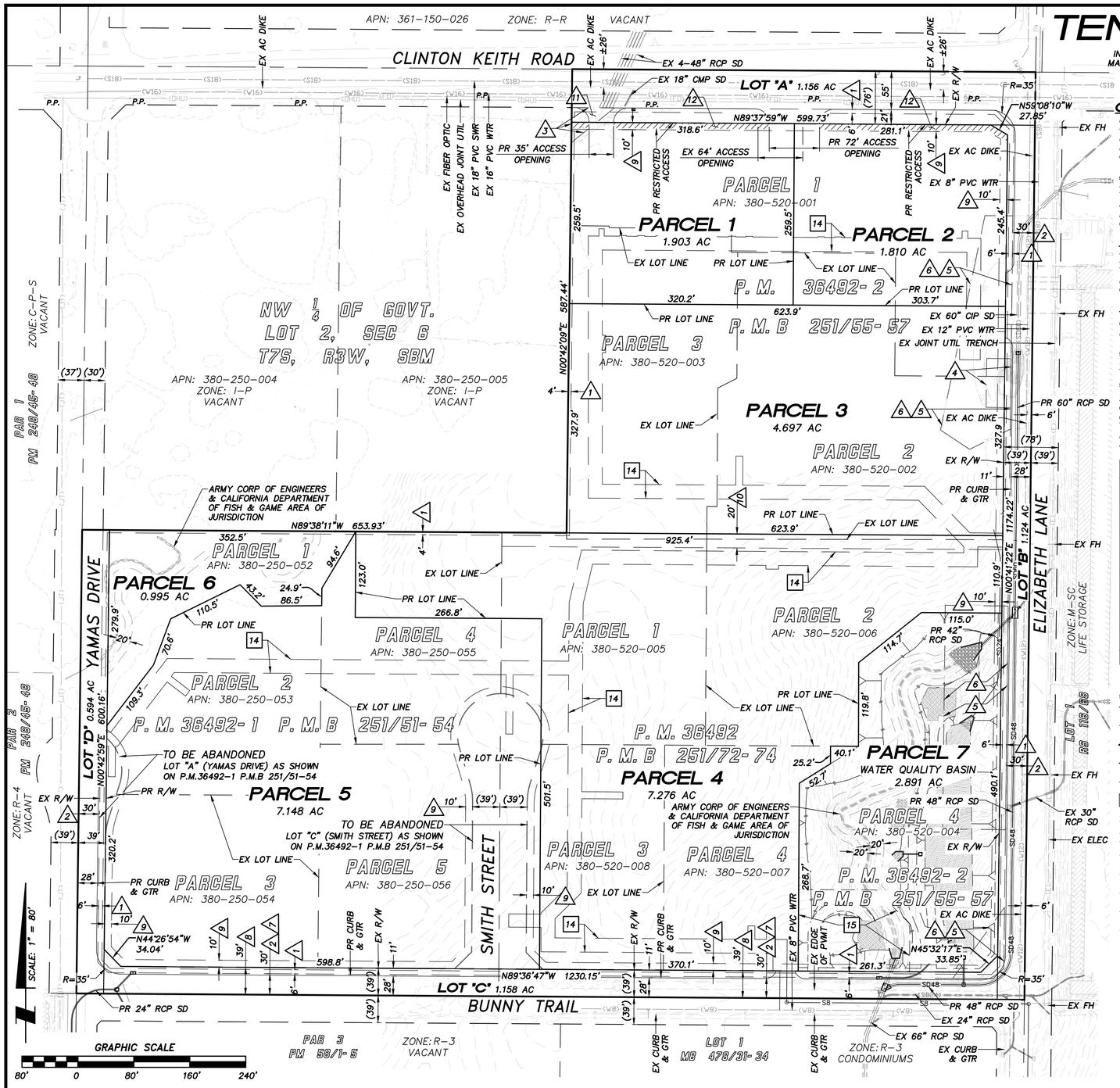
12.	Prior to Final Map approval, the developer shall dedicate the southern half - section of Clinton Keith Road, measured, 76' from the approved centerline. Right of way will be based on a modified 152' urban arterial, Standard No. 91, in accordance with the City of Wildomar Improvement Standards & Specifications and to the satisfaction of the City Engineer. **Refer to MND Mitigation Measure TR-1**.	Prior to Recordation of Final Map ***Phase A***	Engineering Dept.	
13.	Prior to Final Map approval, the developer shall dedicate the western half - section of Elizabeth Lane, measured, 39' from the approved centerline. Right of way will be based on a 78' industrial collector, Standard No. 111, in accordance with the City of Wildomar Improvement Standards & Specifications and to the satisfaction of the City Engineer. **Refer to MND Mitigation Measure TR-1**.	Prior to Recordation of Final Map; ***Phase A and Phase B***	Engineering Dept.	
14.	Prior to Final Map approval, the developer shall dedicate the northerly half - section of Bunny Trail, measured, 39' from the approved centerline. Right of way will be based on a 78' industrial collector, Standard No. 111, in accordance with the City of Wildomar Improvement Standards & Specifications and to the satisfaction of the City Engineer.	Prior to Recordation of Final Map; ***Phase B and Phase C***	Engineering Dept.	
15.	Prior to Final Map approval, the developer shall dedicate the easterly half - section of Yamas Drive, measured, 39' from the approved centerline. Right of way will be based on a 78' industrial collector, Standard No. 111, in accordance with the City of Wildomar Improvement Standards & Specifications and to the satisfaction of the City Engineer. The developer shall prepare legal description and plat to support City acceptance by Resolution the road easement for Yamas Drive to be recorded prior to recordation of the Final Map.	Prior to Recordation of Final Map; ***Phase C***	Engineering Dept.	

ATTACHMENT A - EXHIBIT 1 CONDITIONS OF APPROVAL – Wildomar Commerce Center			
Tentative Parcel Map No. 38646 (PA 22-0225)			
APN: 380-520-001 through -008 and 380-520-052 through -056			
Tentative Parcel Map No. 38646 Approval Date: May 3, 2023	**Tentative Parcel Map No. 38646 Expiration Date: May 3, 2026**		
Conditions of Approval	**Timing / Implementation**	**Enforcement / Monitoring Dept.**	**Verification (Date and Signature)**
16. The Applicant shall provide a reciprocal access easement between the parcels 1, 2 and 3 to ensure access to Clinton Keith Road and Elizabeth Lane. And provide a reciprocal access easement between parcels 2 and 4 to ensure access to Elizabeth Lane. The location of the access point(s) shall be to the satisfaction of the City Engineer and will be approved when these parcels are developed.	Prior to Recordation of Final Map ***Phase A and Phase B***	Engineering Dept.	
17. Prior to Final Map approval, the developer shall dedicate easements for the storm drainage systems as shown on the tentative map. Facilities that are to be owned and maintained by Riverside County Flood Control and Water Conservation District (RCFC) shall be reviewed, approved and agreements executed.	Prior to Recordation of Final Map ***All Phases***	Engineering Dept.	
18. Prior to Final Map approval, the developer shall dedicate a public utility easement adjacent to all public and private streets for overhead and/or underground facilities and appurtenances to the satisfaction of the City Engineer.	Prior to Recordation of Final Map ***All Phases***	Engineering Dept.	

END

TENTATIVE PARCEL MAP 38646

IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA BEING ALL OF PARCEL 5, OF PARCEL MAP NO. 9637 AS SHOWN BY MAP ON FILE IN BOOK 58 PAGES 1 THROUGH 5, INCLUSIVE OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA LYING IN TOWNSHIP 7S, RANGE 3W, SECTION 6 SAN BERNARDINO MERIDIAN.



OWNER:

RANCON MEDICAL AND EDUCATION CENTER, LLC
41391 KALMIA STREET, SUITE 200
MURRIETA, CA 92562
PHONE:
CONTACT:

APPLICANT:

SUMMIT DEVELOPMENT CORPORATION
190 NEWPORT CENTER DRIVE, SUITE 220
NEWPORT BEACH, CA 92660
PHONE: (949) 655-8226
CONTACT: BRYAN BENTROTT

CIVIL ENGINEER:

SB&O INC.
41689 ENTERPRISE CIRCLE NORTH, SUITE 126
TEMECULA, CA 92590
PHONE: 951-695-8900
CONTACT: DON BROOKS

GROSS AND NET AREAS:

GROSS AREA	30.75 AC MORE OR LESS
NET AREA	26.72 AC MORE OR LESS

NUMBER OF PARCELS:

7 PARCELS, 4 LETTERED LOTS

PLAN IDENTIFICATION:

ASSESSORS PARCEL NO. 380-520-001, 002, 003, 004, 005, 006, 007, 008 & 380-250-052, 053, 054, 055, 056
THOMAS BROTHERS MAP
PAGE 927, GRID G1 & H1, RIVERSIDE COUNTY, 8TH EDITION

PARCEL AREA TABLE

PARCEL NO.	AREA
1	1.903 AC
2	1.810 AC
3	4.697 AC
4	7.276 AC
5	7.148 AC
6	0.995 AC
7	2.891 AC
LOT "A"	1.156 AC
LOT "B"	1.124 AC
LOT "C"	1.158 AC
LOT "D"	0.594 AC
TOTAL	30.752 AC

LEGAL DESCRIPTION:

PARCELS 1 THROUGH 5 AND LETTERED LOTS "A" THROUGH "E" OF PARCEL MAP NO. 36492-1, IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 251, PAGES 51 THROUGH 54, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY. (APN'S: 380-250-052 THROUGH -056)

PARCELS 1 THROUGH 4 OF PARCEL MAP NO. 36492-2, IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 251, PAGES 55 THROUGH 57, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY. (APN'S: 380-520-001 THROUGH -004)

PARCELS 1 THROUGH 4 OF PARCEL MAP NO. 36492, IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 251, PAGES 72 THROUGH 74, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY. (APN'S: 380-520-005 THROUGH -008)

BASIS OF BEARING:

THE BASIS OF BEARINGS FOR SURVEY IS THE CENTER LINE OF CLINTON KEITH AVENUE, PER PARCEL MAP NO. 36492-1, P.M. 251/51-54. BEING NORTH 89°37'59" WEST.

ZONING:

PER CITY OF WILDOMAR LAND USE AND ZONING MAP AND CITY OF WILDOMAR MUNICIPAL CODE INDUSTRIAL PARK ZONE DEVELOPMENT STANDARDS SECTION 17.88.040	
EXISTING & PROPOSED ZONE: I-P INDUSTRIAL PARK	
EXISTING & PROPOSED LAND USE: BUSINESS PARK	
FRONT YARD SETBACK:	25'
SIDE YARDS SETBACK:	10'
REAR YARDS SETBACK:	15'
STREET SIDE SETBACK:	25'
STREET SIDE LANDSCAPE SETBACK	10'
HEIGHT:	50'

UTILITY PURVEYORS:

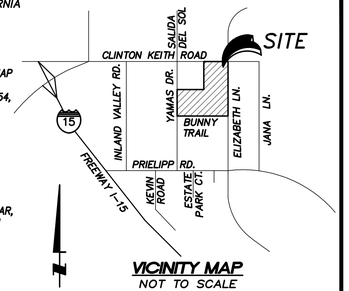
CITY OF WILDOMAR	951-677-7751
ELSINORE VALLEY MUNICIPAL WATER DISTRICT	951-674-3146
FRONTIER COMMUNICATIONS	310-264-5100
SPECTRUM	951-406-1601
SOUTHERN CALIFORNIA EDISON	800-427-2000
SOUTHERN CALIFORNIA GAS	800-655-4555
UNDERGROUND SERVICE ALERT	800-227-2600
LAKE ELSINORE UNIFIED SCHOOL DISTRICT	951-253-7000

GENERAL NOTES

1. THE PROPERTY IS NOT WITHIN A SPECIFIC PLAN OR A SPECIAL STUDIES ZONE.
2. THE PROPERTY IS NOT SUBJECT TO OVERFLOW, INUNDATION OR FLOOD HAZARD.
3. THE PROPERTY DOES NOT CONTAIN ANY FLAMMABLE/ COMBUSTIBLE OR WASTE.
4. NO ABOVE/UNDERGROUND TANKS ARE PROVIDED.
5. PROPERTY IS NOT WITHIN ANY FAULT ZONES.
6. LOCATED IN FLOOD ZONE X, "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN" AS SHOWN IN FIRM PANEL 06065C 2705G, DATED AUGUST 28, 2008.
7. THERE IS NO WELL ON SITE OR WITHIN 200' OF THE PROPERTY BOUNDARY.
8. THE TENTATIVE PARCEL MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE SUBDIVIDER.
9. THE POTENTIAL FOR LIQUEFACTION IS CONSIDERED TO BE REMOTE.
10. THIS PROJECT IS IN A VERY HIGH FIRE HAZARD SEVERITY ZONE OF RIVERSIDE COUNTY AS SHOWN ON A MAP ON FILE WITH THE CLERK OF THE BOARD OF SUPERVISORS. ANY BUILDING CONSTRUCTED WITHIN THIS PROJECT SHALL COMPLY WITH THE SPECIAL CONSTRUCTION PROVISIONS CONTAINED IN CITY OF WILDOMAR MUNICIPAL CODE AND THE CALIFORNIA BUILDING CODE.
11. THERE IS NO ABOVE OR UNDERGROUND FUEL TANKS, WASTE OIL, LPG AND CHEMICAL TANK EXIST ON SITE.
12. EXISTING TOPOGRAPHY OF PROPERTY IS BASED ON AERIAL SURVEY PREPARED BY INLAND AERIAL SURVEYS, INC. ON OCTOBER 14, 2011.
13. THERE IS NO EXISTING OR PROPOSED SEPTIC SEWAGE DISPOSAL TANK ON SITE.
14. THERE IS NO EXISTING OR PROPOSED MOBILE HOME AND RECREATIONAL AREAS ON SITE.
15. THERE IS NO EXISTING BUILDING, DWELLINGS OR OTHER STRUCTURES ON SITE.
16. THERE IS NO PROPOSED RESIDENTIAL UNITS ON SITE.

LEGEND

- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- PROPOSED BOUNDARY LINE
- PROPOSED PROPERTY LINE
- STREET CENTERLINE
- PROPOSED EASEMENTS
- EXISTING CURB & GUTTER
- EXISTING SIDEWALK
- (626) EXISTING CONTOUR
- (S8) EXISTING SEWER
- (W12) EXISTING WATER
- (SD42) EXISTING STORM DRAIN
- (UGE) EXISTING UNDERGROUND ELECTRICAL
- P.P. EXISTING POWER POLE
- FH EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING METER / UTILITY
- MH EXISTING MAN HOLE
- EXISTING LIGHT POLE



VICINITY MAP
NOT TO SCALE

EXISTING EASEMENTS:

1. AN EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RECORDED DECEMBER 13, 1978 AS INSTRUMENT NO. 78-261602 OF OFFICIAL RECORDS. IN FAVOR OFF SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION.
2. AN EASEMENT FOR INGRESS & EGRESS AND PUBLIC UTILITY PURPOSES AND INCIDENTAL PURPOSES IN THE DOCUMENT RECORDED JULY 22, 1982 AS INSTRUMENT NO. 125464 OF OFFICIAL RECORDS.
3. AN EASEMENT FOR ROAD AND INCIDENTAL PURPOSES, RECORDED JUNE 10, 1991 AS INSTRUMENT NO. 91-193576 OF OFFICIAL RECORDS. IN FAVOR OF: THE COUNTY OF RIVERSIDE.
4. AN EASEMENT FOR RIP-RAP DISSIPATER TO SERVICE THE DRAINAGE SYSTEM AND INCIDENTAL PURPOSES, RECORDED OCTOBER 09, 2002 AS INSTRUMENT NO. 2002-562594 OF OFFICIAL RECORDS. IN FAVOR OF: ROBERT G. WELLS, BETTY D. WELLS AND THE ROBERT G. WELLS FAMILY LIMITED PARTNERSHIP.
5. THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "DRAINAGE AND ACCESS EASEMENT AGREEMENT" RECORDED JANUARY 23, 2004 AS INSTRUMENT NO. 2004-49328 OF OFFICIAL RECORDS.
6. AN EASEMENT FOR DRAINAGE AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 09, 2004 AS INSTRUMENT NO. 2004-091304 OF OFFICIAL RECORDS. IN FAVOR OF: THE COUNTY OF RIVERSIDE.
7. THE RIGHTS, IF ANY, OF A CITY, PUBLIC UTILITY OR SPECIAL DISTRICT TO PRESERVE A PUBLIC EASEMENT IN BUNNY TRAIL IN THE WILDOMAR AREA AS THE SAME WAS VACATED BY THE DOCUMENT RECORDED OCTOBER 04, 2007 AS INSTRUMENT NO. 619517 OF OFFICIAL RECORDS.
8. AN EASEMENT FOR PUBLIC ROAD AND UTILITY AND INCIDENTAL PURPOSES, RECORDED APRIL 27, 2021 AS INSTRUMENT NO. 2021-259408 OF OFFICIAL RECORDS. IN FAVOR OF: THE CITY OF WILDOMAR.
9. AN EASEMENT SHOWN OR DEDICATED ON THE MAP OF PARCEL MAP NO. 36492-1 RECORDED JUNE 02, 2021 AND ON FILE IN BOOK 251, PAGE 51 THROUGH 54, OF PARCEL MAPS. FOR PUBLIC UTILITY PURPOSES.
10. AN EASEMENT SHOWN OR DEDICATED ON THE MAP OF PARCEL MAP NO. 36492-1 RECORDED JUNE 02, 2021 AND ON FILE IN BOOK 251, PAGE 51 THROUGH 54, OF PARCEL MAPS. FOR: EMERGENCY ACCESS AND INCIDENTAL PURPOSES.
11. AN EASEMENT SHOWN OR DEDICATED ON THE MAP OF PARCEL MAP NO. 36492-2 RECORDED JUNE 9, 2021 AND ON FILE IN BOOK 251, PAGE 55-57, OF PARCEL MAPS. FOR: STORM DRAIN AND RECIPROCAL ACCESS PURPOSES AND INCIDENTAL PURPOSES.
12. ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM CLINTON KEITH ROAD, EXCEPTING THE 64' ACCESS OPENING, HAVE BEEN DEDICATED OR RELINQUISHED ON THE MAP OF PARCEL MAP NO. 36492-2 ON FILE IN BOOK 251, PAGE 55-57, OF PARCEL MAPS.
13. AN EASEMENT SHOWN OR DEDICATED ON THE MAP OF PARCEL MAP NO. 36492-1 RECORDED JUNE 02, 2021 AND ON FILE IN BOOK 251, PAGE 51 THROUGH 54, OF PARCEL MAPS FOR RECIPROCAL ACCESS PURPOSES AND INCIDENTAL PURPOSES.SAID EASEMENT IS BLANKET IN NATURE ACROSS ALL PARCELS.

PROPOSED EASEMENTS:

14. AN EASEMENT FOR WATER & INCIDENTAL PURPOSES, TO BE DEDICATED TO ELSINORE VALLEY MUNICIPAL WATER DISTRICT ON FINAL MAP.
15. AN EASEMENT FOR DRAINAGE & INCIDENTAL PURPOSES, TO BE DEDICATED TO RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT ON FINAL MAP.

DEDICATIONS:

LETTERED LOTS A-D TO BE DEDICATED TO THE CITY OF WILDOMAR FOR STREET & UTILITY PURPOSES ON FINAL MAP.

DIGALERT
DIAL BEFORE YOU DIG TOLL FREE 1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.
The private engineer signing these plans is responsible for assuring the accuracy and acceptability of the design hereon. In the event of discrepancies arising after city acceptance or during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plans for acceptance by the city

MARK	BY	DATE	REVISIONS	APPR.	DATE
	ENGINEER			CITY	

CITY OF WILDOMAR
ACCEPTED BY:
Date:
Daniel A. York, Director of Public Works/ City Engineer, PE 43212
ACCEPTANCE AS TO CONFORMANCE WITH APPLICABLE CITY STANDARDS AND PRACTICES

SEAL-ENGINEER:
REGISTERED PROFESSIONAL ENGINEER DONALD R. BROOKS No. 41829 CIVIL STATE OF CALIFORNIA
PREPARED BY: DONALD R. BROOKS
R.C.E. No. 41829

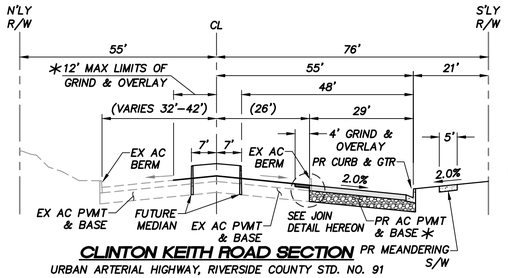
SB&O INC.
PLANNING ENGINEERING SURVEYING
41689 Enterprise Circle North, Suite 126
Temecula, Ca. 92590
951-695-8900
951-695-8901 Fax

BENCHMARK:
Elevation = 1255.326
Datum = NGVD29
BENCHMARK # E-21
THIS SURVEY WAS PERFORMED BY SB&O INC.
SCALE: H: As Noted V: As Noted

PA22-0085
CITY OF WILDOMAR
SCHEDULE "E"
TENTATIVE PARCEL MAP No. 38646
CLINTON KEITH RD & ELIZABETH LN

SHEET No. 1
OF 2 SHTS

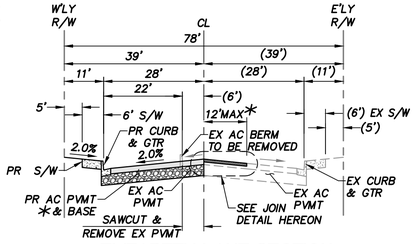
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CLINTON KEITH ROAD SECTION

URBAN ARTERIAL HIGHWAY, RIVERSIDE COUNTY STD. NO. 91
T.I. = 10.0 R=13
SCALE: 1"=20'(H) 1"=4(V)

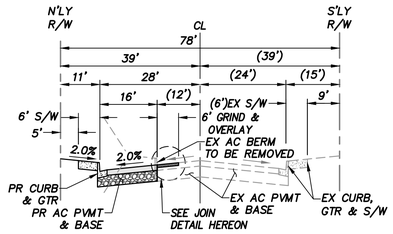
*NOTE: PAVEMENT SECTION/GRIND & OVERLAY LIMITS SUBJECT TO CHANGE BASED ON CORE SAMPLE TESTING RESULTS



ELIZABETH LANE SECTION

INDUSTRIAL COLLECTOR STREET, RIVERSIDE COUNTY STD. NO. 111
T.I. = 8.0 R=13
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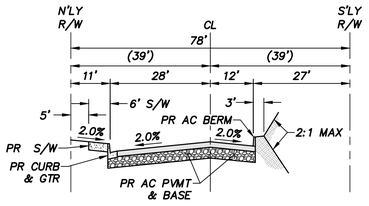
*NOTE: PAVEMENT SECTION/GRIND & OVERLAY LIMITS SUBJECT TO CHANGE BASED ON CORE SAMPLE TESTING RESULTS



BUNNY TRAIL SECTION

FROM STATION 16+93.15 TO ELIZABETH LANE

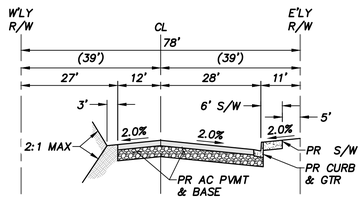
INDUSTRIAL COLLECTOR STREET, RIVERSIDE COUNTY STD. NO. 111
T.I. = 8.0 R=13
SCALE: 1"=20'(H) 1"=4'(V)



BUNNY TRAIL SECTION

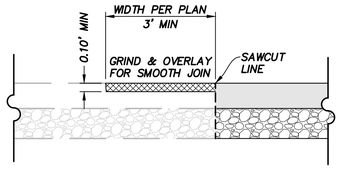
FROM YAMAS DRIVE TO STATION 16+93.15

INDUSTRIAL COLLECTOR STREET, RIVERSIDE COUNTY STD. NO. 111
T.I. = 8.0 R=13
SCALE: 1"=20'(H) 1"=4'(V)



YAMAS DRIVE SECTION

INDUSTRIAL COLLECTOR STREET, RIVERSIDE COUNTY STD. NO. 111
T.I. = 8.0 R=13
SCALE: 1"=20'(H) 1"=4'(V)



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The private engineer signing these plans is responsible for assuring the accuracy and acceptability of the design hereon. In the event of discrepancies arising after city acceptance or during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plans for acceptance by the city

MARK	BY	DATE	REVISIONS	APPR.	DATE

ENGINEER | CITY

CITY OF WILDOMAR
ACCEPTED BY:

Date:

Daniel A. York, Director of Public Works/ City Engineer, PE 43212

ACCEPTANCE AS TO CONFORMANCE WITH APPLICABLE CITY STANDARDS AND PRACTICES

SEAL-ENGINEER:
REGISTERED PROFESSIONAL ENGINEER
DONALD R. BROOKS
No. 41829
CIVIL
STATE OF CALIFORNIA

SB&O INC.
PLANNING ENGINEERING SURVEYING
41689 Enterprise Circle North, Suite 126
Temecula, Ca. 92590
951-695-6900
951-695-6901 Fax

PREPARED BY: DONALD R. BROOKS
R.C.E. No. 41829

BENCHMARK:
Elevation = 1255.326
Datum = NGVD29
BENCHMARK # E-21

THIS SURVEY WAS PERFORMED BY SB&O INC.

SCALE: H: As Noted V: As Noted

PA22-0085

CITY OF WILDOMAR

SCHEDULE "E"

TENTATIVE PARCEL MAP No. 38646

CLINTON KEITH RD & ELIZABETH LN

SHEET No. 2
OF 2 SHTS

I:\77382 WILDOMAR COMMERCE CENTER\DWG\C-77382-TPM.DWG 3/2/2023 4:27:06 PM PLOTTED BY:BLAKE HATCH

INITIAL STUDY FOR THE

Rancon Medical Office/Retail Project
Plot Plan & Tentative Parcel Map No. 36492
(Planning Application No. 12-0053)

Lead Agency:

CITY OF WILDOMAR
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

Prepared by:

Matthew Fagan Consulting Services
42011 Avenida Vista Ladera
Temecula, CA 92591

NOVEMBER 2013

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Table 5.16-1, Project Trip Generation 137

Note to Reader: to save natural resources the appendices are contained on a CD-ROM included with the printed copy of this Initial Study. The appendices are also available on the Environmental Documents Center of the City of Wildomar Planning Department website located at:

http://www.cityofwildomar.org/planning.asp

CD copies of the appendices are also available as part of the proposed Project file and can be reviewed at the following location:

Matthew C. Bassi, Planning Director
City of Wildomar, Planning Department
23873 Clinton Keith Rd., Suite 201
Wildomar, CA 92595
Hours: Monday - Thursday 8am - 5pm (closed Fridays)

APPENDICES

(located on the CD in a pocket at the back of this Initial Study)

A Site Photos

B Air Quality and Greenhouse Gas Impact Analysis

C Biological Resources Assessment

D Historical/Archaeological Resources Survey Report

E Paleontological Resources Assessment Report

F Geologic Hazards Evaluation and Updated Preliminary Geotechnical/Fault Investigation

G Phase I Environmental Study

H Preliminary On-Site Hydrology

I Project-Specific Preliminary Water Quality Management Plan (WQMP)

J Preliminary Acoustical Analysis

K Traffic Impact Analysis Report

L EVMWD Will Serve Letter

I. INTRODUCTION

PURPOSE

This document is an Initial Study that evaluates the environmental impacts resulting from the implementation of a proposed Plot Plan and Tentative Parcel Map ("proposed Project") that would subdivide approximately 29.40 acres (gross)/25.99 acres (net) into thirteen (13) parcels for the initial development of approximately 96,240 square feet of proposed commercial, retail, restaurant, office (including medical) and light industrial uses. Ultimate development of the proposed Project will result in 294,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant. These proposed Project components are discussed in greater detail in Section II.B, below.

II. PROJECT DESCRIPTION

A. PROJECT LOCATION AND SETTING

The proposed Project site is generally located at the southwest corner of Clinton Keith Road and Elizabeth Lane,(i.e., west of Elizabeth Lane, north of Bunny Trail and west of Yamas Drive, in City of Wildomar, Riverside County, California. The regional and local vicinity of the proposed Project site are shown in Figure 1, *Regional Vicinity Map* and Figure 2, *Local Vicinity Map*. The Assessor's Parcel Number (APN) for the proposed Project site is 380-250-022. The proposed Project site is located on the U.S. Geological Survey (USGS) 7.5' Murrieta topographic quadrangle map, Section 6, T.7 S., R. 3 W.

Currently, the proposed Project site is vacant. The topography of the proposed Project site is generally flat. The site slopes in a northwest to southwest direction, with the elevations ranging from approximately 1,308 feet above mean sea level (MSL) along the northern boundary, to approximately 1,360 square feet MSL along the southern boundary. The highest elevation is at 1,385 feet above MSL on top of a berm located adjacent to Clinton Keith Road in the northeast corner of the site, and the lowest elevation is at 1,341 feet above MSL within the channel bottom of a drainage located in the southeast corner of the site.

General Plan

The City of Wildomar General Plan land use designation for the proposed Project site is Business Park (BP). According to the General Plan:

> *"The Business Park land use designation allows for employee-intensive uses, including research and development, technology centers, corporate and support office uses, "clean" industry and supporting retail uses. Building intensity ranges from 0.25 to 0.6 floor area ratio (FAR)."*

The General Plan land use designations for the properties immediately adjacent to the proposed Project site are as follows:

- North: Open Space-Recreation (OS-R)
- South: Business Park (BP)
- Southwest: Very High Density Residential (VHDR)
- East: Business Park (BP)
- West: Business Park (BP)

Reference Figure 3, *City of Wildomar General Plan Land Use Plan*

Zoning

The proposed Project site is zoned Industrial Park (IP). According to Section 17.88.010 (Permitted Uses) of the Wildomar Municipal Code, the IP zone district allows for industrial and manufacturing uses, as well as service and commercial uses.

The zoning designations for the properties immediately adjacent to the proposed Project site are as follows:

- North: R-R (Rural Residential)
- South: R-R (Rural Residential) and I-P (Industrial Park)
- Southwest: R-3 (General Residential Zone)
- East: M-SC (Manufacturing-Service Commercial)
- West: R-R (Rural Residential)

Reference Figure 4, *City of Wildomar Zoning Map*

B. PROJECT DESCRIPTION

1. Tentative Parcel Map

Tentative Parcel Map (36492) is a proposal to subdivide one (1) existing parcel, totaling approximately 29.40 acres (gross)/25.99 acres (net), into thirteen (13) parcels for commercial, industrial, and open space purposes. The thirteen (13) new parcels would be numbered Parcels 1 through 13 and would be divided as shown in Table 1-1, *Proposed Parcel Acreage* and Figure 5, *Tentative Parcel Map No. 36492.*



Figure 1 - Regional Vicinity Map

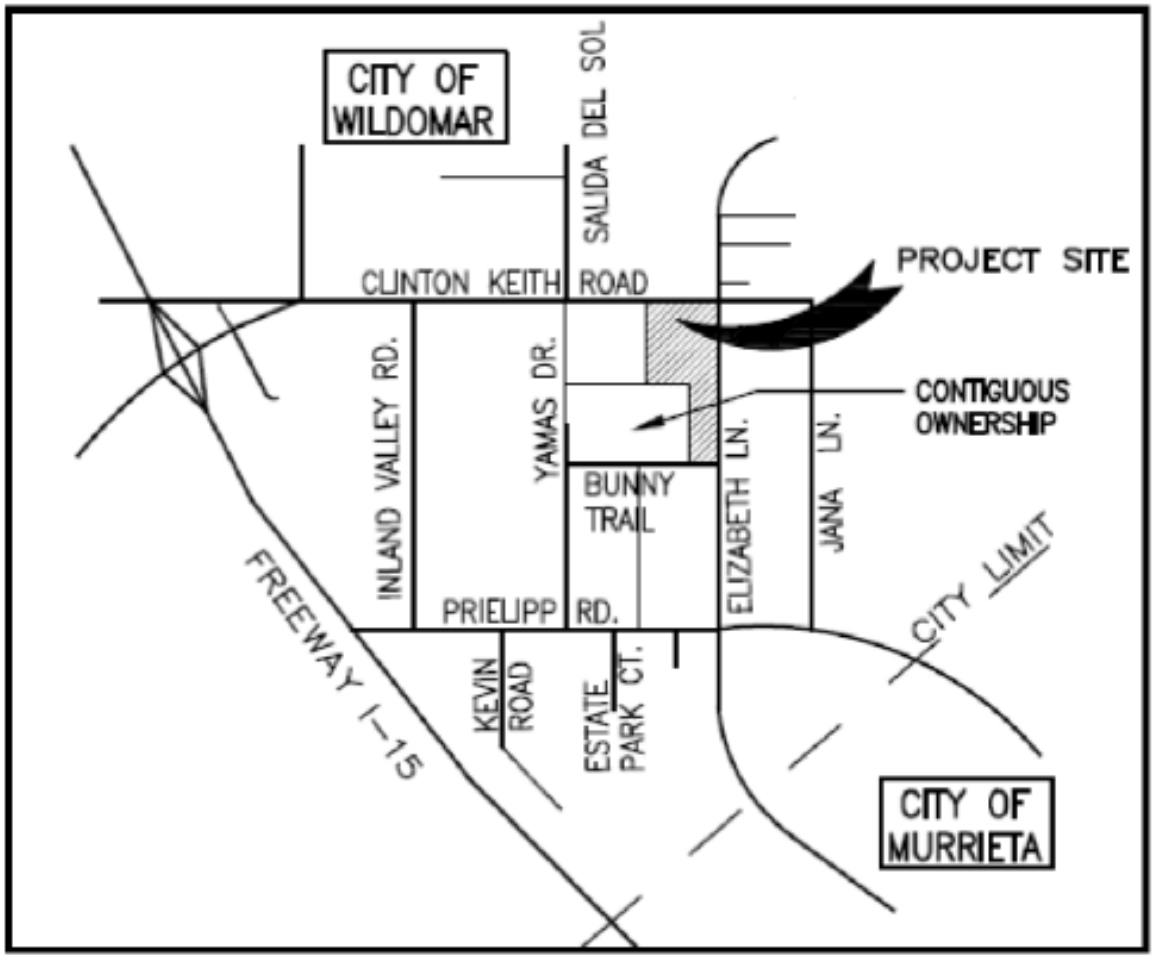
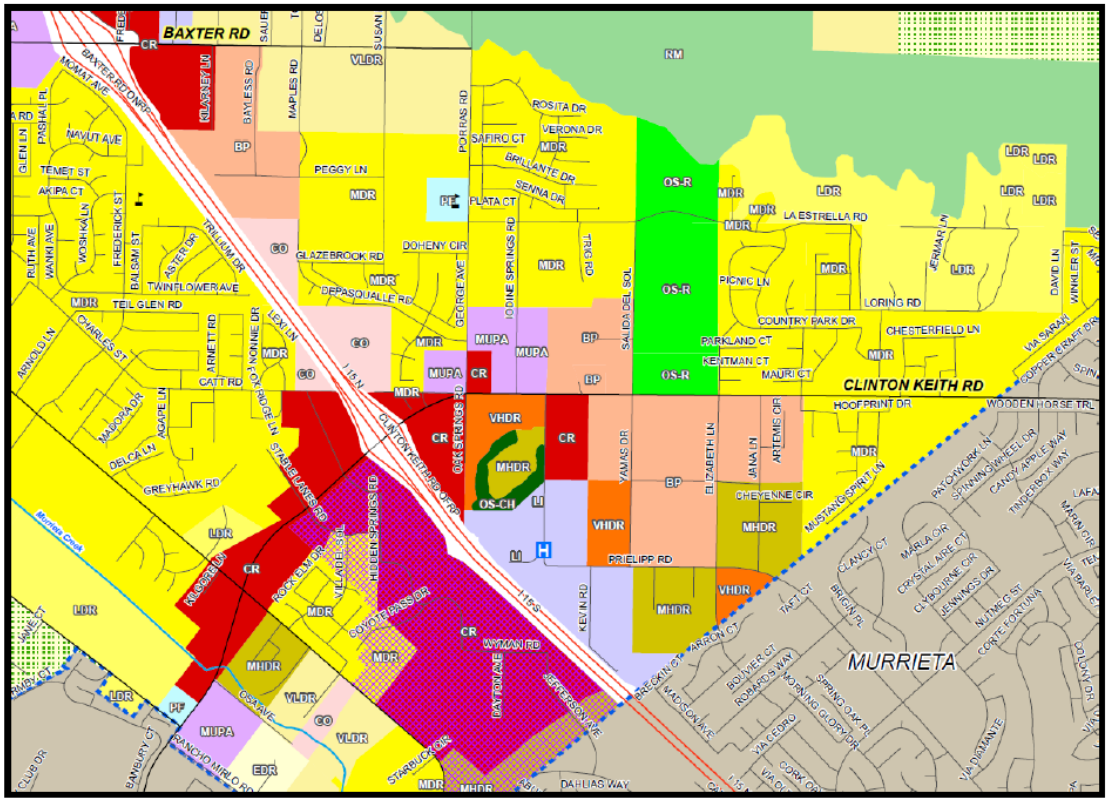


Figure 2 - Local Vicinity Map



GENERAL PLAN LEGEND

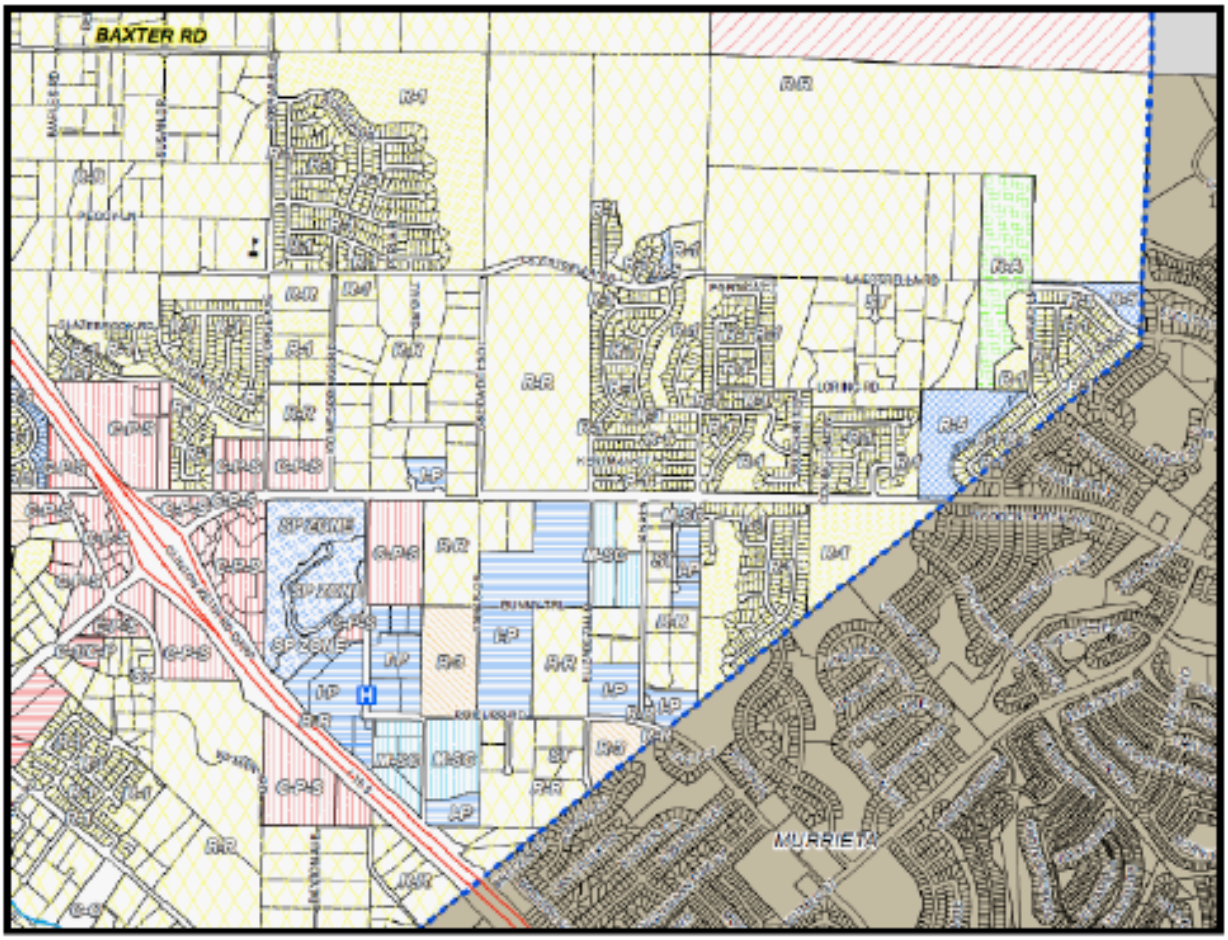
OVERLAY

- COMMUNITY CENTER
- MIXED USE POLICY AREA

LAND USE

- Estate Residential
- EDR-RC
- Very Low Density Residential
- VLDR-RC
- Low Density Residential
- LDR-RC
- Medium Density Residential
- Medium High Density Residential
- High Density Residential
- Highest Density Residential
- Very High Density Residential
- Commercial Retail
- Commercial Tourist
- Commercial Office
- Community Center
- Light Industrial
- High Industrial
- Business Park
- Public Facilities
- Mixed Use Policy Area
- Rural Residential
- Rural Mountainous
- Rural Desert
- Agriculture
- Conservation
- Conservation Habitat
- Open Space Recreation
- Open Space Rural
- Water
- Mineral Resources
- Indian Lands
- Freeway
- WILDOMAR CITY LIMITS

Figure 3 – City of Wildomar General Plan Land Use Map



ZONING LEGEND

ZONING CODE

- C-1/C-P
- C-P-S
- I-P
- M-SC
- R-1
- R-1-1
- R-1-10000
- R-1-15000
- R-3
- R-5
- R-A
- R-A-1
- R-A-1/2
- R-A-10
- R-A-2 1/2
- R-A-20000
- R-A-5
- R-R
- R-T
- SP ZONE
- W-1
- WILDOMAR CITY LIMITS

Figure 4 – City of Wildomar Zoning Map

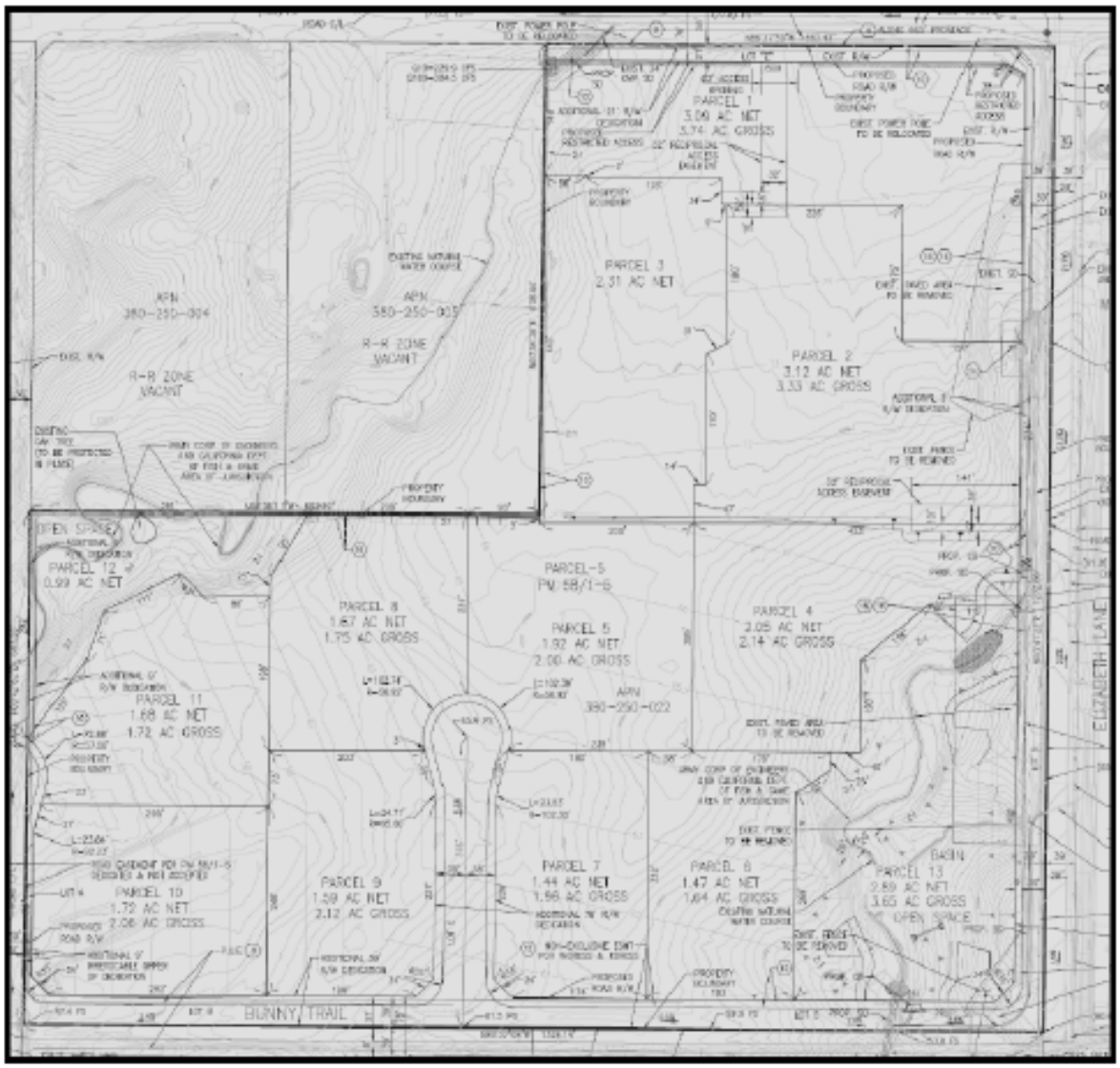


Figure 5 – Tentative Parcel Map No. 36492

Table 1.2-1
Proposed Parcel Acreage

Parcel Number	Project Site Acreage		
	Gross	Net	Dedicated Land
1	3.74	3.09	0.65
2	3.33	3.12	0.21
3	2.31	2.31	-
4	2.14	2.05	0.09
5	2.00	1.92	0.08
6	1.64	1.47	0.17
7	1.96	1.44	0.52
8	1.75	1.67	0.08
9	2.12	1.59	0.53
10	2.06	1.72	0.34
11	1.72	1.68	0.04
12 (Open Space)	0.99	1.05	-
13 (Open Space)	3.65	2.89	0.76
Totals	29.40	25.99	3.41

Source: Figure 3, Tentative Parcel Map No. 36492

As noted in Table 1.2-1, *Proposed Project Acreage*, above, the proposed Project would dedicate approximately 3.41 acres of the proposed Project site to the City of Wildomar for right-of-way purposes for Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and "Lot C" that will provide the necessary Proposed Project circulation and to accommodate access to/from the proposed development.

Anticipated future roadway improvements are discussed below.

Roadway Improvements

Implementation of the Project will result in improvements to several roadways within TPM 36492, as depicted on Figure 5, *Tentative Parcel Map No. 36492.* With the exception of "Lot C", all roadways are General Plan Circulation Element roadways.

Clinton Keith Road

Improvements to Clinton Keith Road are depicted on Figure 6, *Clinton Keith Road (Project frontage on Clinton Keith Road to Elizabeth Lane)*. The ultimate right-of-way for Clinton Keith Road, along the proposed Project's northern frontage is 152**'**. Clinton Keith Road is classified as an Urban Arterial Highway. Currently, there is 58' to 68' of existing pavement on Clinton Keith Road adjacent to the proposed Project's northerly frontage. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 21' additional ROW dedication for a parkway, which will include a 5' meandering sidewalk along the proposed Project's northerly boundary;
- 29' of additional pavement, for a total of 48' feet of pavement within a 55' section; and

- 14’ wide proposed raised median (7’ on the proposed Project’s ROW and 7’ on the adjacent ROW.

These improvements will be constructed with Phase 1 of the proposed Project.

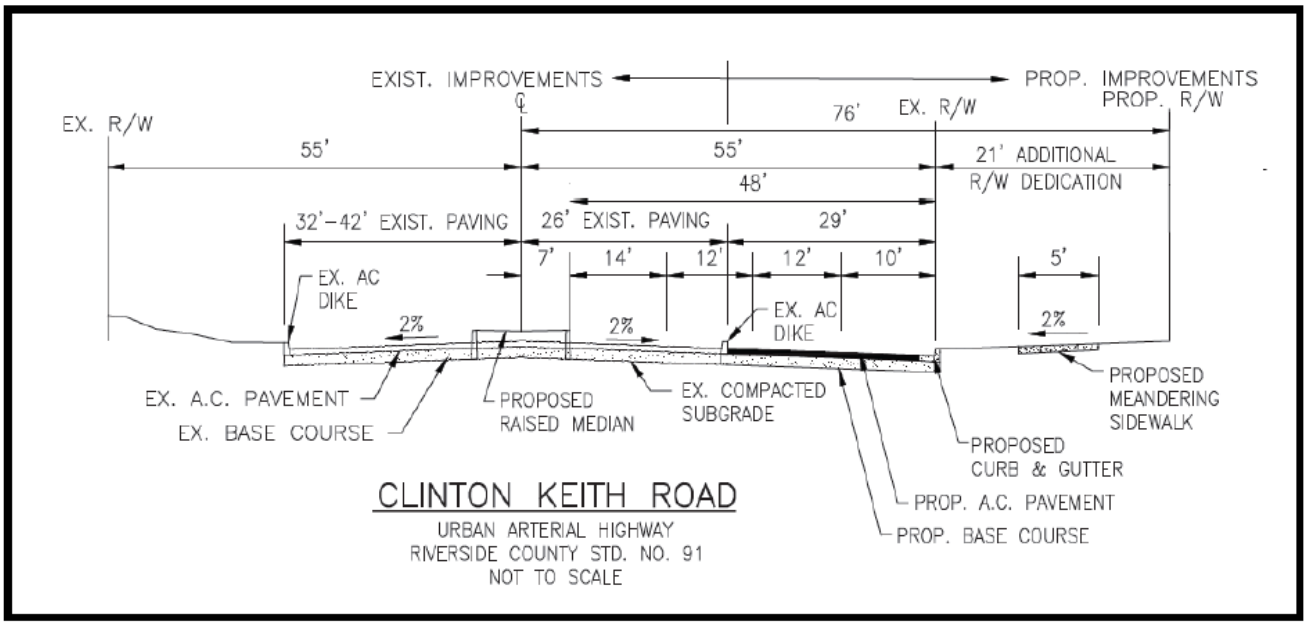


Figure 6 – Clinton Keith Road
(Project Frontage on Clinton Keith Road to Elizabeth Lane)

Elizabeth Lane

Improvements to Elizabeth Lane are depicted on Figure 7, *Elizabeth Lane (from Clinton Keith Road to Bunny Trail)*. The ultimate right-of-way for Elizabeth Lane, along the proposed Project's easterly frontage is 78'. Elizabeth Lane is classified as an Industrial Collector Street. Currently, there is 34' of existing pavement on Elizabeth Lane, which is adjacent to the existing Clinton Keith Self Storage, easterly of the proposed Project site. In addition, an 11' parkway (6' curb adjacent sidewalk and 5' of landscaping) is also installed on the east side of Elizabeth Lane. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 9' additional ROW dedication;
- 22' of additional pavement, for a total of 56' feet of pavement within a 78' section; and
- 11' parkway (6' curb adjacent sidewalk and 5' of landscaping).

These improvements will be constructed with Phase 1 of the proposed Project.

Bunny Trail

Improvements to Bunny Trail are depicted on Figure 8, *Bunny Trail (between Elizabeth Lane and Yamas Drive)*. The ultimate right-of-way for Bunny Trail, along the proposed Project's southerly frontage is 78'. Bunny Trail is classified as an Industrial Collector Street. Bunny Trail, along the southerly Proposed Project boundary, does not currently exist. Proposed roadway improvements include half-width improvements adjacent to the proposed Project's southerly boundary: 11' parkway (5' parkway and 6' curb-adjacent sidewalk), and 28' feet of pavement. An additional 18' of pavement (south of the roadway centerline) and an 8' shoulder. This portion is considered an off-site improvement. In total, 46' of pavement will be developed with the proposed Project.

Bunny Trail improvements will be constructed with Phase 2 of the proposed Project.

Yamas Drive

Improvements to Yamas Drive are depicted on Figure 9, *Yamas Drive (north of Bunny Trail).* The ultimate right-of-way for Yamas Drive, along the proposed Project's easterly frontage is 78'. Yamas Drive is classified as an Industrial Collector Street and will provide access to Parcels 10 and 11. Yamas Drive, along the southerly Proposed Project boundary, does not currently exist. Proposed roadway improvements include half-width improvements adjacent to the proposed Project's southerly boundary: 11' parkway (5' parkway and 6' curb-adjacent sidewalk), and 28' feet of pavement. An additional 18' of pavement (south of the roadway centerline) and an 8' shoulder. This portion is considered an off-site improvement. In total, 46' of pavement will be developed with the proposed Project. An additional 9' of ROW will be dedicated with the proposed Project for the Yamas Drive improvements. Yamas Drive will extend as a cul-de-sac to the existing drainage course (approximately 400' northerly of the existing terminus of Yamas Drive).

Yamas Drive improvements will be constructed with Phase 2 of the proposed Project.

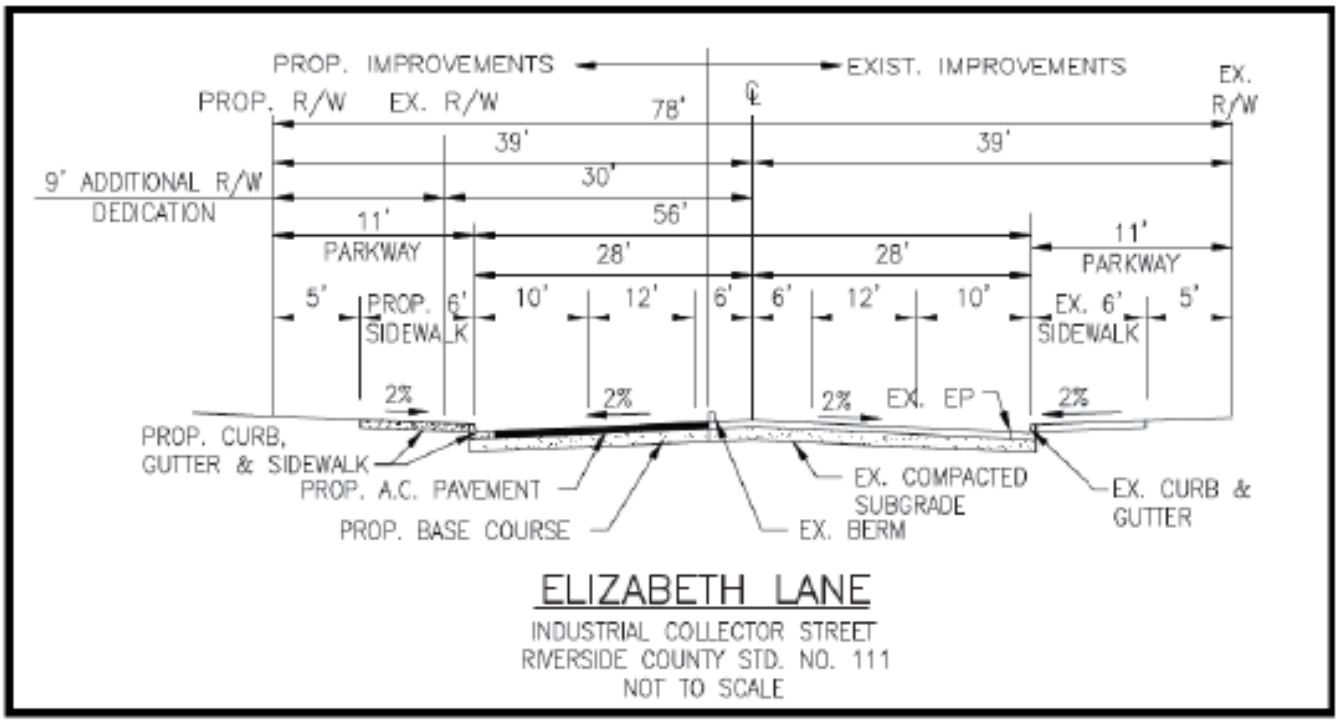


Figure 7 – Elizabeth Lane
(From Clinton Keith Road to Bunny Trail)

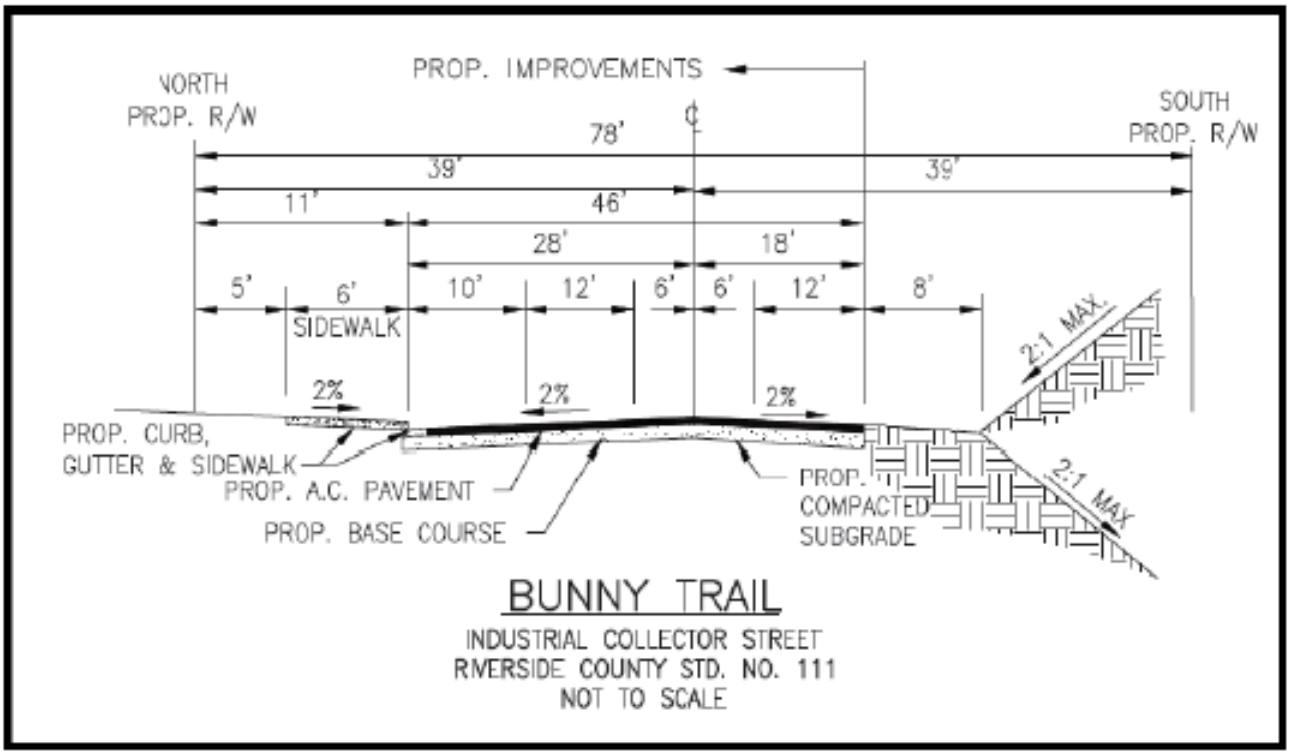


Figure 8 – Bunny Trail

(Between Elizabeth Lane and Yamas Drive)

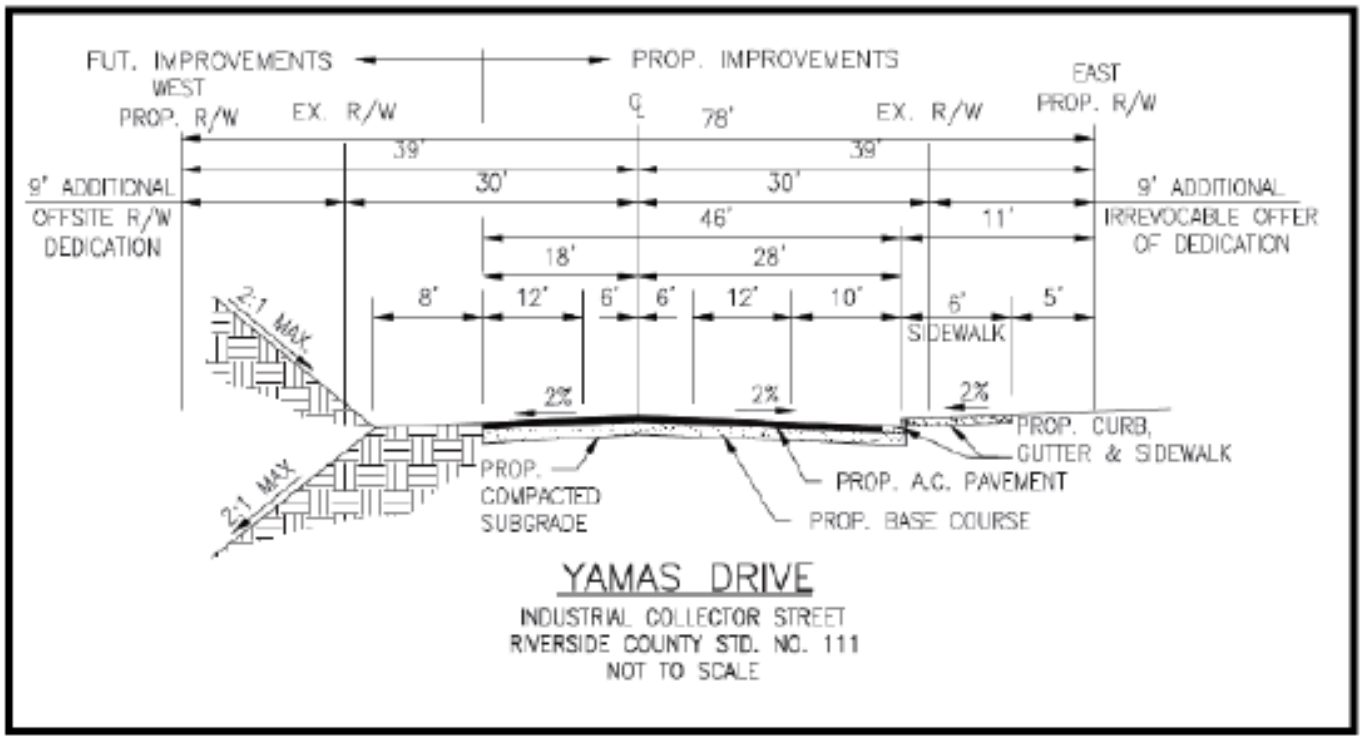


Figure 9 – Yamas Drive
(North of Bunny Trail)

Lot "C"

Improvements to Lot "C" are depicted on Figure 10, *Lot "C" (north of Bunny Trail).* The ultimate right-of-way for Lot "C" is 78'. Lot "C" is classified as an Industrial Collector Street and will allow access to Parcels 5, 7, 8 and 9 off of Bunny Trail. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 78' ROW dedication;
- 56'' of pavement (28' per half-width); and
- 11' parkway (6' curb adjacent sidewalk and 5' of landscaping) on both sides of Lot "C"

Lot "C" improvements will be constructed with Phase 2 of the proposed Project.

2. Plot Plan

The Plot Plan will be developed in two (2) phases. Phase 1 of the proposed Project includes approximately 96,240 square feet of proposed commercial, retail, restaurant, office (including medical) and light industrial uses, as depicted on Figure 11, *Plot Plan*. Ultimate development (Phase 2) of the proposed Project will result in 294,900 square feet of business park uses, 42,400 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant.

Phase 1 of the proposed Project includes six (6) buildings on the site. These buildings range in size from approximately 3,000 square feet to 42,420 square feet for a total of 96,240 square feet (11.8% of the site). Buildings 1 and 2 are located adjacent to Clinton Keith Road. Buildings 3 and 4 are located adjacent to Elizabeth Lane. Buildings 5 and 6 are located internal to the proposed Project. The individual building square footages, maximum heights and proposed uses and are listed in Table 1.2-2, *Plot Plan Square Footage and Proposed Uses*, below:

Table 1.2-2
Plot Plan Square Footage and Proposed Uses

Building	Maximum Height	Square Footage	Proposed Use(s)
1	26'0"	8,200	Commercial Retail
2	26'0"	8,200	Commercial Retail
3	26'0"	3,000	Commercial Retail
4	26'0"	3,000	Drive-thru Fast Food
5	36'0"	31,420	Medical Office
6	36'0"	42,420	Office
Total		**96,240**	

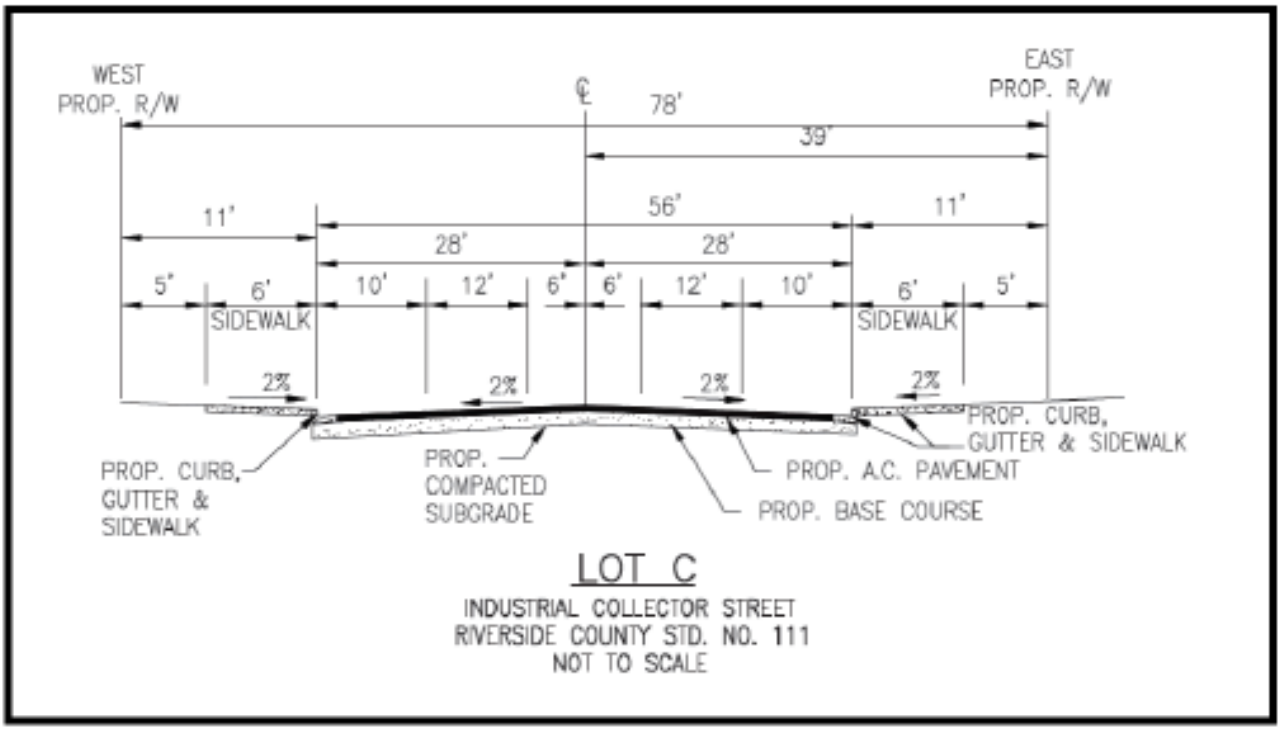


Figure 10 – Lot "C"
(North of Bunny Trail)

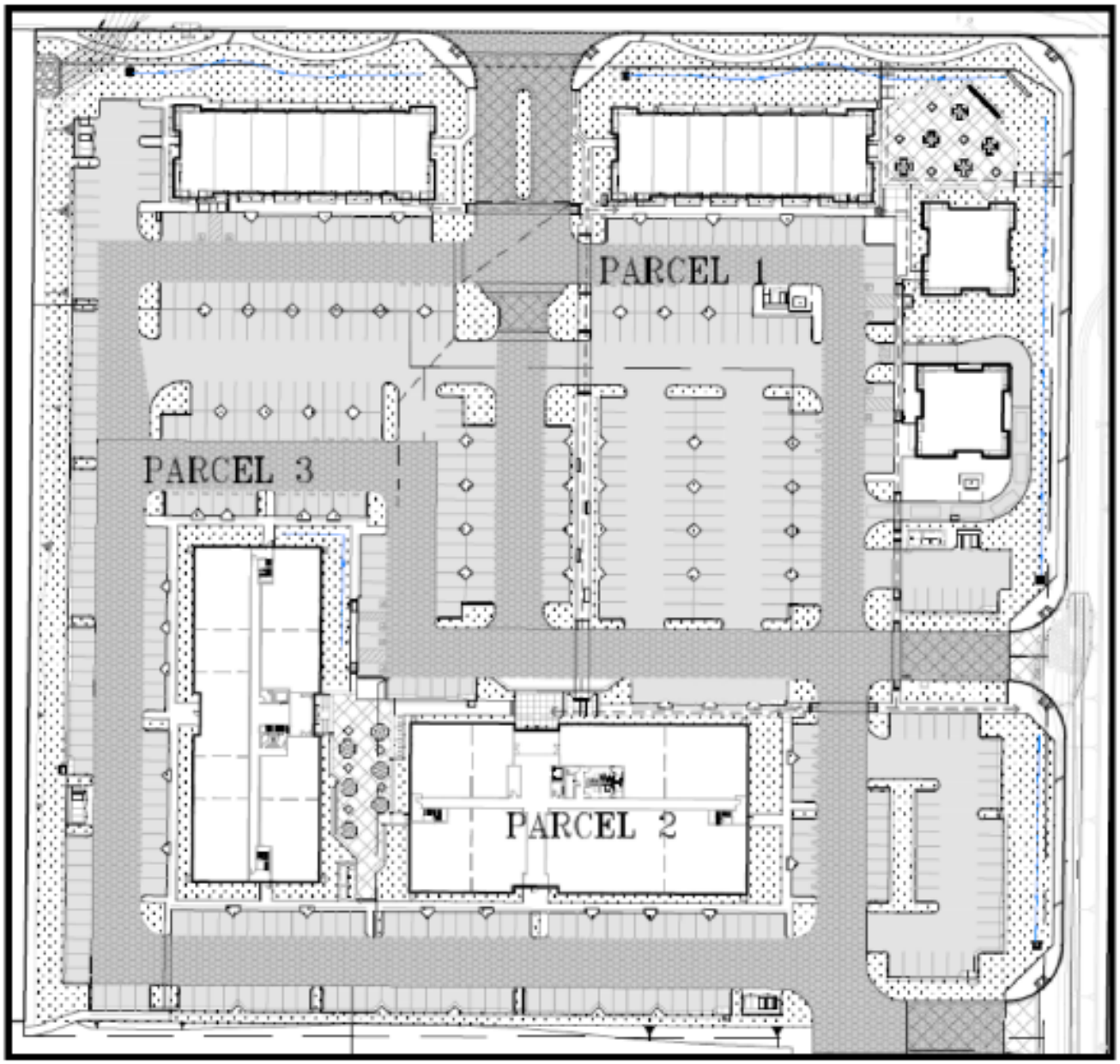


Figure 11 – Plot Plan

No portion of Phase 2 is planned at this time. However, as part of this analysis, the ultimate development of both phases of the proposed Project, which will result in a total of 294,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant has been taken into account in this Initial Study. Therefore, it is anticipated that Phase 2 will include the remaining 198,660 square feet of development on the proposed Project site. Phase 2 development will be in accordance with the BP General Plan designation and the IP Zoning designation.

Two (2) gathering/outdoor spaces have been provided in Phase 1. These are located between Buildings 2 and 3 and 5 and 6 respectively, as shown on Figure 12, *Illustrative Plan*. These gathering areas will include, at a minimum: shade trees, seating areas, seat walls, lighting, decorative paving and potential water features. Reference Figure 13, *Patio Areas*.

Hours of Operation

The tenants and specific businesses for both Phases of development are unknown at this time, therefore, it is difficult to assess operational hours and number of employees. The days and hours of operation will be assumed to be typical of those associated with similar commercial retail office, medical office and, Drive-thru Fast Food restaurant uses of this type and scale.

Building Architecture and Materials

All six (6) buildings in Phase 1 will have a similar design theme and color motif. The architecture could be considered contemporary and consistent with other commercial and light industrial/office developments in the Proposed Project area. Buildings 1-4 will be wood frame construction. These building will be articulated on all sides through the use of a combination of the following items: stucco, glass, aluminum mullions, tile accents, metal canopies, storefront entries and decorative light fixtures. Building entry points have been accented and the building mass has been broken up with the use of colors, materials, pop-outs and roof height variations. Please see Figure 14, *Color Elevations Buildings 1 and 2* and Figure 15, *Color Elevations Buildings 3 and 4*. Buildings 5 and 6 are office buildings and have been designed to be complimentary to Buildings 1-4, yet at the same time provide the simple architecture and design that accompanies office buildings in contrast to commercial retail buildings. Both buildings will be tilt-up construction. These building will be articulated on all sides through the use of a combination of the following items: glass, aluminum mullions, metal canopies, storefront entries, horizontal reveals and decorative light fixtures. Building entry points have been accented and the building mass has been broken up with the use of colors, materials, pop-outs and roof height variations. Please see Figure 16, *Color Elevations Building 5* and Figure 17, *Color Elevations Building 6*.

Phase 2 architecture is not known at this time. I will be assumed that Phase 2 architecture will be complementary in style and massing as Phase 1.



Figure 12 – Illustrative Plan

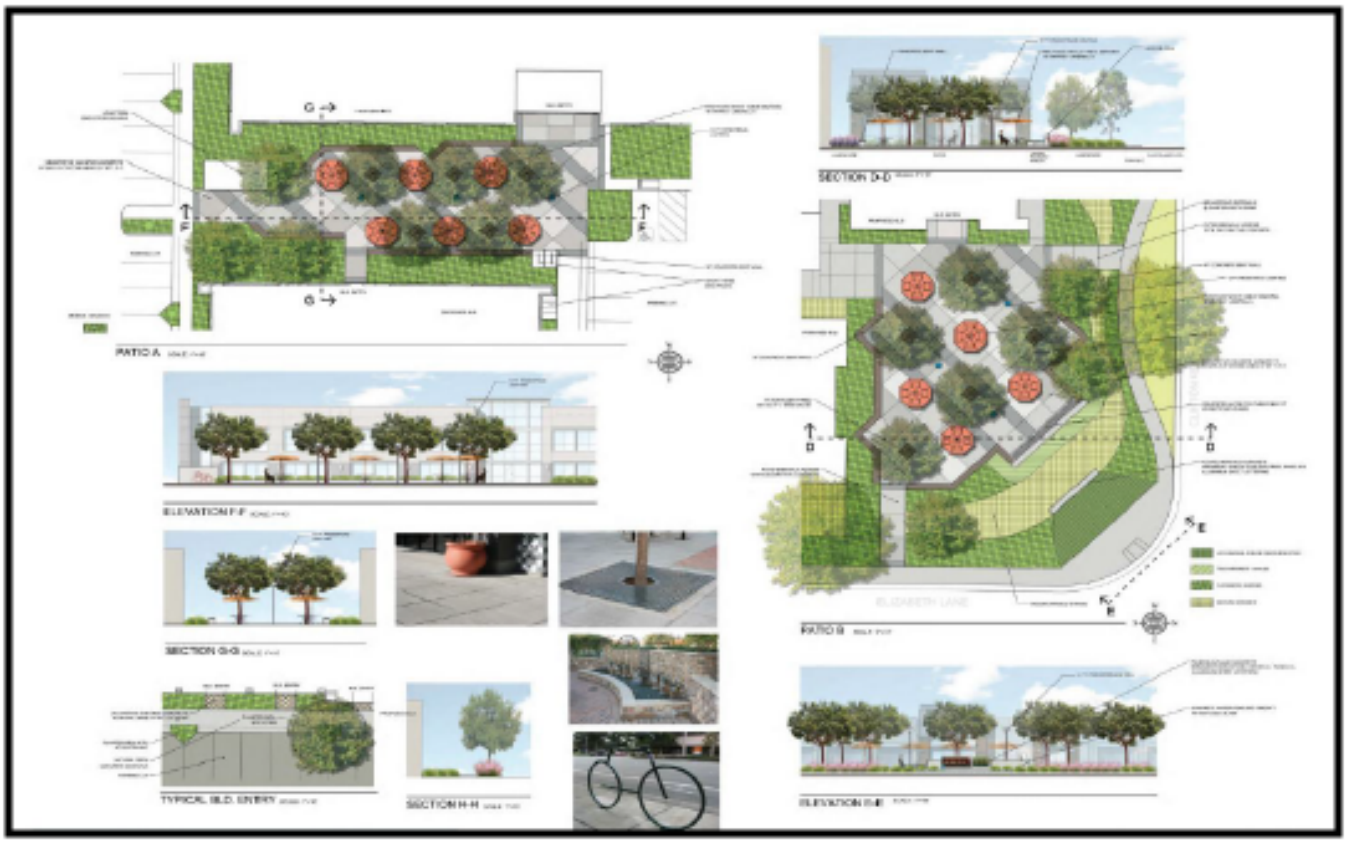


Figure 13 – Patio Areas

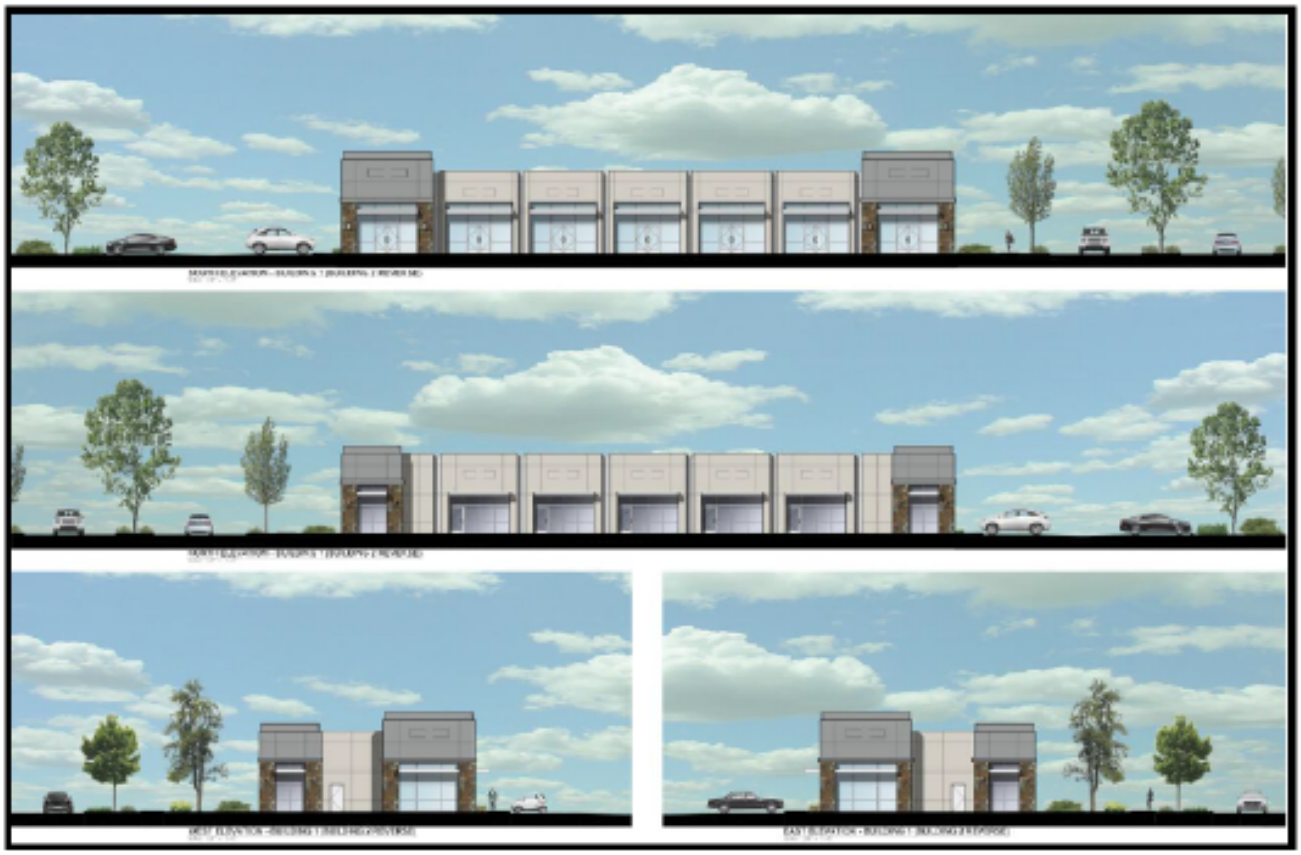


Figure 14 – Color Elevations Buildings 1 and 2



Figure 15 – Color Elevations Buildings 3 and 4



Figure 16 – Color Elevations Building 5



Figure 17 – Color Elevations Building 6

Site Access, Roadway Improvements, Off-Street Parking and Landscaping

Site Access

The Proposed Project proposes three (3) access points in Phase 1. These access points will be from two (2) surrounding publicly maintained streets: Clinton Keith Road and Elizabeth Lane. The Clinton Keith Road access point will be restricted to right-in/right-out turning movements. The northerly Elizabeth Lane access will be restricted to right-in/right-out turning movements. Full-access driveway will be permitted on the more southerly access point on Elizabeth Lane. Phase 2 access points will be from Elizabeth Lane, Bunny Trail, Lot "C" and Yamas Drive. No turning movement restrictions are anticipated. Please reference Figure 11, *Plot Plan*.

Roadway Improvements

A detailed discussion of Roadway improvements has been described above under II.B.1, Tentative Parcel Map (36492).

Off-Street Parking

The City's parking requirement for Phase 1 has been calculated utilizing the following ratios:

Commercial Retail: 1 parking space per 200 square feet;
Drive–thru Fast Food: 1 parking space per 100 square feet;
Medical Office: 1 parking space per 200 square feet; and
Office: 1 parking space per 200 square feet.

This formula results in a requirement for 498 parking spaces for Phase 1. Phase 1 of the proposed Project will provide a total of 502 spaces. These parking spaces include standard, handicap, compact and "clean air" parking spaces. Fifty (50) bike racks are required (25 short-term and 25 long-term spaces). Phase 1 of the proposed Project will provide 60 bicycle spaces. With the exception of the Clinton Keith frontage, parking will be along the proposed Project's perimeter, with a larger parking field centrally located within the proposed Project.

Phase2 parking requirements will be provided in accordance with the City's requirements.

Landscaping

According to the City's Zoning Code, approximately fifteen percent (15%) of the site must be landscaped in the IP Zone. For Phase 1, this minimum area to be landscape would be approximately 75,925 square feet). According to Figure 11, *Plot Plan*, approximately 91,453 square feet, or 18.1% of the site of Phase 1 will be landscaped. Landscaping will be along all of the proposed Project perimeters, with the largest landscaping setback along Clinton Keith Road, to be followed by Elizabeth Lane and then the southerly and westerly proposed Project boundaries.

Grading/Construction

According to the *Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar*, prepared by Albert A. Webb Associates, dated February

13, 2013, Revised July 17, 2013, the following grading/construction scenario for the proposed Project are:

- The Proposed Project site is currently vacant; thus, no demolition is necessary.
- Phase 1 construction will begin with site grading for the commercial and office uses no sooner than October 2013. Grading will last approximately four months. Building construction follows and will last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately six months and begin during building construction.
- Phase 2 construction will begin with site grading for the business park uses no sooner than March 2015. Grading will last approximately six months. Building construction follows and will last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately seven months and begin during building construction.

Phase 1 grading is shown on Figure 18a, *Preliminary Grading Plan – Northern Portion and* Figure 18b, *Preliminary Grading Plan – Southern Portion*. Grading for Phase 1 is proposed on Parcels 1-3 and Parcel 13. Phase 1 grading will result in 44,143 cubic yards of cut and 20,300 cubic yards of fill. Approximately 23,843 cubic yards will be exported to the Phase 2 portion of the proposed Project, and will not need to be further exported off the proposed Project site upon development of Phase 2 Grading in Phase 1 will provide developable areas for the Plot Plan, protection for the drainage course in Parcel 13, as well as grading for the improvements to Clinton Keith Road and Elizabeth Lane.

Phase 2 grading is not known at this time, but will encompass grading for Parcels 5-11, Bunny Trail, Yamas Drive and, Lot "C". It should be noted that default parameters within CalEEMod (Air Quality modeling software) were used for modeling air quality construction emissions for all phases of development of the proposed Project, and these default values reflect a worst-case scenario, which means that Proposed Project emissions are expected to be equal to or less than the estimated construction emissions. This is further elaborated upon in Section V.3 (Air Quality) of this Initial Study.

Hydrology / Water Quality

Hydrology

Proposed on-site storm drain system and drainage design for Phase 1 will maintain these existing flows by the following:

- The existing four 48" RCP culverts in the northwest corner that run under Clinton Keith Road will be extended under the widened southern half of the road, maintaining existing flows with no impact downstream. The site grading proposes that the north-west portion of 0.6 acres drains to Stream 3 in a manner that the proposed conditions flows do not exceed existing conditions flows generated from the 2.1 acres.
- Near the above mentioned culverts, an AC spillway inlet into a 24" CMP will be replaced with a catch basin along with the street improvement widening.
- The existing 60" RCP that carries flows from north side of Clinton Keith Road will be extended approximately 400 lineal feet and outlet back into the natural drainage channel approximately 150' south of the most southerly drive entrance from Elizabeth Lane.

- An existing catch basin at a low point along the east side of Elizabeth Lane that directly discharges into a natural channel will join the above mentioned 60" RCP, as well as a proposed catch basin directly on the west side of Elizabeth Lane.
- The existing 30" RCP that carries flows from the adjacent mini-storage facility will be extended approximately 200 lineal feet and join a culvert that will be built under Bunny Lane.
- A 40' long culvert will be built under Bunny Lane to allow storm water to continue flowing in a southerly direction as it currently does.
- An on-site drainage system is proposed to capture the on-site flows and convey them to the proposed water quality/detention basin.
- Detention basins will be constructed at the outlet locations for each stream subareas to mitigate the increased runoff from the post-developed site conditions and release measured flows into the natural streams with no adverse impact downstream. For preliminary purposes, the basins are sized for the differences between the volumes of the 10-year, 24-hour pre- and post-developed conditions storm events. The 100-year events will bypass through.

A detention basin will be constructed in the southeast corner of Parcel 13 to mitigate the increased runoff from the post-developed parcels 1,2 and 3 proposed Project site and release measured flows into the natural Stream 1 with no adverse impact downstream. The proposed basin will serve dual purpose as being a water quality sand filtration basin and a detention mitigation basin.

Phase 2 drainage improvements are not known at this time. Phase 2 drainage improvements will be installed with the development of that portion of the proposed Project. All drainage facilities in Phase 2 will be consistent with City of Wildomar requirements, and will be subject to the current, or applicable standard conditions at the time of development, plus the proposed Project-specific mitigation measures contained in this Initial Study.

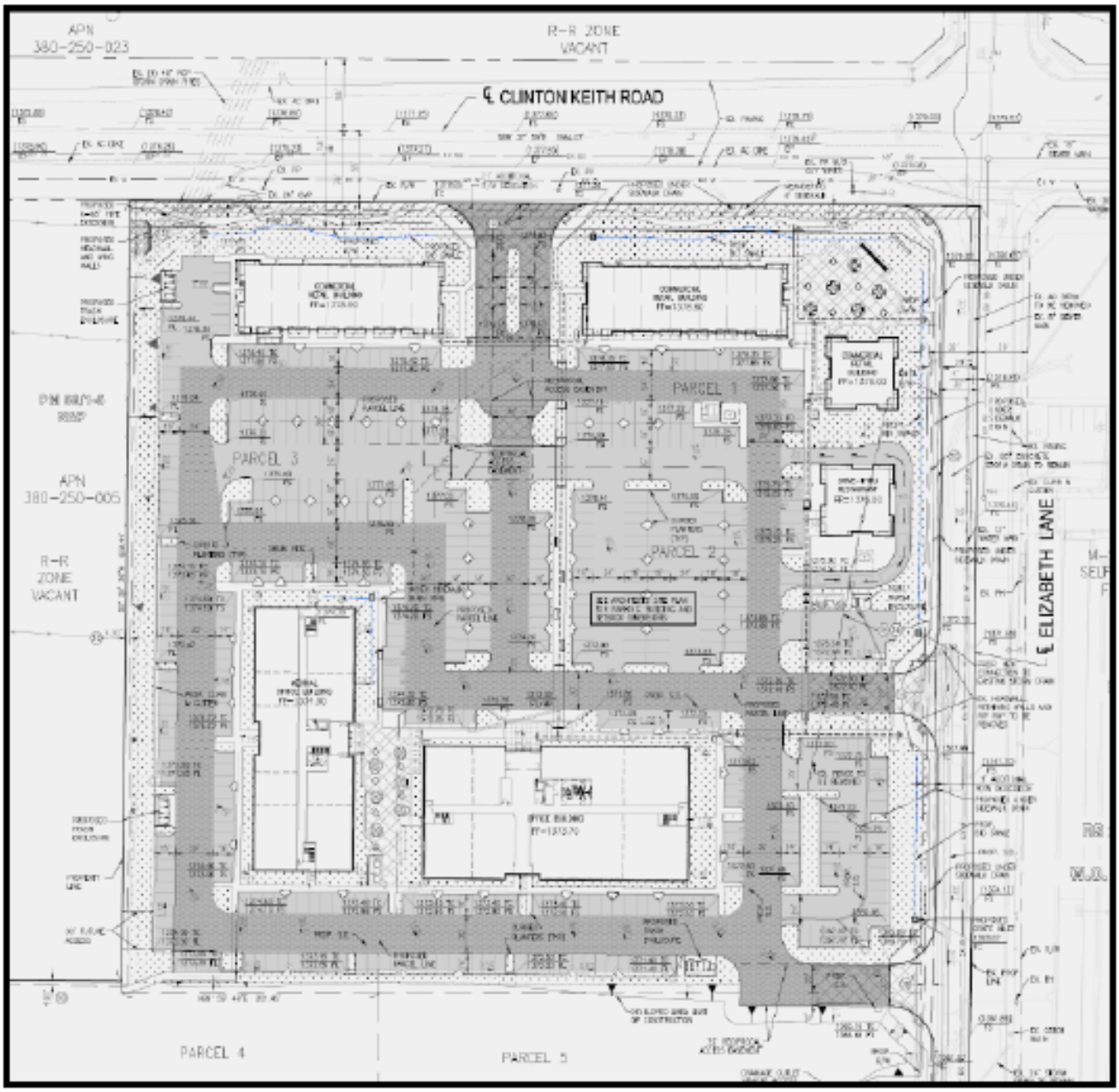


Figure 18a - Preliminary Grading Plan
Northern Portion

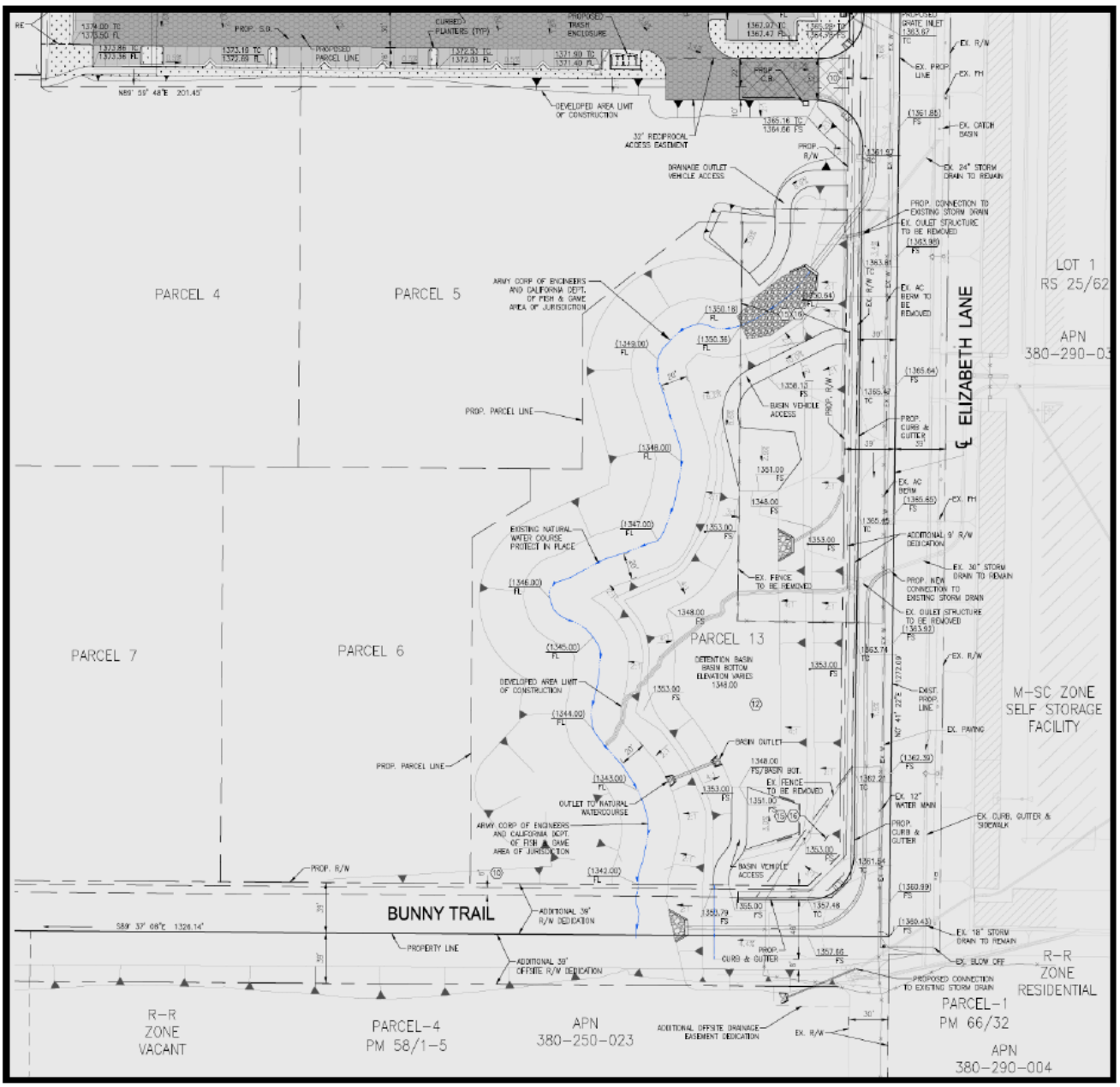


Figure 18b - Preliminary Grading
Southern Portion

Water Quality

Tentative Parcel Map 36492 proposes to create 13 parcels on approximately 29.5 acres of currently vacant, formerly agricultural land. Phase 1 of the proposed Project proposes to currently develop only three of those parcels (Parcel 1, 2, and 3 – 7.7 acres) along with Parcel 13 (open space – 2.88 acres) into an industrial park and a detention/sand filter basin respectively. The net disturbed area as a result of this Phase 1 will be 11.85 acres and will be limited to this partial development that consists of the following activities:

- Conduct grading operations for 7.7 acres and grade to existing topography along the southern boundary of the 3 parcels.
- Construct one medical office building, three commercial office buildings, one office building, one drive-thru restaurant, plus associated parking and landscape areas on Parcels 1 through 3.
- Construct a detention basin/sand filter basin on Parcel 13 (1.1 acres out of 2.88 acres of open space) for increased storm water runoff mitigation and water quality treatment.
- Construct sidewalk under drains along Clinton Keith Road and Elizabeth Lane to convey street tributary runoff to on-site vegetated swales that treat the storm water before entering the existing MS4 storm drain system.
- Conduct selective grading of the immediate surrounding area and modify existing storm drain design to prevent diversion of flows and maintain existing drainage patterns.

Phase 2 WQMP facilities are not known at this time. Phase 2 WQMP facilities will be installed with the development of that portion of the proposed Project. All WQMP facilities in Phase 2 will be consistent with City of Wildomar requirements for implementing water quality, and will be subject to the current, or applicable standard conditions at the time of development, plus the proposed Project-specific mitigation measures contained in this Initial Study.

Sewer and Water Facilities

The proposed Project will tie into an existing 20" water line located in Clinton Keith Road and a 12" water line in Elizabeth Lane, which will create a loop system. The proposed Project will tie into an existing 18" sewer line located in Clinton Keith Road.

Utilities

All utilities and public services are currently available on, or adjacent to, the proposed Project site. Utility and Service providers are as follows:

- Electricity: Southern California Edison
- Water: Elsinore Valley Municipal Water District
- Sewer: Elsinore Valley Municipal Water District
- Cable: Comcast Cablevision
- Gas: Southern California Gas Company
- Telephone: Verizon

Biological Resources

According to the *Biological Resources Assessment, Rancon Medical and Education Center. City of Wildomar, Riverside County, California*, prepared by PCR Services Corporation, dated September, 2012, the proposed Project site consists primarily of non-native grassland, with a smaller component of native vegetation dominated by California buckwheat (*Eriogonum fasciculatum*). The entire site is within the Western Riverside County MSHCP, but is not within any designated United States Fish and Wildlife Service (USFWS) critical habitat.

The proposed Project site supports two (2) drainage features observed to support field indicators associated with USACE, RWQCB, and CDFG (collectively "the resource agencies") jurisdictional waters, including Drainage D1 and Drainage D2. Drainage D1 is located near the eastern boundary of the site adjacent to Elizabeth Lane, and Drainage D2 is located in the northwest corner of the southern portion of the site, with a small portion adjacent to Clinton Keith Road to the north. Please refer to Figure 19, *Jurisdictional Features* (Figure 8 of BRA).

Mapped soils in the proposed Project site are within the Monserate-Arlington-Exeter Association, including eight soil types as follows:

- Arlington and Greenfield fine sandy loams, 2 to 8 percent slopes, eroded
- Handford sandy loam, 2 to 15 percent slopes
- Monserate sandy loam, 0 to 5 percent slopes (co-dominant soil type)
- Monserate sandy loam, shallow, 8 to 15 percent slopes, eroded
- Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded
- Monserate sandy loam, shallow, 15 to 25 percent slopes, severely eroded
- Ramona and Buren loams, 5 to 15 percent slopes, eroded (co-dominant soil type)
- Ramona and Buren loams, 5 to 25 percent slopes, severely eroded

Biological Resources are discussed in greater detail in Section V. 4 (Biological Resources) of this Initial Study.



Figure 19 – Jurisdictional Features

III. EXECUTIVE SUMMARY

A. Summary of Impacts and Mitigation Measures

The following represents a summary of impacts and mitigation measures associated with the proposed Project. Note that the City has standard conditions and ordinances that may also address impacts. All subsequent development will be required to comply with the tentative parcel map and plot plan requirements of the City of Wildomar.

1. Aesthetics

   All impacts are less than significant without mitigation, or no impact.

2. Agricultural Resources

   The proposed Project has no impact on agricultural resources.

3. Air Quality

   The proposed Project has no impact on air quality resources. However, the Project applicant has agreed to the following mitigation measures, which contain methods to further reduce Project impacts from construction and operational emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gasses, of this Initial Study).

   AQ-1 Construction Mitigation

   a. Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.)
   b. Limit fugitive dust sources to 20 percent opacity.
   c. Require a dust control plan for earthmoving operations.
   d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
   e. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.
   f. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.
   g. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.
   h. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.
   i. Require high pressure injectors on diesel construction equipment.*
   j. Utilize only CARB Tier 3 or better certified equipment for construction activities.*
   k. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.*
   l. Suspend use of all construction equipment operations during second stage smog alerts.*

* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during grading activities.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

AQ-2 Operation Mitigation

a. Install EV charging facilities for a minimum of 1% of all parking spaces.*
b. Provide preferential parking locations for EVs and CNG vehicles.*
c. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.*
d. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.*
e. Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment **or** contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.*
f. Provide secure, bicycle parking for employees.*
g. Provide direct safe, direct bicycle access to adjacent bicycle routes.*
h. Provide short-term bicycle parking for retail customers and other non-commute trips.*

* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during site plan review and verified prior to Certificate of Occupancy.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

4. Biological Resources

The following mitigation measure will reduce biological impacts to less than significant:

BIO-1 Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.

Timing/Implementation: Implemented prior to any off-site grading.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-2 The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently $500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.

Timing/Implementation: The fee must be paid prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

BIO-3 Due to the presence of suitable habitat and in compliance with the MSHCP, a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.

Timing/Implementation: Implemented 30 days prior to ground disturbance.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-4 If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the *Staff Report on Burrowing Owl Mitigation*.

Timing/Implementation: Implemented prior to ground any disturbance for Phase 2.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-5 Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

Timing/Implementation: Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-6 Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, *Impacts to Jurisdictional Features*, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFG. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.
2. On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

Timing/Implementation: Implemented prior to ground any disturbance in areas designated as jurisdictional features.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

5. Cultural Resources

The following mitigation measures will reduce impacts to cultural resources to a less than significant level:

CUL-1 Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation:

> If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the appropriate Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Commission and/or City Council. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: *As a condition of project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Building and Planning Departments.*

CUL-2 At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe[1] to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

Timing/Implementation: *Prior to the issuance of a grading permit.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-3 Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation:

> If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-4 The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found on the Project site, to the appropriate Tribe for proper treatment and disposition as defined by the appropriate Tribe.

[1] The appropriate Tribe will be selected from the list of Tribal representatives provided by the Native American Heritage Commission.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-5 All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the appropriate culturally affiliated Native American Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-6 To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified professional shall monitor all construction activities that could potentially impact archaeological and/or paleontological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-7 A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-8 Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-9 Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

6. Geology and Soils

All impacts are less than significant without mitigation. Note that all development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements.*

7. Greenhouse Gas Emissions

The following mitigation measure will reduce impacts to greenhouse gas resources to a less than significant level:

GHG-1 Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.

Timing/Implementation: During Construction Activities and Project Operations.

Enforcement/Monitoring: City of Wildomar Planning and Building Departments.

8. Hazards and Hazardous Materials

The following mitigation measure will reduce impacts to hazards and hazardous materials to a less than significant level. See also *Standard Conditions & Requirements.*

HAZ-1 All spills or leakage of any hazardous products, including petroleum products, during regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan

prepared for the Project development.

Timing/Implementation: Prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Engineering Department.

HAZ-2 Prior to the certificate of occupancy for a medical office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety Department.

HAZ-3 As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety and Fire Departments.

HAZ-4 Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety and Fire Departments.

9. Hydrology and Water Quality

The following mitigation measure will reduce impacts to hydrology and water quality to a less than significant level:

HYD-1 Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated

with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.

Timing/Implementation: Prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Engineering Department.

10. Land Use and Planning

All impacts are less than significant without mitigation, or no impact.

11. Mineral Resources

The proposed Project has no impact on mineral resources.

12. Noise

The following mitigation measure will reduce noise impacts to a less than significant level. See also *Standard Conditions & Requirements.*

NOI-1 To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-2 The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-3 Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-4 Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence.

It is important to note that the barriers' attenuation will be accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.

Timing/Implementation: Prior to the issuance of occupancy permits and during project operations.

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

NOI-5 Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.

Timing/Implementation: Reviewed at building plan check.

Enforcement/Monitoring: City of Wildomar Building Department.

13. Population and Housing

The proposed Project has no impact on population and housing.

14. Public Services

All impacts are less than significant without mitigation. Note that subsequent development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements.*

15. Recreation

The proposed Project has no impact on recreation.

16. Transportation/Traffic

The following mitigation measure will reduce transportation/traffic impacts to a less than significant level. See also *Standard Conditions & Requirements.*

TR-1 The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service of the following recommended improvements are implemented, prior to the respective phase of development:

On-Site Recommendations:

Roadways

- Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line.
- Construct partial width improvements on the westerly side of Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.
- Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.

Intersections (proposed Project's actual improvements necessary are shown in ***bold, italic, underlined***. The items that are not bold, italic, underlined are already existing)

Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics:

Northbound:	***One right-turn lane. Stop controlled.***
Southbound:	Not applicable.
Eastbound:	One through lane. ***One right-turn lane.***
Westbound:	One through lane.

Install a traffic signal at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics:

Northbound:	***One left-turn lane.*** One shared through and right-turn lane.
Southbound:	***One left-turn lane.*** One shared through and right-turn lane.
Eastbound:	One left-turn lane. One through lane. ***One right-turn lane.***

Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.
Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics:
Northbound: One shared left-turn, through and right-turn lane.
Southbound: One shared left-turn, through and right-turn lane.
Eastbound: ***One shared left-turn, through and right-turn lane. Stop controlled.***
Westbound: One shared left-turn, through and right-turn lane. Stop controlled.
Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW) with the following geometrics:
Northbound: One shared left-turn and through lane.
Southbound: One shared through and right-turn lane.
Eastbound: ***One shared left-turn and right-turn lane. Stop controlled.***
Westbound: Not applicable.
Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics:
Northbound: Not applicable.
Southbound: One right-turn lane.
Eastbound: ***One shared left-turn and right-turn lane. Stop controlled***
Westbound: Not applicable.
Construct the intersection of Project Driveway 4 (NS) and Bunny Trail (EW) with the following geometrics:
Northbound: Not Applicable.
Southbound: ***One shared left-turn and right-turn lane. Stop controlled.***
Eastbound: One shared left-turn and through lane.
Westbound: One shared through and right-turn lane.
Construct the intersection of Yamas Drive (NS) and proposed Project Driveway 5(EW) with the following geometrics:
Northbound: ***One shared through and right-turn lane.***
Southbound: ***One shared left-turn and through lane.***
Eastbound: Not applicable.
Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***
Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics:
Northbound: ***One shared through and right-turn lane.***
Southbound: ***One shared left-turn and through lane.***
Eastbound: Not applicable.
Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***

Timing/Implementation: Implemented during the appropriate Phase of proposed Project construction.

Enforcement/Monitoring: City of Wildomar Traffic Engineering Department.

17. Utilities and Service Systems

All impacts are less than significant without mitigation. Note that all development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements.*

B. STANDARD CONDITIONS & REQUIREMENTS

The following represent typical conditions and requirements of development in the City of Wildomar. These standards will be applied to the proposed Project per ordinance, policy, or county, state, or federal law. The standards also address many environmental impacts and as shown below are divided into the respective environmental sections.

Aesthetics

1. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting.

Air Quality

1. The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures.

Geology and Soils

1. All grading shall conform to the California Building Code, Ordinance 457, and all other relevant laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.

2. Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded per the requirements of Ordinance 457 (refer to dept. form 284-47). Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer.

3. Prior to the issuance of a grading permit, the developer shall submit a geotechnical soils reports to the City Engineer for review and approval prior to issuance of grading permit. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by the City of Wildomar.

Hazards and Hazardous Materials

1. As required by existing ordinance, subsequent development on the site will need to comply with the County of Riverside, Department of Environmental Health, Local Enforcement Agency (LEA) for all activities related to potential hazardous materials.

Land Use and Planning

1. Prior to the issuance of a grading permit, the developer shall pay the regional impact mitigation fee established by the Riverside County MSHCP.

Noise

1. The proposed Project shall comply with the development standard of Chapter 9.48 of the City of Wildomar Zoning Code.

Public Services

1. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required development impact fees for police and fire services pursuant to Chapter 4.60 of the Wildomar Municipal Code and in effect at the time of building permit issuance.

2. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required school impact mitigation fees established by the Lake Elsinore Unified School District and in effect at the time of building permit issuance.

Transportation/Traffic

1. Prior to issuance of any building permit on the proposed Project site, the Project applicant(s) shall pay the appropriate Transportation Uniform Mitigation Fee and the City of Wildomar Development Impact Fee (DIF).

2. Sight distance at the proposed Project entrance roadway should be reviewed with respect to standard City of Wildomar sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

3. Participate in the phased construction of off-site traffic signals through payment of proposed Project's fair share of traffic signal mitigation fees.

4. Signing/striping should be implemented in conjunction with detailed construction plans for the proposed Project site.

Utilities and Service Systems

1. The Project applicant(s) for future development on the proposed Project site shall obtain approval from the Riverside County Department of Environmental Health before receiving water and wastewater service from the Elsinore Valley Municipal Water District.

2. Prior to issuance of a building permit, a recycling collection and loading area plan shall be submitted to the City and to Riverside County Waste Management Division.

IV. ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Project Title:

Rancon Medical Office/Retail Project: Plot Plan and Tentative Parcel Map No. 36492 (Planning Application No. 12-0053)

2. Lead Agency Name and Address:

City of Wildomar, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595

3. Contact Person and Phone Number:

Matthew C. Bassi, Planning Director; (951) 677-7751, ext. 213

4. Project Location:

The proposed Project site is generally located at the southwest corner of Clinton Keith Road and Elizabeth Lane,(i.e., west of Elizabeth Lane, north of Bunny Trail and west of Yamas Drive, in City of Wildomar, Riverside County, California. Assessor's Parcel Number: 380-250-022; Section 6, Township 7 South, Range 3 West.

5. Project Sponsor's Name and Address:

Rancon Medical and Educational Center, LLC, 41391 Kalmia Street, Suite 206, Murrieta, CA 92562

6. General Plan Designation:

Business Park (BP)

7. Zoning:

I-P (Industrial Park)

8. Description of Project:

A proposed Parcel Map ("proposed Project") that would subdivide approximately 29.40 acres (gross)/25.99 acres (net) into thirteen (13) parcels. The Plot Plan proposes development in two (2) phases. Phase 1 proposes approximately 96,240 square feet of commercial, retail, restaurant, office (including medical) and light industrial uses on 11.62 (gross acres)/10.07 (net acres). Ultimate development of the proposed Project will result in 295,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant.

9. Surrounding Land Uses and Setting:

- North – Zoning: Rural Residential; Land Use: Vacant
- South – Zoning: Rural Residential and industrial Park; Land Use: Vacant
- Southwest – Zoning: General Residential; Land Use: Multi-Family Residential
- East – Zoning: Manufacturing-Service Commercial; Land Use: Self-Storage
- West – Zoning: Rural Residential; Land Use: Vacant (west), Multi-Family Residential (southwest)

10. Other Public Agencies Whose Approval Is Required:

Riverside County Flood Control and Water Conservation District, United States Army Corps of Engineers, San Diego Regional Water Quality Control Board, California Department of Fish and Game.

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this proposed Project involving at least one impact that is a "Potentially Significant Impact," or "Less Than Significant With Mitigation Incorporation" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Population/Housing
☐ Agricultural Resources	☒ Hazards/Hazardous Materials	☐ Public Services
☐ Air Quality	☒ Hydrology/Water Quality	☐ Recreation
☒ Biological Resources	☐ Land Use/Planning	☒ Transportation/Traffic
☒ Cultural Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☐ Geology and Soils	☒ Noise	☒ Mandatory Findings of Significance

C. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because of the incorporated mitigation measures and revisions in the proposed Project have been made by or agreed to by the Project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

City Representative

Matthew Bassi

11-15-2013

Signature | Date

Matthew C. Bassi | Planning Director

Applicant

Pursuant to Section 15070(b)(1) of the California Environmental Quality Act , as the Project applicant, I agree to revisions of the Project plans or proposals as described in this Initial Study/Mitigated Negative Declaration to avoid or reduce environmental impacts of my Project to a less than significant level.

Signature | Date

Printed Name

V. ENVIRONMENTAL ANALYSIS.

1. AESTHETICS.

Issues, would the proposal:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			✓	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✓	
e) Interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance?			✓	

DISCUSSION

a) Have a substantial adverse effect on a scenic vista? *Less Than Significant Impact*

The proposed Project site is located south of Clinton Keith Road. According to Figure 9, Elsinore Area Plan Scenic Highways, of the Elsinore Area Plan (EAP), Interstate 15 (I-15) and SR-74 are identified as "State Eligible" roadways. The proposed Project site is located approximately 2 ¼ miles east of I-15 and approximately 9 miles south of SR-74. Therefore, the proposed Project site will not be visible from these roadways. The proposed Project site would mostly be visible from the immediate surrounding area. The scenic vistas in the vicinity of the proposed Project site are of the surrounding mountains and their ridgelines. Any Project-level visual impacts for current and future development are/will be addressed through the City's plot plan application process, which ensures compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Therefore, the proposed Project's effect on the scenic vista would be considered a less than significant impact. No additional mitigation is required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? *No Impact*

The proposed Project site does not contain any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings; therefore, implementation of the proposed Project would not affect these resources. In addition, the proposed Project site is not located within a state scenic highway. No impacts are anticipated from the proposed Project. No mitigation is required.

c) Substantially degrade the existing visual character or quality of the site and its surroundings? *Less Than Significant Impact*

The proposed Project site is a vacant lot, located southerly of Clinton Keith Road and westerly of Elizabeth Lane. The proposed Project would subdivide the existing property into thirteen (13) parcels, two (2) of which are open space, for future retail commercial and office development, consistent with the existing land use designations and zoning and most of the existing and proposed surrounding uses. The proposed Project includes building elevations, landscape plans or other specific building development details for Phase 1. It is reasonable to assume that Phase 2 development on the site will be complimentary to Phase 1 and similar to others in the area. For all Phases of the proposed Project's development, the City's plot plan application process will ensure compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Section 17.216 of the Wildomar Municipal Code regulates plot plan submittals and requires CEQA analysis based on the plot submittal. Through compliance with the plot plan process, the proposed Project will have a less than significant impact that would substantially degrade the existing visual character or quality of the site and its surroundings. No additional mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? *Less Than Significant Impact*

All Phases of development of the proposed Project will create new sources of light and glare. The City's plot plan application process ensures compliance with City zoning and design standards regulating lighting, siding, materials, etc. A lighting photometric plan has been reviewed with the Plot Plan for Phase 1, and, a condition of approval requires review and approval of a construction level plan prior to issuance of building permits. Therefore, the proposed Project would not create new sources of light or glare that would adversely affect day or nighttime views in the area, and this would be considered a less than significant impact. This process will also be followed for all development within Phase 2. With compliance with the Wildomar Municipal Code 8.64 (Light Pollution), any impacts will be considered less than significant. No additional mitigation is required.

e) Interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance? *Less Than Significant Impact*

All development within 45 miles of the Mt. Palomar Observatory is subject to Section 8.64, Light Pollution, of the Wildomar Municipal Code. Under this provision, exterior lighting above 4050 lumens is restricted, and all lighting must be fully shielded if feasible and partially shielded in all other cases, and must be focused to minimize spill light into the night sky and onto adjacent

properties (Wildomar Municipal Code 8.64.060). Implementation of all Phases of the proposed Project will not interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting. Compliance with these provisions ensures that impacts will remain less than significant. No additional mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting.

MITIGATION MEASURES

None.

2. AGRICULTURAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?				✓
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				✓
d) Result in the loss of forestland or conversion of forestland to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use?				✓

DISCUSSION

a–e) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use; conflict with existing zoning for agricultural use or a Williamson Act contract; conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)); result in the loss of forestland or conversion of forestland to non-forest use; or Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use? *No Impact*

According to the Riverside County Land Information System (2013), the site is not located within the an agricultural preserve (Williamson Act) or classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program of the California Department of Conservation; therefore, there is no potential to convert farmland to nonagricultural uses. As seen in Appendix B (Site Photos), the site is not forested and there are no agricultural uses on the site. There is no evidence of recent agricultural activity on the site. According to the *Phase 1 Environmental Assessment*, prepared by EnviroSoil, Inc., dated January 5,

2011, the proposed Project site has historically been vacant since at least 1948. It appears to have been rough graded and apparently is/has been used for dry farming. There is no way of knowing the last time the site was used for agriculture. No impacts are anticipated and no mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

None.

3. AIR QUALITY.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✓	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			✓	
d) Expose sensitive receptors to substantial pollutant concentrations?			✓	
e) Create objectionable odors affecting a substantial number of people?			✓	

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar,* prepared by Albert A. Webb Associates, dated February 13, 2013, Revised July 17, 2013, Revised October 18, 2013 (AQ/GHG Analysis), and is contained Appendix B, of the enclosed CD. Please refer to the AQ/GHG Analysis in Appendix B for a detailed discussion of the background and physical setting as well as the regulatory setting for federal and California ambient air quality standards. The discussion below will center on the short- and long-term emissions as they relate to regional significance thresholds and localized significance thresholds; as well as a CO hot spot analysis. Even though the following analysis, below, concludes that the Project has less than significant air quality impacts and no mitigation is required, the Project applicant has agreed to implement certain measures to further reduce the Project's air quality impacts. Therefore, mitigation measures **AQ-1** and **AQ-2**, though not legally required, have been incorporated into this document. These "mitigation measures" are voluntary and not legally required since the analysis shows that proposed Project's impacts, described below, have no significant impacts.

a) Conflict with or obstruct implementation of the applicable air quality plan? *Less Than Significant Impact*

The proposed Project site is located within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the basin is in nonattainment (i.e., ozone [O3], particulate matter equal to or less than 10 microns and less

than 2.5 microns in diameter [PM-10 and PM-2.5, respectively]), nitrogen oxide (NOx), and lead. These are considered criteria pollutants because they are four of several prevalent air pollutants known to be hazardous to human health. It should be noted that the proposed Project is not anticipated to generate a quantifiable amount of lead emissions.

The federal and California ambient air quality standards (AAQS) establish the context for the local air quality management plans and for determination of the significance of a project's contribution to local or regional pollutant concentrations. The AAQS represent the level of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness, and persons engaged in strenuous work or exercise, all referred to as “sensitive receptors.” SCAQMD defines a "sensitive receptor" as a land use or facility such as residences, schools, child care centers, athletic facilities, playgrounds, retirement homes, and convalescent homes.

Both federal and state Clean Air Acts require that each non-attainment area prepare a plan to reduce air pollution to healthful levels. The 1988 California Clean Air Act and the 1990 amendments to the federal Clean Air Act (CAA) established new planning requirements and deadlines for attainment of the air quality standards within specified time frames which are contained in the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised, and approved over the past decade. The currently adopted clean air plan for the basin is the 1999 SIP Amendment, approved by the U.S. Environmental Protection Agency (EPA) in 2000.

The Air Quality Management Plan (AQMP) for the Basin establishes a program of rules and regulations directed at attainment of the state and national air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections. The SCAQMD adopted an updated AQMP in December 2012, which outlines the air pollution measures needed to meet federal health-based standards for particulates (PM-2.5) in 2014 and also includes specific measures to further implement the ozone strategy in the 2007 AQMP to assist in attaining the ozone standard in 2023 (SCAQMD 2012). The 2012 AQMP was submitted to CARB and EPA for review and to be included as a revision to California’s SIP.

The CARB maintains records as to the attainment status of air basins throughout the state, under both state and federal criteria. The portion of the Basin within which the proposed Project is located is designated as a non-attainment area for NO_x under state standards, and for ozone, PM-10, and PM-2.5 under both state and federal standards.

According to the Wildomar General Plan Environmental Impact Report (SCH No. 2002051143), the expected population growth resulting from buildout of the Wildomar General Plan is not expected to exceed the population growth projections of the SCAQMD's Air Quality Management Plan. In addition, the vehicle miles traveled growth rate under the County General Plan is consistent with the projected population growth utilized by the AQMP. Policies of the Wildomar General Plan are intended to reduce the air quality impact resulting from buildout of the General Plan; the air quality impact was found to be less than significant with respect to consistency with the AQMP.

The proposed Project's emissions from short-term construction of the proposed Project will not exceed SCAQMD regional thresholds for any criteria pollutant. The long-term operation will not exceed the regional daily threshold for NO_X during summer and winter as a result of the vehicle trips traveling to and from the site. Localized significance thresholds will also not be exceeded at sensitive receptor locations within the proposed Project vicinity during construction. In addition, the proposed Project will not result in CO hot spots.

Based on the regional significance threshold analysis for the proposed Project, the short-term construction emissions will not exceed the daily regional thresholds set by SCAQMD and the long-term operational emissions will also not exceed the daily regional thresholds set by SCAQMD during summer and winter.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? *Less Than Significant Impact*

Regional Significance Threshold Analysis

The thresholds contained in the SCAQMD CEQA Air Quality Handbook are considered regional thresholds and are shown in Table 5.2-1, *SCAQMD CEQA Regional Significance Thresholds*. These regional thresholds were developed based on the SCAQMD's treatment of a major stationary source.

Table 5.2-1
SCAQMD CEQA Regional Significance Thresholds

Emission Threshold	Units	VOC	NO_X	CO	SO_X	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operations	lbs/day	55	55	550	150	150	55

Short-Term Analysis

Short-term emissions consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Short-term impacts will also include emissions generated during construction as a result of operation of personal vehicles by construction workers, asphalt degassing, and architectural coating (painting) operations.

The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. This is a standard condition for the proposed Project. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 miles per hour and establishing a permanent, and stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the proposed Project (approximately 25 acres) a Fugitive Dust Control Plan or Large Operation Notification would not be required.

Short-term emissions were evaluated using the CalEEMod version 2011.1.1 computer program. The model evaluated emissions resulting from construction of the proposed Project. The proposed Project will be developed in two Phases. Construction of Phase 1 is expected to last for approximately 17 months starting no sooner than October 2013. Construction of Phase 2 is expected to last for approximately 20 months starting no sooner than March 2015. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that proposed Project emissions are expected to be equal to or less than the estimated construction emissions. In addition to the default values used, several assumptions relevant to model inputs for short-term construction are:

- The proposed Project site is currently vacant; thus, no demolition is necessary.
- Phase 1 construction will begin with site grading for the commercial and office uses no sooner than October 2013. Grading will last approximately four months. Building construction follow and last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately six months and begin during building construction.
- Phase 2 construction will begin with site grading for the business park uses no sooner than March 2015. Grading will last approximately six months. Building construction follow and last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately seven months and begin during building construction.

The construction equipment estimated to be used for each analyzed activity and detailed construction timing is shown in Appendix A of the AQ/GHG Analysis. Table 5.2-2, *Phase 1 Estimated Daily Construction Emissions*, and Table 5.2-3, *Phase 2 Estimated Daily Construction Emissions*, summarize the maximum estimated construction emissions from each Phase.

Table 5.2-2
Phase 1 Estimated Daily Construction Emissions

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
2013						
Grading						
Fugitive Dust	0.00	0.00	0.00	0.00	7.06	3.31
Off-Road Emissions	11.85	97.47	52.85	0.10	4.59	4.59
Worker/Vendor Trips	0.13	0.46	1.49	0.00	0.30	0.03
Total	11.98	97.93	54.34	0.10	11.95	7.93
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
2014						
Grading						
Fugitive Dust	0.00	0.00	0.00	0.00	7.06	3.31
Off-Road Emissions	11.22	90.65	50.83	0.10	4.18	4.18
Worker/Vendor Trips	0.11	0.41	1.37	0.00	0.30	0.03
Total	11.33	91.06	52.20	0.10	11.54	7.52
Building Construction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.74	32.06	23.20	0.04	2.02	2.02
Worker/Vendor Trips	1.34	10.37	12.00	0.03	2.58	0.47
Total	6.08	42.43	35.20	0.07	4.60	2.49
Architectural Coating						
Architectural Coating	67.09	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	0.45	2.77	1.92	0.00	0.24	0.24
Worker/Vendor Trips	0.11	0.13	1.53	0.00	0.34	0.02
Total	67.65	2.90	3.45	0.00	0.58	0.26
2014 Maximum[1]	**73.73**	**91.06**	**52.20**	**0.10**	**11.54**	**7.52**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
2015						
Building Construction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.34	29.16	22.98	0.04	1.80	1.80
Worker/Vendor Trips	1.22	9.43	11.29	0.03	2.55	0.44

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Total	5.56	38.59	34.27	0.07	4,35	2.24
Paving						
Paving	2.07	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.89	30.10	20.54	0.03	2.54	2.54
Worker/Vendor Trips	0.08	0.35	0.97	0.00	0.23	0.02
Total	7.04	30.45	21.51	0.03	2.77	2.56
Architectural Coating						
Architectural Coating	67.09	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	0.41	2.57	1.90	0.00	0.22	0.22
Worker/Vendor Trips	0.10	0.13	1.39	0.00	0.34	0.02
Total	67.60	2.70	3.29	0.00	0.56	0.24
2015 Maximum[2]	**74.64**	**41.29**	**37.56**	**0.07**	**4.91**	**2.80**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: See Appendix A of the AQ/HGH Analysis for model output report. Numbers may not match due to rounding within the model.

[1] Maximum emissions are the greater of grading alone or building construction and architectural coatings since those activities overlap.

[2] Maximum emissions are the greater of building construction and architectural coatings or architectural coatings and paving since those activities overlap.

Table 5.2-3
Phase 2 Estimated Daily Construction Emissions

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
2015						
Grading						
Fugitive Dust	0.00	0.00	0.00	0.00	8.67	3.31
Off-Road Emissions	10.57	83.24	49.03	0.10	3.80	3.80
Worker/Vendor Trips	0.10	0.37	1.25	0.00	0.30	0.03
Total	10.67	83.61	50.28	0.10	12.77	7.14
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Building Construction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.34	29.16	22.98	0.04	1.80	1.80
Worker/Vendor Trips	1.15	8.84	10.57	0.03	2.39	0.41
Total	5.49	38.00	33.55	0.07	4.19	2.21
2015 Maximum[1]	**10.67**	**83.61**	**50.28**	**0.10**	**12.77**	**7.14**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
2016						
Building Construction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	3.99	26.52	22.80	0.04	1.58	1.58
Worker/Vendor Trips	1.14	8.57	10.56	0.03	2.52	0.41
Total	5.13	35.09	33.36	0.07	4.10	1.99
Paving						
Paving	2.07	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.58	28.21	20.38	0.03	2.35	2.35
Worker/Vendor Trips	0.08	0.32	0.91	0.00	0.23	0.02
Total	6.73	28.53	21.29	0.03	2.58	2.37
Architectural Coating						
Architectural Coating	63.78	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	0.37	2.37	1.88	0.00	0.20	0.20
Worker/Vendor Trips	0.10	0.12	1.31	0.00	0.34	0.02
Total	64.25	2.49	3.19	0.00	0.54	0.22

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	75	100	550	150	150	55
2016 Maximum[2]	70.98	37.58	36.55	0.07	4.64	2.59
Exceeds Threshold?	No	No	No	No	No	No

Notes: See Appendix A of the AQ/HGH Analysis for model output report. Numbers may not match due to rounding within the model.

[1] Maximum emissions are the greater of grading alone or building construction alone since those activities don't overlap.

[2] Maximum emissions are the greater of building construction and architectural coatings or architectural coatings and paving since those activities overlap.

Evaluation of Tables 5.2-2 and 5.2-3, above indicates that the maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Therefore. these impacts are considered less than significant.

Even though these impacts are considered less than significant, the Project applicant has agreed to Mitigation Measure **AQ-1**, which contains methods to further reduce Project impacts from construction emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gasses, of this Initial Study).

Long-Term Analysis

Long-term air quality impacts will occur once the proposed Project is in operation. The proposed Project is assumed to be operational in 2016. Mobile source emissions refer to on-road motor vehicle emissions generated from the proposed Project's traffic. These emissions are estimated by using the information provided in the proposed Project-specific Traffic Study (reference Appendix L). Area source emissions include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as natural gas), yard and landscape maintenance (assumed to occur throughout the year in Southern California), consumer use of solvents and personal care products, and an average building square footage to be repainted each year. CalEEMod computes area source emissions based upon default factors and land use assumptions.

Separate emissions were computed for both summer and winter as seen in Table 5.2-4, *Estimated Daily Project Operation Emissions (Summer)*, and Table 5.2-5, *Estimated Daily Project Operation Emissions (Winter)*.

Table 5.2-4
Estimated Daily Project Operation Emissions (Summer)

Source	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Mobile	24.97	52.65	206.75	0.32	34.29	4.03
Natural Gas	0.06	0.55	0.46	0.00	0.04	0.04
Area	10.23	0.00	0.00	0.00	0.00	0.00
Total	**35.26**	**53.20**	**207.21**	**0.32**	**34.33**	**3.08**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Table 5.2-5
Estimated Daily Project Operation Emissions (Winter)

Source	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Mobile	23.18	53.94	207.53	0.29	34.33	3.09
Natural Gas	0.06	0.55	0.46	0.00	0.04	0.04
Area	10.23	0.00	0.00	0.00	0.00	0.00
Total	**33.47**	**54.49**	**207.99**	**0.29**	**34.37**	**3.13**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Evaluation of the data presented in Tables 5.2-4 and 5.2-5, above, indicates that criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter. Impacts are considered less than significant and no mitigation is required.

Even though these impacts are considered less than significant, the Project applicant has agreed to Mitigation Measure **AQ-2** through which contains methods to further reduce Project impacts from operational emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gasses, of this Initial Study).

Localized Significance Threshold Analysis

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology (SCAQMD 2008) that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short-term and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to

an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The proposed Project is located on the edge of SRA 25/26.

Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with hauling, vendor trips, and worker trips are mobile source emissions that occur off-site and need not be considered. SCAQMD has provided LST lookup tables and sample construction scenarios to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. Although the proposed Project site is larger than five acres, it is anticipated that an area no larger than five acres would be disturbed per day during construction. Therefore, the sample construction scenario for the five-acre site was modified using Project-specific information such as the construction equipment usage information from the CalEEMod data found in Appendix A of the AQ/GHG Analysis.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of a project to the nearest sensitive receptors (in meters). Sensitive receptors in the proposed Project vicinity include existing residences northeast and southwest of the proposed Project site. The closest receptor distance on the LST look-up tables is 25 meters. According to SCAQMD Methodology, projects with boundaries closer than 25 meters to the nearest receptor should use LST's for receptors located at 25 meters. Therefore, a receptor distance of 25 meters was chosen. The results are summarized in Table 5.2-6, *LST Results for Construction Estimates*.

Table 5.2-6
LST Results for Construction Emissions

	Peak Daily Emissions (lb/day)			
Activity	**NO_X**	**CO**	**PM-10**	**PM-2.5**
25 meter LST for 5-acres	**371**	**1,965**	**13**	**8**
Grading	95.0	46.6	8.7	5.0
Building Construction	35.1	19.6	2.0	1.8
Paving	41.8	24.5	2.9	2.7
Exceeds Threshold?	**No**	**No**	**No**	**No**

According to Table 5.2-6, short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant.

Long-Term Analysis

According the LST methodology, LST's would only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site; such as warehouse/transfer facilities. The proposed Project is a mixed-use commercial/office and business park and does not include such uses. Therefore, no long-term LST analysis is needed.

Based on the LST analysis, the short-term construction of the proposed Project will not result in localized air quality impacts to sensitive receptors within the proposed Project vicinity. Due to lack of stationary source emissions, no long-term analysis is needed. No impacts are anticipated and no mitigation is required.

CO Hot Spots Analysis

A carbon monoxide (CO) "hot spot" is a localized concentration of CO that is above the state or federal 1-hour or 8-hour ambient air quality standards (AAQS). Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles.

Based on the information presented below, a CO "hot spot" analysis is not needed to determine whether the addition of the proposed Project related traffic will contribute to an exceedance of either the state or federal AAQS for CO emissions in the proposed Project area.

Considering proposed Project-related traffic as well as existing conditions, ambient growth, and cumulative project traffic, the highest average daily trips would be 31,434 on Clinton Keith Road between the Interstate 15 northbound ramps and George Avenue, which is lower than the values studied by SCAQMD. Therefore, none of the intersections in the vicinity of the proposed Project site would have peak hourly traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. No impacts are anticipated and no mitigation is required.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? *Less Than Significant Impact*

Please reference the discussions in Responses 3.a and 3.b, above. Evaluation of Tables 5.2-2 and 5.2-3, above indicates that the maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter. According to Table 5.2-6, short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant. Compliance with the SCAQMD standards deems the impacts not cumulatively considerable. Any impacts are considered less than significant and no mitigation is required.

d) Expose sensitive receptors to substantial pollutant concentrations? *Less Than Significant Impact*

Please reference the discussions in Responses 3.a, 3.b, and 3.c, above. The maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Therefore these impacts are considered less than significant.

Criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter.

Short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant.

Based on the LST analysis, the short-term construction of the proposed Project will not result in localized air quality impacts to sensitive receptors within the proposed Project vicinity. Due to lack of stationary source emissions, no long-term analysis is needed. No impacts are anticipated and no mitigation is required.

None of the intersections in the vicinity of the proposed Project site would have peak hourly traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail.

e) Create objectionable odors affecting a substantial number of people? *Less Than Significant Impact*

During construction, the proposed Project will include operations that will have diesel combustion and other odors associated with equipment and materials. Diesel fuel odors from construction equipment and new asphalt paving fall into this category. None of these odors are permanent, nor are they normally considered so offensive as to cause sensitive receptors to complain. These impacts will be of short duration and are considered less than significant.

The SCAQMD CEQA Air Quality Handbook (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed Project does not anticipate including any of these land uses that have been identified by the SCAQMD as odor sources. Therefore, there would be no odor impacts from the operational phase of the proposed Project.

STANDARD CONDITIONS & REQUIREMENTS

1. The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures.

MITIGATION MEASURES

AQ-1 Construction Mitigation

m. Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.)

n. Limit fugitive dust sources to 20 percent opacity.
o. Require a dust control plan for earthmoving operations.
p. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
q. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.
r. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.
s. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.
t. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.
u. Require high pressure injectors on diesel construction equipment.*
v. Utilize only CARB Tier 3 or better certified equipment for construction activities.*
w. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.*
x. Suspend use of all construction equipment operations during second stage smog alerts.*

* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during grading activities.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

AQ-2 Operation Mitigation

i. Install EV charging facilities for a minimum of 1% of all parking spaces.*
j. Provide preferential parking locations for EVs and CNG vehicles.*
k. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.*
l. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.*
m. Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment **or** contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.*
n. Provide secure, bicycle parking for employees.*
o. Provide direct safe, direct bicycle access to adjacent bicycle routes.*
p. Provide short-term bicycle parking for retail customers and other non-commute trips.*

* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during site plan review and verified prior to Certificate of Occupancy.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

4. BIOLOGICAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?		✓		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		✓		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan?			✓	

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Biological Resources Assessment*, prepared by PCR Services Corporation, dated September 2012 (BRA), and is contained Appendix C, of the enclosed CD. Please refer to the BRA in Appendix C for a detailed discussion of the background, project description, methods of study, existing setting, regulatory framework and thresholds of significance. The discussion below will center on potential impacts from the proposed Project to sensitive plant species, sensitive wildlife species, riparian habitat or other sensitive natural communities, wetlands, wildlife movement, and consistency with local, regional and state habitat conservation plans.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? *Less Than Significant with Mitigation Incorporated*

Sensitive Plant Species

Development of the proposed Project site would result in the direct removal of numerous common plant species; a list of plant species observed within the proposed Project site. Common plant species present within the proposed Project site occur in large numbers throughout the region and their removal does not meet any the significance thresholds for biological resources (see Section 6.0, *Thresholds of Significance* of the BRA). Therefore, impacts to common plant species would be considered a less than significant impact and no mitigation measures would be required.

Only one listed species was observed on the proposed Project site, paniculate tarplant (Section 4.8.3, *Sensitive Plant Species*, of the BRA). The majority of the occupied areas on-site supported low densities of the species, with a few scattered high density patches. The majority of the paniculate tarplant would be permanently impacted as a result of the proposed Project, with the exception of an unimpacted open space area associated with the preserved portion of Drainage D1 in the southeastern portion of the site (see Figure 11, *Impacts to Distribution of Paniculate Tarplant* of the BRA). Permanent on-site impacts to paniculate tarplant total approximately 20.02 acres, including approximately 1.80 acres of densely distributed areas and approximately 18.22 acres of sparsely distributed areas. A total of approximately 0.09 acre of densely distributed areas and approximately 0.50 acre of sparsely distributed areas will be avoided. This species is widely distributed in Riverside County. This species is a Covered Species under the MSHCP; therefore, with payment of the MSHCP Local Development Mitigation Fee, impacts will remain less than significant. Therefore, impacts to paniculate tarplant would be considered a less than significant impact and no mitigation measures would be required.

No other sensitive plant species were observed on-site. If off-site impacts are proposed within potentially suitable habitat for sensitive plant species, additional surveys may be warranted. Mitigation Measure **BIO-1** has been added to reduce any potential impacts to a less than significant level. No additional mitigation is required.

Sensitive Wildlife Species

Development of the proposed Project would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species. A list of wildlife species observed within the proposed Project site is included in Appendix A, *Floral and Faunal Compendium* of the BRA. Due to the limited amount of native habitat to be removed and the high level of existing disturbance from human activity, these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds (see Section 6.0, *Thresholds of Significance* of the BRA). Therefore, impacts to common wildlife species would be considered less than significant impact and no mitigation measures would be required.

Several of the sensitive wildlife species are not expected to occur within the proposed Project site due to the lack of suitable habitat, including but not limited to federally threatened species such as vernal pool fairy shrimp (*Branchinecta lynchi*) and coastal California gnatcatcher

(*Polioptila californica californica*), and federally endangered species such as San Diego fairy shrimp (*Branchinecta sandiegonensis*), and Riverside fairy shrimp (*Streptocephalus woottoni*). Suitable habitat is also absent on-site for the federally and state endangered least Bell's vireo (*Vireo bellii pusillus*), and the federally endangered and state threatened Stephen's kangaroo rat (*Dipodomys stephensi*). Mitigation Measure **BIO-2** has been added, requiring payment of Stephen's kangaroo rat, per acre of disturbed area. After mitigation is incorporated impacts will be considered less than significant.

Focused surveys for burrowing owl (Species of Special Concern) also determined that this species does not occupy the proposed Project site. Therefore, no impacts to these sensitive wildlife species would occur and no mitigation measures would be required with the exception of the burrowing owl. Due to the presence of suitable habitat and in compliance with the MSHCP, Mitigation Measure **BIO-3**, requiring a pre-construction survey for burrowing owl be required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future has been added to the proposed Project. In addition, Mitigation Measure **BIO-4**, pertaining to the burrowing owl, has been added to the proposed Project, since there will be a potential lag between development of Phases 1 and 2 of the proposed Project, requiring subsequent focused studies. With the implementation of these two (2) mitigation measures, proposed Project impacts will be reduced to a less than significant level. No additional mitigation is required.

One Species of Special Concern Species, the San Diego black-tailed jackrabbit, was observed on the proposed Project site. This species is a Covered Species under the MSHCP; therefore, with payment of the MSHCP Local Development Mitigation Fee, impacts will remain less than significant. No additional mitigation is required for this species.

The site supports potential nesting and foraging habitat for migratory birds, in addition to potential foraging habitat for raptors. Based on the disturbed nature and the presence of development surrounding the proposed Project site, the quality of foraging habitat is considered to be low. The loss of foraging habitat as a result of the proposed Project would not expect to impact the foraging of these species. Direct impacts to these species would be avoided through compliance with the Migratory Bird Treaty Act (MBTA). The proposed Project is required by law to comply with the MBTA and perform site work to avoid impacts to birds as described above. Mitigation Measure **BIO-5** has been included to reduce any potential impacts to nesting and foraging habitat. With the implementation of this mitigation measure, impacts to foraging habitat would be considered adverse but less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? *Less than Significant with Mitigation Incorporated*

The proposed Project supports two native habitats on-site totaling 1.2 acres, including California buckwheat scrub (0.97 acre) and chamise chaparral (0.23 acre). The remainder of the proposed Project site supports non-native communities including non-native grassland and non-native grassland/California buckwheat scrub. None of the plant communities on-site are considered sensitive pursuant to CDFG, USFWS, or the MSHCP. Furthermore, the native communities within the proposed Project site are small, scattered, and are of low quality for sensitive plant and

wildlife species. The majority of the on-site plant communities would be impacted by the proposed Project, excluding the open space areas proposed in the northwestern corner of the southern portion of the site (adjacent to Yamas Road), and associated with Drainage D1 in the southeastern corner. Impacts to natural plant communities are summarized in Table 5.4-1, *Permanent Impacts to Natural Plant Communities and Developed Areas*, below. Since none of these habitats are sensitive, impacts would be considered less than significant. No mitigation measures would be required.

Table 5.4-1
Permanent Impacts to Natural Plant Communities and Developed Areas

	On-site (acres)	Off-site (acres)	Total (acres)
Non-native Grassland	20.57	1.35	**21.92**
Non-native Grassland/California Buckwheat Scrub	6.01	0.16	**6.17**
California Buckwheat Scrub	0.94	0.67	**1.61**
Chamise Chaparral	0.18	0.02	**0.20**
Developed	0.55	0.03	**0.58**
Total	**28.25**	**2.23**	**30.48**

Source: PCR Services Corporation, 2012

The proposed Project site does not support any riparian habitat, but does support drainages that are considered jurisdictional pursuant to CDFG. Impacts are proposed to a portion of these jurisdictional drainages. Impact acreages are summarized below in Table 5.4-2, *Permanent Impacts to CDFG Jurisdictional Drainages*. Impacts, in all, total 0.062 acre of permanent on-site impacts (881.65 linear feet) and 0.012 acre of permanent off-site impacts (106.97 linear feet permanent impacts). Impacts to these jurisdictional areas would be required to comply with Section 1602 of the California Fish and Game Code, including applying for a permit and mitigation subject to approval by CDFG. Mitigation Measure BIO-6 has been added to ensure compliance with this regulation. After mitigation is incorporated, proposed Project impacts would be reduced to a less than significant level. It should be noted that the drainages have been avoided to the greatest extent feasible including the central portion of Drainage D1, and the majority of Drainage D2 (see Figure 13 of the BRA).

Table 5.4-2
Permanent Impacts to CDFG Jurisdictional Drainages

	On-Site (acres)	Off-site (acres)	Total (acres)
D1	0.042	0.012	0.054
D1T1	0.017	-	0.017
D2	0.003	-	0.003
Total	**0.062**	**0.012**	**0.074**

Source: PCR Services Corporation, 2012

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? *Less than Significant with Mitigation Incorporated*

No federally protected wetlands occur on the proposed Project site. The proposed Project site does, however, support non-wetland, ephemeral USACE/RWQCB "waters of the U.S." that are regulated pursuant to Section 404 and 401 of the Clean Water Act. Impact acreages are summarized in Table 5.4-3, *Permanent Impacts to USACE/RWQCB Jurisdictional Drainages*. Impacts, in all, total 0.025 acre of permanent on-site impacts (881.65 linear feet) and 0.007 acre of permanent off-site impacts (106.97 linear feet). Impacts to these jurisdictional areas would be required to comply with Sections 404 and 401 of the Clean Water Act, including applying for a permit and mitigation subject to approval by USACE and RWQCB, respectively. Mitigation Measure **BIO-6** has been added requiring compliance with these regulations. After mitigation is implemented, proposed Project impacts would be reduced to a less than significant level. The drainages have been avoided to the greatest extent feasible including the central portion of Drainage D1, and the majority of Drainage D2 (see Figure 13 of the BRA).

Table 5.4-3
Permanent Impacts to USACE/RWQCB Jurisdictional Drainages

	On-Site (acres)	Off-site (acres)	Total (acres)
D1	0.016	0.007	0.023
D1T1	0.006	-	0.006
D2	0.003	-	0.003
Total	**0.025**	**0.007**	**0.032**

Source: PCR Services Corporation, 2012

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? *Less than Significant with Mitigation Incorporated/No Impact*

Wildlife Movement

The proposed Project site supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and at least marginal movement habitat for reptile, bird, and mammal species), but it likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale, and is not identified as a regionally important dispersal or seasonal migration corridor. Movement on a local scale likely occurs with species adapted to urban environments due to the high level of development in the vicinity of the proposed Project site. Although implementation of the proposed Project would result in disturbances to local wildlife movement within the proposed Project site, those species adapted to urban areas would be expected to persist on-site following construction, particularly within the open space areas. As such, impacts would be less than significant and no mitigation measures would be required.

Since the proposed Project site does not function as a regional wildlife corridor and is not known to support wildlife nursery area(s), no impacts would occur and no mitigation measures would be required.

Migratory Species

The proposed Project site has the potential to support songbird nests due to the presence of limited shrubs and ground cover on-site, and trees off-site. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact as defined by the thresholds of significance. Any potential impacts to raptor and songbird nests would be considered potentially significant. The proposed Project is required by law to comply with the MBTA and perform site work to avoid impacts to birds as described above. Mitigation Measure **BIO-5** has been included to reduce any potential impacts to nesting and foraging habitat. With the implementation of this mitigation measure, impacts to foraging habitat would be considered adverse but less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? *No Impacts*

The proposed Project site supports limited trees, including one coast live oak tree that is proposed for preservation within an open space area along the western boundary, and the canopy of another smaller oak tree along the western boundary (the trunk of this oak tree is off-site; the canopy that extends on-site will not be impacted). Since no impacts are proposed to trees, no conflicts would occur with any local ordinances.

f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan? *Less than Significant Impact*

The proposed Project site is within the Western Riverside County MSHCP and requires compliance with the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP), and the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP). The proposed Project site is not within a cell, a designated cell group, or a subunit within the Elsinore Area Plan; therefore, conservation of land on the proposed Project site is not required pursuant to the MSHCP. The proposed Project site is also not within the survey overlays for Narrow Endemic Plant Species (Section 6.1.3 of the MSHCP), Criteria Area Species, Amphibian Species, or Mammal Species (Section 6.3.2 of the MSHCP). The proposed Project site will not result in edge effects that will adversely affect biological resources within the MSHCP Conservation Area and, as such, will not be subject to the Guidelines Pertaining to the Urban/Wildlands Interface for the treatment and management of edge factors such as lighting, urban runoff, toxics, and domestic predators (Section 6.1.3 of the MSHCP). Compliance with the Burrowing Owl and Riparian/Riverine requirements of the MSHCP are summarized below:

- Focused burrowing owl surveys were conducted and were negative; a 30-day pre-construction survey will be conducted;

- The two ephemeral drainages on the proposed Project site meet the definition of Riverine Areas pursuant to the MSHCP ("*areas with fresh water flow during all or a portion of the year*"). Apart from the one coast live oak tree along the western ephemeral drainage, the biological functions and values of Riparian/Riverine Areas do not exist on-site. As such, the protection of associated species of amphibians, birds, fish, invertebrate-crustacean, and plant species is not required. A portion of the western ephemeral drainage has been placed in an open space lot for 100 percent avoidance, including the coast live oak tree. The proposed Project will result in temporary impacts to Riverine Areas. As required by the City of Wildomar, a site-specific storm drain system will be designed and engineered for the proposed Project that will adequately mitigate this impact. Temporary impacts will only occur until the on-site storm drain system is constructed, and will improve existing conditions by carrying flows consistent with local and regional storm flow requirements. In addition, the storm water runoff captured by the on-site storm drain system will be treated in water quality basins and/or biological swales before being discharged off-site. With this drain system, the proposed Project will have no impact on existing water quality downstream and off-site.

  Other kinds of aquatic features that could provide suitable habitat for Riparian/Riverine species, such as fairy shrimp, are not present on-site (i.e. vernal pools, swales, vernal pool-like ephemeral ponds, stock ponds, or other human-modified depressions such as tire ruts, etc.).

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

BIO-1 Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.

Timing/Implementation: Implemented prior to any off-site grading.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-2 The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently $500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.

Timing/Implementation: The fee must be paid prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

BIO-3 Due to the presence of suitable habitat and in compliance with the MSHCP, a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.

Timing/Implementation: Implemented 30 days prior to ground disturbance.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-4 If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the *Staff Report on Burrowing Owl Mitigation*.

Timing/Implementation: Implemented prior to ground any disturbance for Phase 2.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-5 Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the proposed Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

Timing/Implementation: Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-6 Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, *Impacts to Jurisdictional Features*, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFG. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

2. On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

Timing/Implementation: Implemented prior to ground any disturbance in areas designated as jurisdictional features.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

5. CULTURAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		✓		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		✓		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
d) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Historical/Archaeological Resources Survey Report, Assessor's Parcel No. 380-350-022, City of Wildomar, Riverside County, California*, prepared by CRM TECH, dated August 1, 2012 (Archaeo Report), and the *Paleontologic Resources Assessment Report, Assessor's Parcel No. 380-350-022, City of Wildomar, Riverside County, California*, prepared by CRM TECH, dated August 3, 2012 (Paleo Report). The Archaeo Report is contained Appendix D, and the Paleo Report is contained Appendix E, of the enclosed CD.

a,b) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5; or, cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? *Less Than Significant Impact with Mitigation Incorporated*

Records Search

On July 6, 2012, CRM TECH (Project Archaeologist) conducted the historical/archaeological resources records search at the Eastern Information Center (EIC), University of California, Riverside. During the records search, maps and records on file at the EIC were examined for previously identified cultural resources in or near the proposed Project area and existing cultural resources reports pertaining to the proposed Project vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside County Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

1. Historical Research

Historical background research for this study was conducted by CRM TECH on the basis of published literature in local and regional history and historic maps of the region. Among maps

consulted for the Archaeo Report were U.S. General Land Office (GLO) land survey plat maps dated 1857-1899 and U.S. Geological Survey (USGS) topographic maps dated 1901-1953. These maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, located in Moreno Valley.

2. Native American Participation

On June 28, 2012, CRM TECH submitted a written request to the State of California's Native American Heritage Commission for a records search in the commission's sacred lands file. Following the Native American Heritage Commission's recommendations, CRM TECH contacted 19 Native American representatives in the region in writing on July 17,2012 to solicit local Native American input regarding potential cultural resources concerns associated with the proposed Project. The correspondences between CRM TECH and the Native American representatives are included as Appendix 2 of the Archaeo Report. In addition, representatives of the City of Wildomar, Matthew Bassi, City Planner, and Matthew Fagan, City CEQA Consultant met with the Pechanga Band on January 3, 2013 for consultation pursuant to SB 18. At that time, a General Plan Amendment was included within the scope of the proposed Project to amend the City's Circulation Element. Since that meeting, it was determined by the City Staff that a GPA is not required as part of the proposed Project. Still, it should be noted that this consultation occurred.

3. Field Survey

On July 5, 2012, CRM TECH carried out the intensive-level, on-foot field survey of the proposed Project area. During the survey, the Project Archaeologist walked parallel east-west transects spaced 15 meters (approx. 50 feet) apart. The areas enclosed by fences were inspected from the perimeter. In this way, the ground surface in the proposed Project area was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic periods (i.e., 50 years ago or older). Due to recent disking, ground visibility in the proposed Project area was good (50%-80%) except along the drainages where the vegetation was densest. The areas covered by pavement offered no visibility of the natural ground surface, as would be expected.

Results and Findings

1. Records Search

According to EIC records, the proposed Project area was included in a 2008 study, but no cultural resources were recorded within or adjacent to the proposed Project area as a result of that or any other previous study (Goodman 2008). Outside the proposed Project boundaries, but within a one-mile radius, EIC records show some 67 additional studies covering various tracts of land or linear features, in all covering approximately 50% of the area within the scope of the records search (reference Figure 4 of the Archaeo Report).

Despite the substantial number of studies in the vicinity, only 12 historical/archaeological sites and 5 isolates—i.e., localities with fewer than three artifacts—have been previously recorded within the one-mile radius, as listed in Table 1 of the Archaeo Report. Seven of the sites, and all of the isolates were prehistoric—i.e., Native American—in origin, consisting of lithic scatters, flakes, and bedrock milling features. The closest of these to the proposed Project location was a stone flake isolate (33-011436) that was recorded approximately ¼-mile to the southeast. The other five sites dated to the historic period, and included three buildings, trash scatters, and the remains of an

olive orchard. None of these previously recorded sites or isolates was located in the immediate vicinity of the proposed Project area, and thus none of them requires further consideration.

2. Historical Research

Historic maps consulted for the Archaeo Report (Figures 5-8 of the Archaeo Report) indicate that the proposed Project area is low in sensitivity for cultural resources from the historic period. In the mid-1850s, when the U.S. government conducted the first systematic land surveys in southern California, no man-made features were found anywhere in the vicinity of the proposed Project area (Figure 5 of the Archaeo Report). Around the turn of the century, a few scattered buildings, likely farmsteads, and meandering roads were observed nearby, but none of them within or adjacent to the proposed Project area (Figure 6 of the Archaeo Report). The forerunner of today's Clinton Keith Road was in place along the northern proposed Project boundary by the late 1930s, and a building with a windmill had appeared just to the northwest by the 1950s, but the proposed Project area evidently remained undeveloped throughout the historic period, except perhaps as farmland (Figures 7, 8 of the Archaeo Report).

3. Native American Participation

In response to CRM TECH's inquiry, the Native American Heritage Commission reports in a letter dated June 29, 2012, that the sacred lands record search identified no Native American cultural resources within the proposed Project area, but recommends that local Native American groups be contacted for further information. For that purpose, the commission provided a list of potential contacts in the region (see Appendix 2 of the Archaeo Report).

Upon receiving the commission's response, CRM TECH initiated correspondence with all 15 individuals on the referral list and the organizations they represent. In addition, Yvonne Markle, Environmental Office Manager for the Cahuilla Band of Indians, John Gomez, Jr., Cultural Resources Coordinator for the Ramona Band of Cahuilla Indians, Steve Estrada, Environmental Director for the Santa Rosa Band of Cahuilla Indians, and Rob Roy, Environmental Director for the La Jolla Band of Mission Indians, were also contacted. As of this time, four of the tribal representatives have responded in writing (see Appendix 2 of the Archaeo Report).

Shasta Gaughen, Tribal Historic Preservation Officer for the Pala Band of Mission Indians, states in a letter that her tribe has no concerns and wishes to defer to other tribes located closer to the proposed Project area. On behalf of the Santa Rosa Band of Cahuilla Indians, Tribal Council member Gabriella Rubalcava responded via e-mail, stating that the Santa Rosa Band also has no specific concerns and would defer further consultations specifically to the Soboba Band of Luiseño Indians.

Joseph Ontiveros, Cultural Resources Director for the Soboba Band of Luiseño Indians, identifies the proposed Project area as a part the tribe's Traditional Use Area and finds it to be in close proximity to known village sites in an area of shared use by both the Luiseño and the Cahuilla. He requests further consultation with the Project developer/landowner, and that a Native American monitor from the Soboba Band is present during earth-moving activities. Similarly, Tuba Ebru Ozdil, Cultural Planner for the Pechanga Band of Luiseño Indians, states that the proposed Project area lies within the tribe's ancestral territory and is close to known cultural sites. The Pechanga Band also wishes to be present during earth-moving activities, and requests tribal review of all

archaeological and environmental documentation, as well as proposed Project plans, and further government-to-government consultation with the lead agency. The City has determined that they will consult with the Pechanga Band for the proposed Project.

4. Field Survey

The intensive-level field survey produced completely negative results for potential cultural resources. The ground surface in the entire proposed Project area was closely inspected for any evidence of human activities dating to the prehistoric or historic periods, but none was found. A metal trough was noted in the southwest portion of the proposed Project area, and a small amount of modern refuse was observed in a light scatter over the property, but none of these items holds any historical or archaeological interest. In sum, no evidence of any buildings, structures, objects, sites, features, or artifacts more than 50 years of age was encountered during the field survey.

Summary

In summary of the research results presented above, no potential "historical resources" were previously recorded within or adjacent to the proposed Project area, and none was encountered during the present survey. In addition, Native American input during this study did not identify any sites of traditional cultural value in the vicinity, and historic maps show no notable cultural features within the proposed Project area during the historic period. Based on these findings, and in light of the criteria listed above, the present report concludes that no historical resources exist within or adjacent to the proposed Project area.

However, because archaeological resource sites have been identified within the City of Wildomar, there is the potential for the unanticipated discovery of these resources. Because these resources are known to exist in the general area, the mitigation measures listed in this section (**CUL-1** through **CUL-6**) will ensure that any unanticipated discovery would not have a significant impact on archeological resources. Impacts will remain less than significant with mitigation incorporated. No additional mitigation is required.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? *Less Than Significant Impact with Mitigation Incorporated*

Methods and Procedures

1. Records Searches

The records search service was provided by the San Bernardino County Museum (SBCM) in Redlands and the Natural History Museum of Los Angeles County (NHMLAC) in Los Angeles. These institutions maintain files of regional paleontological localities as well as supporting maps and documents. The records search results were used to identify known paleontological localities in or near the proposed Project area, or in the general vicinity.

2. Literature Review

In addition to the records searches, a literature search was conducted using materials in the CRM TECH library, including unpublished reports produced during surveys of other properties in the area, and the personal library of CRM TECH geologist/paleontologist Harry M. Quinn, California Professional Geologist #3477.

3. Field Survey

On July 5, 2012, CRM TECH (Project paleontologist) conducted the field survey of the proposed Project area. During the survey, the Project paleontologist walked parallel east-west transects spaced 15 meters (approx. 50 feet) apart. The areas enclosed by fencing were inspected from the perimeter. Using these methods, the ground surface in the entire proposed Project area was systematically and carefully examined to determine the soil types, to verify the geological formations, and to look for any indications of paleontological remains. Visibility of the native ground surface was virtually zero where the proposed Project area lies under pavement, and varied from fair to good (50-80%) in the open fields, depending on the density of the vegetation.

Results and Findings

1. Records Searches

The Natural History Museum of Los Angeles County and the San Bernardino County Museum found no known paleontological localities within the proposed Project area. However, numerous paleontological localities have been reported nearby from sediment lithologies similar to those known to occur at this location, namely the Pleistocene-age Pauba Formation and an unnamed sandstone and conglomerate formation.

Based on previous discoveries, the San Bernardino County Museum considers the proposed Project vicinity to be an area of high paleontologic sensitivity, with a demonstrated high potential to contain "significant nonrenewable fossil resources present at the surface and in the subsurface" primarily Pleistocene-age vertebrate fossils. The Natural History Museum also notes that the entire proposed Project area contains exposures of the Plio-Pleistocene Pauba Formation that may contain significant fossil vertebrate remains. Both of the museums note the presence of small vertebrate fossils in the Pauba Formation and the need, therefore, to collect and process sediment samples to inspect them for small specimens.

2. Literature Review

The proposed Project area has been mapped by Mann as *Qp*, namely the Pauba Formation of Pleistocene age, and *Qfa*, the Temecula Arkose of probable Pleistocene age. Rogers maps it as *Qc*, or nonmarine sedimentary rocks of Pleistocene age. Kennedy maps the surface geology at this location as *Qps*, the sandstone portion of the Pauba Formation, with some *Kgdd*, or Granodiorite, in the northern portion. The Pauba Formation is assigned a late Pleistocene age and the Granodiorite a Mesozoic age.

Hill et al. also map the surface geology in the proposed Project area as *Qps* with some *Kgd* in the northern portion. The *Qps* represents the sandstone member of the Pleistocene-age Pauba

Formation, described as "light-brown, moderately well indurated sandstone and siltstone facies," and the *Kgd* is described as granodiorite of Cretaceous age (*ibid*.). Kennedy and Morton (2003) map the surface geology at the proposed Project location as *Qpfs*, which is defined as the sandstone member of the Pauba Formation, with *Kpvg*, or monzogranite to granodiorite, in the northern portion. Based on the mapping, the proposed Project area is located on an uplifted block north of the Wildomar Fault.

Knecht maps the surface soils as *AtC2*, *AtD2*, *MmB*, *MnD2*, *MnE3*, *PlD*, *RnD2*, and *RnE3*. The *AtC2* and *AtD2* soil belong to the Arlington and Greenfield Series. These soils are found on terraces and ridges and in concave areas where dissected terraces and alluvial fans merge and are commonly eroded. The *MmB*, *MnD2*, and *MnE3* soils belong to the Monserate Series, which form on terraces and old alluvial fans composed predominantly of granitic material. The *PlD* soils belong to the Placentia Series. They develop on alluvial fans and terraces in alluvium derived mainly from metasedimentary sandstones. The *RnD2* and *RnE3* soils belong to the Ramona and Buren Series. These soils form on old dissected terrace deposits.

3. Field Survey

The field survey produced negative results for any indication of paleontological resources, and no surficial evidence of fossil remains or potentially fossiliferous sediments were encountered. As mentioned above, the surface soils in most of the proposed Project area have been disturbed in the past by disking and various construction activities. Consequently, no intact paleontological deposits are likely to survive in the surface soils, and none were observed.

Discussion

The results of the records searches and the literature research indicate that the proposed Project area is located upon outcrops of the Pleistocene-age Pauba Formation, which has uplifted along the north flank of the Wildomar Fault Zone. Sediments of this group have produced a number of vertebrate and some invertebrate fossils during construction monitoring on properties located approximately 3-5 miles to the southeast of the proposed Project area and throughout the region. Based on these findings, the proposed Project area is assigned a high potential to contain nonrenewable paleontological remains.

CEQA guidelines (Title 14 CCR App. G, Sec. V(c)) require that public agencies in the State of California determine whether a proposed Project would "directly or indirectly destroy a unique paleontological resource" during the environmental review process. The present Paleo Report, conducted in compliance with this provision, is designed to identify any significant, non-renewable paleontological resources that may exist within or adjacent to the proposed Project area, and to assess the possibility for such resources to be encountered in future excavation and construction activities.

In summary of the research results presented above, the proposed Project's potential to impact paleontological resources has been determined to be high, especially for Pleistocene-age vertebrate fossils. Therefore, it is recommended that a paleontological resource impact mitigation program shall be implemented during the proposed Project to prevent such impacts or reduce them to a level less than significant. With the incorporation of Mitigation Measures **CUL-7** through **CUL-9**, any proposed Project impacts can be reduced to a less than significant level.

d) Disturb any human remains, including those interred outside of formal cemeteries? *Less Than Significant Impact With Mitigation Incorporated*

Neither the City nor the County have records of the proposed Project site containing any previously identified formal or informal cemetery. Although there are no known archaeological resources on the proposed Project site, in the event human remains are encountered during ground-disturbing activities, mitigation measures (**CUL-1** through **CUL-6**) identified below would reduce any impacts to a level of less than significant. No additional mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

CUL-1 Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation:

> If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the appropriate Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Commission and/or City Council. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: *As a condition of project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Building and Planning Departments.*

CUL-2 At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe[3] to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal

[3] The appropriate Tribe will be selected from the list of Tribal representatives provided by the Native American Heritage Commission.

monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

Timing/Implementation: *Prior to the issuance of a grading permit.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-3 Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation:

> If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-4 The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found on the Project site, to the appropriate Tribe for proper treatment and disposition as defined by the appropriate Tribe.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-5 All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the appropriate culturally affiliated Native American Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-6 To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified professional shall monitor all construction activities that could potentially impact archaeological and/or paleontological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.

Timing/Implementation: As a condition of Project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-7 A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

Timing/Implementation: As a condition of Project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-8 Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-9 Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).

Timing/Implementation: *As a condition of project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

6. GEOLOGY AND SOILS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?			✓	
ii) Strong seismic ground shaking?			✓	
iii) Seismic-related ground failure, including liquefaction?			✓	
iv) Landslides?				✓
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Geologic Hazards Evaluation and Updated Preliminary Geotechnical/Fault Investigation, Proposed 9-Acre Medical ad Education Center Development and Associated 29.4-Acre Tentative Parcel Map 36492, Located East of Yamas Drive, South of Clinton Keith Road and West of Elizabeth Lane in the City of Wildomar, Riverside County, California*, prepared by LGC, dated August 24, 2012 (Geo Study), and is contained Appendix F, of the enclosed CD.

a) i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? *Less Than Significant Impact*

The proposed Project is located within seismically active Southern California (Seismic Zone 4) and is expected to experience occasional strong ground motions from earthquakes caused by both local and regional faults. According to the Geo Study, based on a review of published and unpublished geologic/geotechnical maps and literature pertaining to the proposed Project site and regional geology, the closest active faults are the Elsinore-Temecula Fault located approximately 3.0 miles from the proposed Project site and the Elsinore-Glen Ivy Fault located approximately 7.8 miles from the proposed Project site. Other active faults, within 20 miles of the proposed Project site are the Elsinore-Julian Fault, approximately 19.6 miles; and the San Jacinto Fault, approximately 20 miles. These faults are capable of producing a moderate to strong magnitude earthquake.

The Geo Study indicates that no faults (active, potentially active, or inactive) are known to traverse through the proposed Project site, based on review of geologic literature and aerial photographs, as well as geologic mapping. The site does not lie within an Alquist-Priolo Earthquake Fault Hazard Zone as defined by the State of California in the Alquist-Priolo Earthquake Fault Hazard Zoning Act or a Riverside County Fault Zone. The possibility of damage due to ground rupture is considered negligible since active faults are not known to cross the proposed Project site.

As there is no evidence of a known fault on the proposed Project site, the proposed Project would not expose people or structure to potential substantial adverse effects associated with ground rupture and this would be considered a less than significant impact.

ii) Strong seismic ground shaking? *Less Than Significant Impact*

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the proposed Project site, include soil liquefaction and dynamic settlement. Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. According to the Geo Study, the potential for liquefaction is considered remote.

Other secondary seismic effects include shallow ground rupture, and seiches and tsunamis. In general, these secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault, and the on-site geology. According to the Geo Study, ground rupture due to active faulting is not likely on-site due to the absence of known active fault traces. Cracking due to shaking from distant seismic events is not considered a significant hazard, although it is a possibility at any time. Based on the elevation of the development at the proposed Project site with respect to sea level, and its distance from large, open bodies of water, the potential of seiche and/or tsunami are considered to be negligible.

Completion of a geotechnical soils report and compliance with the California Building Code will minimize the potential for damage associated with strong seismic ground shaking and reduce any impacts to a less than significant level. This is a standard condition and is not considered unique mitigation under CEQA. Impacts will remain less than significant. No additional mitigation is required.

iii) Seismic-related ground failure, including liquefaction? *Less Than Significant Impact*

Please reference the discussion in Response 6.a.ii, above. To address any potential impacts from other seismic-related ground failure, including liquefaction, compliance with the standard requirements contained in the California Building Code are expected to reduce the impacts associated with ground failure hazards to a less than significant level. No additional mitigation is required.

iv) Landslides? *No Impact*

According to the Geo Study, review of geologic literature and aerial photographs, as well as geologic mapping and previous field exploration does not indicate the presence of landslides on, or directly adjacent to, the proposed Project site. Based on this information, no impacts are anticipated. No mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil? *Less Than Significant Impact*

Soil erosion may result during construction, as grading and construction can loosen surface soils and make soils susceptible to effects of wind and water movement across the surface. The City routinely requires the submittal of detailed Erosion Control Plans with any grading plans. The implementation of this standard requirement is expected to address any erosion issues associated with the future grading of the site. As a result, these impacts are considered to be less than significant with the implementation of the necessary erosion and runoff control measures required as part of the approval of a grading plan. No additional mitigation is required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? *Less Than Significant Impact*

Please reference the discussion in Response 6.a.ii, above. To address any potential impacts as a result of being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, compliance with the standard requirements contained in the California Building Code are expected to reduce the impacts associated with ground failure hazards to a less than significant level. No additional mitigation is required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? *Less Than Significant Impact*

According to the Geo Study, the majority of the proposed Project site is underlain by 2 feet to 15 feet of potentially compressible undocumented artificial fill, young alluvium and very weathered bedrock, which may be prone to potential intolerable post-grading settlement and/or hydroconsolidation, under the surcharge of the development proposed structural loads and/or fill loads. It is recommended that these materials be overexcavated to underlying bedrock.

Any development proposed on the site is required to comply with the California Building Code and commonly accepted engineering practices, which require special design and construction methods for dealing with expansive and unstable soil behavior. Compliance with recommendations included

in the soils report that is required prior to issuance of a grading plan, as well as with applicable building codes, would ensure that soils at development sites would be capable of supporting the structures resulting from the proposed Project. This compliance would reduce impacts resulting from expansive and unstable soils to a less than significant level. No additional mitigation is required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? *No Impact*

The proposed Project does not propose the use or construction of septic tanks or alternative wastewater disposal systems. No impacts are anticipated. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. All grading shall conform to the California Building Code, Ordinance 457, and all other relevant laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.
2. Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded per the requirements of Ordinance 457 (refer to dept. form 284-47). Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer.
3. Prior to the issuance of a grading permit, the developer shall submit a geotechnical soils reports to the City Engineer for review and approval prior to issuance of grading permit. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by the City of Wildomar.

MITIGATION MEASURES

None.

7. GREENHOUSE GAS EMISSIONS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar,* prepared by Albert A. Webb Associates, dated February 13, 2013, Revised July 17, 2013, Revised October 18, 2013 (AQ/GHG Analysis), and is contained Appendix B, of the enclosed CD. Please refer to the AQ/GHG Analysis in Appendix B for a detailed discussion of the federal, state and regional regulatory setting. The discussion below will center on the short- and long-term emissions analysis. Even though the following analysis, below, concludes that the Project has less than significant greenhouse gas Emissions impacts and no mitigation is required, the Project applicant has agreed to implement certain measures to further reduce the Project's greenhouse gas impacts. Therefore, mitigation measure **GHG-1**, though not legally required, has been incorporated into this document. This "mitigation measure" is voluntary and not legally required since the analysis shows that proposed Project's impacts, described below, have no significant impacts.

a,b) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or, conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? *Less Than Significant Impact*

Methodology

At this time, there are no adopted numeric thresholds that govern the determination of the significance of the Project's GHG emissions. This analysis in the AQ/GHG Analysis used the AB 32 reduction target as a significance threshold, which called for the state to achieve 1990 levels of GHG emissions by 2020. This equates to a 28.5 percent reduction in GHG emissions. The AQ/GHG Analysis's methodology is to compare the Project's GHG emissions as proposed to the Project's emissions if the Project were constructed before AB 32, which is often referred to as a Business-As-Usual (BAU) analysis.

Many aspects of the GHG estimates for the BAU analysis are similar to those analyzed for the proposed Project. BAU emissions for construction will be similar to those shown for the Project, as the same Project footprint will be disturbed. Therefore, construction under the BAU analysis is assumed to be equivalent to that of the Project and was not modeled separately. BAU emissions

for the remaining sources of GHG emissions were estimated using CalEEMod and are similar to the GHG estimates for the Project with the following exceptions:

- The energy-related GHG emissions were estimated according to the historical 2005 Title 24 standards.
- Mobile source emissions factors do not include the Pavley motor vehicle standards for cars and light trucks and the Low Carbon Fuel Standard (LCFS) for motor vehicle fuels;
- No adjustments were made for the water efficient landscape requirements in the City Municipal Code or the CalGreen code requirements that were not in effect at the time AB 32 was passed.

Emissions Estimates

It should be noted that the release of GHG in general and CO_2 specifically into the atmosphere is not of itself an adverse environmental affect. It is the affect that increased concentrations of GHG including CO_2 in the atmosphere has upon the Earth's climate (i.e., climate change) and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although air quality modeling can estimate a project's incremental contribution of CO_2 into the atmosphere, it is not feasible to determine whether or how an individual project's relatively small incremental contribution (on a global scale) might translate into physical effects on the environment. Since the Earth's climate is determined by the complex interaction of different components of the Earth and its atmosphere, it is not possible to discern whether the presence or absence of GHG emitted by the Project would result in any measurable impact that would cause climate change.

The following Project activities were analyzed below for their contribution to global GHG emissions:

Short-Term Analysis

Construction-Related Activities

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the proposed Project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. Life-cycle emissions associated with the manufacture of building materials are also not quantified in this analysis although they undoubtedly exist. Quantification was not attempted because of the large spatio-temporal variation in sources for building products used to construct the proposed Project and the consequent large uncertainty associated with the resulting emissions. For this reason, to attempt to quantify life-cycle emissions of materials would be speculative. This conclusion is consistent with recent guidance on quantification of emissions for commercial projects presented by the California Air Pollution Control Officer's Association guidance. *CEQA and Climate Change* (CAPCOA, p. 65).

Table 5.7-1, *Project Construction Equipment GHG Emissions*, summarizes the CalEEMod output results and presents the GHG emissions estimates for the proposed Project in metric tonnes per year (MT/yr) for CO_2, CH_4, N_2O, and CO_2E (GHG and ozone-depleting gases).

Table 5.7-1
Project Construction Equipment GHG Emissions

Year	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
2013	332.35	0.03	0.00	333.03
2014	888.53	0.07	0.00	889.99
2015	1,026.99	0.08	0.00	1,026.76
2016	617.91	0.04	0.00	618.80
Total	**2,827.01**	**0.23**	**0.00**	**2,868.58**
Amortized Total				**95.62**

Evaluation of Table 5.7-1, above indicates that an estimated 2,868.58 $MTCO_2E$ will occur from proposed Project construction equipment over the course of the estimated construction period. The draft SCAQMD GHG threshold Guidance document released in October 2008 (SCAQMD 2008b, p. 3-8) recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the proposed Project's GHG emissions were spread evening over 30 years to yield and average of 95.62 $MTCO_2E$/yr.

Long-Term Analysis

Area Source Emissions

CalEEMod estimates the GHG emissions associated with area sources which include landscape equipment emissions, architectural coating, consumer products, and hearths. Landscape equipment servicing the proposed Project site create CO_2 resulting from fuel combustion based on the proposed Project's land uses. Consumer products consist of consumer use of solvents and personal care products and architectural coatings consist of an average building square footage to be repainted each year. Hearth emissions do not apply to the proposed Project because no dwelling units are proposed. The CalEEMod output contained in Appendix A of the AQ/GHG Analysis shows that the GHG emissions from area sources are negligible and are reported at zero.

Energy-Related Emissions

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings is typically

generated at an off-site power plant which indirectly generates GHG emissions. The electricity intensity factor for the Project was modified to reflect the 2020 Renewable Portfolio Standard (RPS), which requires a 33 percent mix of renewable energy sources (see footnote #11 of the AQ/GHG Analysis). The default electricity intensity factor was used for the BAU.

The default energy usage values used in CalEEMod are based on the CEC sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies and reflect current 2008 Title 24 improvements (CalEEMod User's Guide, p. 30). The 2013 Title 24 standards were approved in May 2013 and take effect on January 1, 2014 and are 30 percent more efficient than the 2008 standards (see footnote #12 of the AQ/GHG Analysis). To reflect the 2013 Title 24 standards which the Project will be subject to, a 30 percent reduction was in energy usage was input in CalEEMod. In addition, the Project will install high-efficiency lighting throughout the Project as a design feature. A 40 percent reduction was input within CalEEMod to account for this design feature, which is conservative since Energy Star lighting is approximately 75 percent more efficient than traditional lighting (see footnote #13 of the AQ/GHG Analysis). The BAU scenario utilized historical 2005 Title 24 standards available within CalEEMod.

Table 5.7-2, *Annual Project Energy-Related GHG Emissions*, summarizes the GHG emissions estimates reported by CalEEMod for the proposed Project.

Table 5.7-2
Annual Project Energy-Related GHG Emissions

	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
Project 2020				
Electricity	748.65	0.04	0.02	754.70
Natural Gas	886.16	0.00	0.00	86.69
Total	**834.81**	**0.04**	**0.02**	**841.39**
BAU 2020				
Electricity	1,389.93	0.06	0.02	1,398.64
Natural Gas	121.24	0.00	0.00	121.97
Total	**1,511.17**	**0.06**	**0.02**	**1,520.61**

Mobile Source Emissions

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults or in Project-specific traffic analyses. The information provided in the Project-specific Traffic Study (*Traffic Impact Analysis Report, Tentative Parcel Map*

No. 36492 (TIA), prepared by Albert A. Webb Associates, dated February 2013, Revised July 15, 2013) was used for the Mobile Source Emissions analysis in the AQ/GHG Analysis. The GHG emissions estimated in CalEEMod for the Project include the Pavley motor vehicle standards for cars and light trucks and the Low Carbon Fuel Standard (LCFS) for motor vehicle fuels whereas the GHG emissions for the BAU scenario do not (see footnote #14 of the AQ/GHG Analysis).
Table 5.7-3, *Annual Project Mobile Source GHG Emissions*, shows the proposed Project's mobile source emissions.

Table 5.7-3
Annual Project Mobile Source GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
Project 2020				
Mobile	3,196.48	0.14	0.00	3,199.32
BAU 2020				
Mobile	4,113.06	0.14	0.00	4,115.90

Solid Waste-Related Emissions

CalEEMod also calculates the GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the state. The waste generation rates and emission estimates were based on CalEEMod default factors. However, this analysis assumes that additional waste will be diverted from landfills through recycling, reduction in waste generated, and/or composting to meet the 2020 statewide goal of 75 percent waste diverted (see footnote #15 of the AQ/GHG Analysis). The BAU scenario assumes a solid waste diversion rate from landfills of 53 percent which is what was reported in 2006, the year AB 32 was passed (see footnote #16 of the AQ/GHG Analysis).

Table 5.7-4
Annual Project Waste-Related GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
Project 2020				
Solid Waste	35.93	2.12	0.00	80.52
BAU 2020				
Solid Waste	67.55	3.99	0.00	151.37

Table 5.7-4, *Annual Project Waste-Related GHG Emissions,* above, indicates that total proposed Project-related GHG emissions from solid waste disposal are estimated to be approximately 80.52 $MTCO_2E$ annually and 151.37 $MTCO_2E$ annually for the Project and BAU, respectively. Biogenic CO_2 emissions[1] (which equal the total CO_2 emissions in *Table 5.7-4, Annual Project Waste-Related GHG Emissions*) were not included when CARB analyzed the GHG emissions inventory under AB 32. Therefore, they are not included in the Project's total GHG emissions shown in *Table 5.7-6, Total Annual Project-Related GHG Emissions*, below.

Water-Related Energy Usage

Electricity is also indirectly used in water supply, treatment, and distribution, as well as wastewater treatment in southern California and plays a large role in GHG production.

There are three (3) processes necessary to supply potable water to urban users (i.e., residential, commercial, and industrial):

(1) Supply and conveyance of the water from the source;
(2) Treatment of the water to potable standards; and
(3) Distribution of the water to individual users.

After use, the wastewater is treated and either reused as reclaimed/recycled water or returned to the environment (CEC 2005, p. 21). CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project's location. Default values were used for electricity intensity factor associated with the supply and conveyance of water from its source which assumes that the water is being imported from northern California.

The Project's indoor water use was reduced by 20 percent to account for the mandatory reduction outlined in the CalGreen code (CalGreen, p. 30). Outdoor water use from the Project will also be reduced as a result of Project compliance with the water efficient landscape ordinances enforced

[1] Biogenic emissions are emissions from natural sources, such as plants and trees.

by the City under Municipal Code Section 17.276 (WMC) which requires a 30 percent reduction. Since neither of these requirements was in place when AB 32 was passed, the BAU scenario assumed no reductions were taken for indoor or outdoor water use.

The following table shows the GHG emissions from water-related energy usage for the Project and BAU.

Table 5.7-5
Annual Project Water-Related GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
Project 2020				
Water-Related Energy	223.67	1.63	0.05	271.88
BAU 2020				
Water-Related Energy	375.84	2.04	0.06	436.20

Total Project GHG Emissions

As shown in Table 5.7-6, *Total Annual Project-Related GHG Emissions*, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 4,453 $MTCO_2E$ per year which includes construction-related emissions amortized over a typical project life of 30 years. The GHG emissions from the BAU scenario are approximately 6,252 $MTCO_2E$ per year. The table below indicates that the majority of GHG emissions are from vehicle use (mobile sources) followed by energy consumption.

As shown in Table 5.7-6, *Total Annual Project-Related GHG Emissions*, a comparison of the Project's GHG emissions in 2020 and the BAU GHG emissions corresponds to a 28.7 percent reduction. This achieves the 28.5 percent reduction target set by AB 32.

Table 5.7-6
Total Annual Project-Related GHG Emissions

Source	Metric Tons per year (MT/yr)	
	Project 2020	**BAU 2020**
Amortized Construction	95.62	95.62
Energy	841.39	1,520.61
Mobile	3,199.32	4,115.90
Solid Waste	44.59	83.83
Water	271.88	436.20
Total	**4,452.80**	**6,252.16**
Percent Reduction from BAU	**28.7**	**___**

Conclusion

The above analysis indicates that the proposed Project along with its design feature of high efficiency lighting and the implementation of statewide GHG reduction measures would result in a 28.7 percent reduction compared to the BAU emissions level, which achieves the AB 32 reduction target of 28.5 percent. Therefore, the Project has demonstrated compliance with AB 32 and no additional analysis or mitigation is required.

Regarding compliance with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHG, the City does not currently have an adopted plan (e.g., Climate Action Plan, or GHG reduction plan) for the purposes of reducing GHG emissions. Although there are no plans or policies at the local level, the CARB Scoping Plan is applicable at the state level. As described above, beginning on page 24, AB 32 directed CARB to adopt the Scoping Plan for achieving GHG reductions.

Project consistency with the applicable measures in the Scoping Plan is shown in Table 5.7-7, CARB Scoping Plan Measure Project Comparison. Most of the reduction measures are not applicable to the Project and were not listed. The Project is consistent with the feasible measures. Examples of inapplicable measures include the California Cap-and-Trade Program, Industrial Emissions, High-Speed Rail, and Sustainable Forests.

The strategies listed in Table 5.7-7, *CARB Scoping Plan Measure Project Comparison,* as well as mitigation measures **AQ-1** and **AQ-2**, shall be required as mitigation measures for the proposed Project (mitigation measure **GHG-1**) to further reduce impacts to Greenhouse Gasses. The majority of these strategies are designed to apply to construction and operation of buildings. During the plot plan review process the City will determine which of the strategies described in Table 5.7-7, (as well as any that may occur subsequent to this document) should be applied to the

proposed Project. The City will apply the appropriate strategies at the time of building permit application. In addition, development on the proposed Project site would be subject to all future applicable regulatory requirements, which would also reduce the GHG emissions of the proposed Project.

Table 5.7-7
CARB Scoping Plan Measure Project Comparison

Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The Project will be compliant with the 2013 Title 24 standards, which become effective January 1, 2014.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards and became mandatory in the 2010 edition of the Code (January 2011), on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The Project will be subject to these mandatory standards.

High Global Warming Potential Gases –Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the Project that are required to comply with the measures will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The Project will be required to comply with the 75 percent waste reduction required in AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The Project will comply with all applicable section of the City's Municipal Code, including Section 17.276 (WMC).
Source: CARB Scoping Plan	

STANDARD CONDITIONS & REQUIREMENTS

1. None.

MITIGATION MEASURES

GHG-1 Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.

Timing/Implementation: During Construction Activities and Project Operations.

Enforcement/Monitoring: City of Wildomar Planning and Building Departments.

8. HAZARDS AND HAZARDOUS MATERIALS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		✓		
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		✓		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓

DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? *Less Than Significant Impact with Mitigation Incorporated*

The Riverside County Environmental Health Department issues permits to and conducts inspections of businesses that use, store, or handle quantities of hazardous materials and/or waste

greater than or equal to 55 gallons or 500 pounds, or 200 cubic feet of compressed gas, at any time. The Riverside County Environmental Health Department also implements the Hazardous Material Management Plans (Business Emergency Plans) that include an inventory of hazardous materials used, handled, or stored at any business in Wildomar.

The proposed Project may create an additional possible hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. During the construction phase, there is a potential for accidental release of petroleum products in sufficient quantity to pose a hazard to people and the environment. Prior to initiating construction, a Stormwater Pollution Prevention Plan will be approved by the City to address any construction-related spills or accidents. This requirement is included in Mitigation Measure **HAZ-1**. With Mitigation Measure **HAZ-1**, the proposed Project is not expected to result in a significant impact on the environment.

In addition, the proposed Project is located immediately adjacent to Clinton Keith Road. It is possible that an accident or spill may expose future building occupants to hazardous materials. However, the likelihood of this type of event is rare and it is not considered to be significant. In addition, some hazardous materials will be stored on the premises; however, those used are commonly associated with office, restaurant, and commercial retail development. No impacts are anticipated beyond those commonly associated with these types of developments. No additional mitigation is required.

There is the potential for upset of hazardous materials associated with medical uses on the proposed Project site. A hallmark of medical services in general, is the use of a variety of hazardous materials and the generation of hazardous waste in support of medical services. There are two potential sources of accidental release of hazardous or toxic substances from medical office operations and these two sources can occur under three different circumstances. The first source of an accidental release can occur during delivery of the hazardous materials. Such accident release can occur anywhere between the chemical storage location and the proposed facilities. The second source of an accidental release can occur within the medical office, but under conditions where the spill is contained within the medical offices and does not result in general exposure of the surrounding population. Finally, an accidental release can occur that could be released into the general environment where surrounding land uses and people may be affected.

The transport of hazardous materials and wastes is strictly controlled by the State of California. A regulatory structure has been created to respond to the accidental release of hazardous or toxic materials during transport. The change in circumstances from the existing environmental setting is that if the proposed Project is approved for implementation, future operations may require delivery of hazardous and toxic materials to the proposed Project site to support operations. Deliveries will be random and are expected to occur on a daily basis to support operations.

Each day our communities experience the delivery of a variety of hazardous or toxic materials, ranging from petroleum products (gasoline and diesel) to large gas canisters, such as chlorine for water and wastewater treatment plants and compressed natural gas (propane). The proposed project will add to the existing transport of hazardous and toxic materials entering the City of Wildomar. If a transport accident occurs, it may or may not be accompanied by an accidental release of the hazardous or toxic materials. Thus, a potential exists to experience an accidental release of medical-related hazardous or toxic materials to the local environment.

The key to determining whether this change in the environment represents a significant adverse impact is to assess whether this change represents a high probability of accidental release and whether such a release poses a significant hazard based on the known response capability to such an accident. Most of the medical office related hazardous material may be either solid, containerized (gas canisters), or stringently packaged (radioactive material). Based on these facts regarding the type and character of hazardous materials and the response capabilities of the City and regional agencies to a transport accident, the City finds that the potential for significant risk due transport is a less than significant impact to the environment from implementing the proposed Project.

Within the medical office building a potential for accidental release of hazardous material also exists. Mitigation measures are provided below (**HAZ-2** and **HAZ-3**) to ensure that a plan is implemented as part of medical office operations. The City finds that the potential for significant risk due to internal hospital/medical office use of hazardous and toxic materials will be less than significant, with implementation of the mitigation measures.

The final source of accidental release to the environment is from a release that would escape the medical offices into the surrounding environment. Because of the small quantities of solid and liquid hazardous materials at the site during operations, most of the medical office hazardous materials cannot escape to the surrounding environment. Mitigation is required to control the release of stored hazardous gases in canisters is identified below (**HAZ-4**). Based on the analysis presented in this section and with implementation of these mitigation measures, the City finds the potential for risk to the surrounding environment and population from an accidental release of hazardous substances within the medical offices is considered to be less than significant.

b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? *Less Than Significant Impact with Mitigation Incorporation*

The proposed Project may create a hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment; however, due to the quantity and nature of these materials, commonly associated with office, restaurant, and retail development, these impacts will be considered less than significant. No impacts are anticipated beyond those commonly associated with office, restaurant, and retail development. No additional mitigation measures are required. Please reference the discussion in 8.a., above, as it relates to potential upset and accidental conditions involving the release of hazardous materials into the environment as it pertains to medical offices. Impacts will be reduced to a less than significant level with mitigation incorporation.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? *No Impact*

No existing or proposed schools are located within one-quarter mile the proposed Project site. Ronald Reagan Elementary School is located approximately 1-mile to the northwest of the proposed Project site. Donald Graham Elementary School is located on the west side of I-15, approximately 1.6 miles from the proposed Project site. Tovashal Elementary School is located southeasterly of the proposed Project site, approximately 1.4 miles away. Therefore, implementation of the proposed Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impacts are anticipated. No mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? *No Impact*

The proposed Project is not located on any hazardous materials site as designated by Government Code Section 65962.5. According to the *RMEC, LLC Phase I Environmental Study*, prepared by EnviroSoil, Inc., dated January 5, 2011, contained in Appendix G of this Initial Study, EnviroSoil, Inc. did not identify any current on-site environmental concerns in connection with the subject property. This review included all list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impacts are anticipated. No mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? *No Impact*

The proposed Project site is not located within any airport land use plan. The closest public airport is French Valley Airport, which is located approximately 5.6 miles southeast of the proposed Project site. Given the distance between the proposed Project and the French Valley Airport, and since the proposed Project site is not within in the airport land use plan for the French Valley Airport, no impacts are anticipated from the proposed Project that would result in a safety hazard for people residing or working in the proposed Project area. No mitigation is required.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? *No Impact*

The closest private airstrip to the proposed Project site is Skylark Field, which is located approximately 4.6 miles northwest of the proposed Project site. Based on this distance between Skylark Park and the proposed Project site, implementation of the proposed Project will not result in a safety hazard for people residing or working in the proposed Project area. No impacts are anticipated. No mitigation is required.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? *No Impact*

Access to the proposed Project site is from Clinton Keith Road and Elizabeth Lane, which are currently improved and will be additionally improved through the implementation of the proposed Project, as well as future improvements to Bunny Trail, Lot "C," and Yamas Drive, which are currently unimproved/ non-existent. Development of the proposed Project will not require the closure or relocation of any roadways and operation of the proposed Project is not expected to interfere with access to any roadways. Therefore, the proposed Project will have no impact on any plans for emergency evacuation. No mitigation is required.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? *No Impact*

According to the Riverside County Land Information System (2013), the proposed Project site is not located in the High Wildfire Zone area. These areas are more often found in more rural areas of Riverside County. The purpose of the wildland fire hazard area designation is to address safety concerns in potentially dangerous wildland fire areas. Since the proposed Project site is located outside the High Wildfire Zone area, development on the proposed Project site would not expose people or structures to a significant risk of loss, injury, or death involving wildland fire. No impacts are anticipated and no mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. As required by existing ordinance 8.56, subsequent development on the site will need to comply with the County of Riverside, Department of Environmental Health, Local Enforcement Agency (LEA) for all activities related to potential hazardous materials.

MITIGATION MEASURES

HAZ-1 All spills or leakage of any hazardous products, including petroleum products, during construction and operational activities shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan prepared for the Project development.

Timing/Implementation: Prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Engineering Department.

HAZ-2 Prior to the certificate of occupancy for a medical office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety Department.

HAZ-3 As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety Department and Fire Departments.

HAZ-4 Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety Department and Fire Departments.

9. HYDROLOGY AND WATER QUALITY.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?		✓		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			✓	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		✓		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?		✓		
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		✓		
f) Otherwise substantially degrade water quality?		✓		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?				✓
h) Place within 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j) Inundation by seiche, tsunami, or mudflow?				✓

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Preliminary On-Site Hydrology for Rancon Medical and Educational Center, Tentative Parcel Map 36492, Plot Plan for Parcels 1, 2, 3 and* 13, prepared by Albert A. Webb Associates, dated September 2012 (Hydrology Report), and the *Project-Specific Preliminary Water Quality Management Plan (WQMP), Rancon Medical and Educational Center (RMEC), Tentative Parcel Map 36492, Plot Plan for Parcels 1, 2, 3 and 13,* prepared by Albert A. Webb Associates, dated September 2012 (WQMP). The Hydrology Report is contained Appendix H, and the WQMP is contained Appendix I, of the enclosed CD. Please refer to the WQMP for detailed information on hydrologic conditions of concern, Best Management Practices (BMPs), operation and maintenance responsibility for treatment control BMPs, and funding. Please refer to the Hydrology Report for detailed information on hydrological data, hydrology results, and methodologies.

a) **Violate any water quality standards or waste discharge requirements?** *Less Than Significant Impact with Mitigation Incorporated*

The storm water for the proposed Project will discharge into a natural channel that meanders in a southerly direction for approximately 3 miles until joining with Murrieta Creek. Murrieta Creek then runs in a southeasterly direction for approximately 9 miles until it joins with Temecula Creek to form the Santa Margarita River. The Santa Margarita River continues in a southwesterly direction for approximately 29.2 miles until forming the Santa Margarita Lagoon and outfalling into the Pacific Ocean near Camp Pendleton (San Diego County). Murrieta Creek (Channel), the Santa Margarita River, as well as the Santa Margarita Lagoon are all on the federal 303(d) list of impaired water bodies. Listing a water body as impaired in California is governed by the Water Quality Control Policy for developing California's Clean Water Act Section 303(d) Listing Policy. The State and Regional Water Boards assess water quality data for California's waters every two years to determine if they contain pollutants at levels that exceed protective water quality criteria and standards. This biennial assessment is required under Section 303(d) of the Federal Clean Water Act.

Potential pollutants from both Phases of the proposed Project (which may potentially include: an industrial park uses, medical offices, commercial retail, a restaurant, and associated parking areas), would be sediment/turbidity, nutrients, organic compounds, trash/debris, oxygen demanding substances, pathogens (bacteria & viruses), oil and grease, pesticides, and metals.

The on-site runoff from the proposed Project site will ultimately flow through Murrieta Creek and the Santa Margarita River. These two water bodies do not meet water quality standards associated with their beneficial uses and are impaired by nutrients, oxygen demanding substances, pathogens (bacteria & viruses), and metals. Therefore, treatment controls BMPs, with a medium to high effectiveness for treating these pollutants of concern, will be incorporated into the proposed Project design. In addition, Mitigation Measure HYD-1 requires the preparation and implementation of a SWPPP and WQMP for all Phases of development. BMPs will be an integral component of the SWPPP and WQMP.

The following types of wastes are expected to be generated from the developed condition:

- Oil and grease from trucks and cars and other automotive fluids;
- Pesticides, herbicides, and fertilizers in landscaped areas;

- Food waste from restaurant;
- Trash; and
- Medical waste.

Lastly, the proposed Project site has historically been used for agriculture. Nutrients are the most common pollutant associated with this practice. However, since nutrients are an existing "pollutant of concern", future treatment control BMPs will address this issue, as contained in Mitigation Measure **HYD-1**.

The proposed Project is required to prepare a stormwater pollution and prevention plan (SWPPP) to be administered during and post construction. The SWPPP incorporates best management practices (BMPs) to ensure that potential water quality impacts are minimized. BMPs typically include vegetative cover, silt fencing, regular watering of the soil, sedimentation areas, covering of the soil, etc. Each set of BMPs is written specifically for the project for which the SWPPP is required. The SWPPP is submitted to the Regional Water Quality Control Board and to the City for review, and a copy of the SWPPP must be kept accessible on the proposed Project site at all times.

Future development associated with the proposed Project would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Stormwater Permit No. R9-2010-0014, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. A key component of the NPDES permit is the implementation of the Areawide Urban Runoff Management Program for the City, which includes the requirement of stormwater quality treatment and/or BMPs in project design for both construction and operation for new development.

The proposed Project will also be required to submit to the City for review and approval of a new or modified Water Quality Management Plan (WQMP) that identifies specific BMPs and other measures necessary to protect water quality for all Phases of development. The preliminary WQMP included as Appendix J is designed to address construction 11.62 acres for the commercial development of Parcels 1, 2, 3, and 13 of Tentative Parcel Map 36492 (APN: 380-250-022) and Plot Plan for Parcels 1, 2, 3, and 13.

Mitigation Measure **HYD-1** has been included, requiring a SWPPP and WQMP for all Phases of development. Therefore, the any development on the proposed Project site is not expected to violate any water quality standards, waste discharge requirements, or have a significant impact on the environment after mitigation is incorporated.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? *Less Than Significant Impact*

The proposed Project will modify on-site local drainage patterns and absorption rates; however, these modifications will be incorporated into an existing drainage system. The description of the on-and off-site drainage system is discussed below in Response 9.c. Due to the nature and design

of the proposed Project, implementation of the proposed Project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). While there will be an increase in the amount of impervious surfaces as a result of implementation of the proposed Project, any impacts from this increase will be off-set through the use of on-site detention and retention, which is included in the proposed Project design. Any impacts are considered less than significant. No mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? *Less Than Significant Impact with Mitigation Incorporated*

Off-site flows, north of Clinton Keith Road, enter the site at two locations along Clinton Keith Road. One location is in the extreme northwest corner of Parcel 1. Here, four 48" Reinforced Concrete Pipes (RCPs) convey flows under Clinton Keith Road to a natural channel that continues southwesterly until joining Murrieta Creek. Also, there is a 24" Corrugated Metal Pipe (CMP) that conveys street flows from an Asphalt Concrete (AC) curb/spillway along Clinton Keith Road. The other location is approximately 350' south of the northeast corner. At this location, flows are conveyed through a basin just east of Elizabeth Lane into a 60" RCP that crosses under Elizabeth Lane and outlets into a natural channel. This channel meanders in a southerly direction until joining Murrieta Creek. In addition, flows from the adjacent mini-storage building and parking area to the east confluence with this channel and enter the site at two locations. The first location is at a low point in Elizabeth Lane where a catch basin with 24" RCP to the east street side and a curb opening to the west street side convey street flows and outlet midway along the eastern boundary of the site into this natural channel. The second location is approximately 250' north of the intersection of Elizabeth Lane and Bunny Trail where a 30" RCP culvert outlets into the natural channel. Once the combined flows exit the site, they continue in natural channels for approximately 3 miles until they join Murrieta Creek.

On-site flows presently drain towards three meandering natural drainage courses. The north-west area of the Plot Plan site (2.1 acres) drains into Stream 3, where the existing four 48" RCPs under Clinton Keith Road outlet. The mid-area of the site consists of 3.3 acres and drains into the natural Stream 2. The easterly site area drains into the natural Stream 1 where the proposed Plot Plan for Parcels 1, 2, 3 and 13 will drain to during the post-developed conditions.

The proposed on-site storm drain system and drainage design will maintain these existing flows by the following:

- The existing four 48" RCP culverts in the northwest corner that run under Clinton Keith Road will be extended under the widened southern half of the road, maintaining existing flows with no impact downstream. The site grading proposes that the north-west portion of 0.6 acres drains to Stream 3 in a manner that the proposed condition flows do not exceed existing condition flows generated from the 2.1 acres.
- Near the above mentioned culverts, an AC spillway inlet into a 24" CMP will be replaced with a catch basin along with the street improvement widening.

- The existing 60" RCP that carries flows from north side of Clinton Keith Road will be extended approximately 400 lineal feet and outlet back into the natural drainage channel approximately 150' south of the most southerly drive entrance from Elizabeth Lane.
- An existing catch basin at a low point along the east side of Elizabeth Lane that directly discharges into a natural channel will join the above mentioned 60" RCP, as well as a proposed catch basin directly on the west side of Elizabeth Lane.
- The existing 30" RCP that carries flows from the adjacent mini-storage facility will be extended approximately 200 lineal feet and join a culvert that will be built under Bunny Lane.
- A 40' long culvert will be built under Bunny Lane to allow storm water to continue flowing in a southerly direction as it currently does.
- An on-site drainage system is proposed to capture the on-site flows and convey them to the proposed water quality/detention basin.
- Detention basins will be constructed at the outlet locations for each stream subareas to mitigate the increased runoff from the post-developed site conditions and release measured flows into the natural streams with no adverse impact downstream. For preliminary purposes, the basins are sized for the differences between the volumes of the 10-year, 24-hour pre- and post-developed conditions storm events. The 100-year events will bypass through.

  A detention basin will be constructed in the southeast corner of Parcel 13 to mitigate the increased runoff from the post-developed parcels 1, 2 and 3 proposed Project site and release measured flows into the natural Stream 1 with no adverse impact downstream. The proposed basin will serve dual purpose as being a water quality sand filtration basin and a detention mitigation basin. The 2-year, 24-hour and the 10-year, 24-hour storm events were mitigated through the basin which is sufficient to prove the basin capacity. The 100-year events will bypass through. The proposed basin outlet structure will have orifices to restrict the 2- and the 10-year flows and a weir on top of the structure for bypassing the 100-year flows. The post development flows for the 2 and 10 year storms will be no greater than pre-development flows.

  Based upon the results of the Hydrology Report, it is concluded that the proposed facilities will adequately provide drainage conveyance in accordance with a 100-Year design storm event. The proposed facilities, with adequate maintenance, will convey flows safely through the region in accordance with Riverside County Flood Control and Water Conservation District requirements for drainage conveyance and without an impact upon the existing storm drain improvements.

  As discussed above, all Phases of the proposed Project will require preparation of a stormwater pollution and prevention plan (SWPPP), which will incorporate BMPs to ensure that potential water quality impacts are minimized. The SWPPP is required to include a counter-measure plan describing measures to ensure proper collection of sedimentation produced on the site. Mitigation Measure **HYD-1** has been included, requiring a SWPPP and WQMP for all Phases of development. Therefore, the any development on the proposed Project site is not expected to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site after mitigation is incorporated.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site? *Less Than Significant Impact with Mitigation Incorporated*

Please reference the discussion in 8.c, above. Impacts are considered less than significant with mitigation incorporated.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? *Less Than Significant Impact with Mitigation Incorporated*

While the proposed Project will result in both immediate and future increases in runoff water, these increases will be adequately conveyed via the improvements proposed by mitigation measure **HYD-1**. The proposed Project will be required to prepare a WQMP and a SWPPP that will include BMPs designed to reduce and manage increases in runoff water at the site. With the incorporation of mitigation, proposed Project impacts will be reduced to a less than significant level. No additional mitigation measures are required.

f) Otherwise substantially degrade water quality? *Less Than Significant Impact with Mitigation Incorporated*

The proposed Project and/or future development associated with the proposed Project would not otherwise substantially degrade water quality. All development on the proposed Project site would be subject to the requirements of the NPDES Stormwater Permit No. R8-2010-0033, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. A key component of the NPDES permit is the implementation of the Area-wide Urban Runoff Management Program for the City, which includes the requirement of stormwater quality treatment and/or BMPs in project design for both construction and operation for new development.

Implementation of Mitigation Measure **HYD-1** would condition future development to prepare and comply with the requirements of the SWPPP and final Water Quality Management Plan, which would ensure that significant water quality impacts and violations of standards and requirements do not occur. With the incorporation of mitigation, proposed Project impacts will be reduced to a less than significant level. No additional mitigation measures are required.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map? *No Impact*

The proposed Project would not result in the development of housing on the proposed Project site. According to the Riverside County Land Information System (2013), the proposed Project site is not located within a 100-year flood hazard. Therefore, the proposed Project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map. No impacts are anticipated. No mitigation is required.

h) Place within 100-year flood hazard area structures which would impede or redirect flood flows? *No Impact*

The proposed Project does not propose to impede or redirect any flood flows. The proposed Project site is located outside of the 100-year flood hazard area. No impacts are anticipated. No mitigation is required.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? *No Impact*

According to Figure 11 of the Elsinore Area Plan, the proposed Project site is located outside of the inundation area of Lake Elsinore. No impacts are anticipated. No mitigation is required.

j) Inundation by seiche, tsunami, or mudflow? *No Impact*

The proposed Project site is not located in an area that is subject to seiches, mudflows, or tsunamis. No impacts are anticipated. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

HYD-1 Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized to below a level of significance. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Engineering Department.

10. LAND USE AND PLANNING.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				✓
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				✓
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓

DISCUSSION

a) Physically divide an established community? *No Impact*

The proposed Project site is located on the south side of Clinton Keith Road, west of Elizabeth Lane. The General Plan land use designations for the properties immediately adjacent to the proposed Project site are as follows:

- North: Open Space-Recreation (OS-R)
- South: Business Park (BP)
- Southwest: Very High Density Residential (VHDR)
- East: Business Park (BP)
- West: Business Park (BP)

The Wildomar General Plan land use designation for the proposed Project site is Business Park (BP). The land surrounding the proposed Project, with the exception of land across Clinton Keith Road to the north, which is physically separated from the proposed Project site contain Business Park (BP) land use designations. All Phase 1 and Phase 2 development of the proposed Project will be consistent with the General Plan land use designation. Only the parcel to the east of the proposed Project site, a self-storage use is currently developed. Based on these circumstances, the proposed Project will not physically divide an established community. No impacts are anticipated. No mitigation is required.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? *No Impact*

The proposed Project will serve to implement the vision, goals and policies of multiple Elements of the City's General Plan, including, but not limited to Chapter 3 (Land Use Element), Chapter 4 (Circulation Element), Chapter 6 (Safety Element), Chapter 7 (Noise Element), and Chapter 9 (Air Quality Element). As discussed in Section V.4 (Biological Resources) of this Initial Study, the proposed Project is consistent with the Riverside County Multiple Species Habitat Conservation Plan (MSHCP). As a result, implementation of the proposed Project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project (including, but not limited to the policies of the general plan, specific plan, local coastal program, or zoning ordinance) adopted to protect environmental resources. Any potential conflicts were anticipated in the General Plan and/or MHSCP. No impacts are anticipated. No mitigation is required.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? *No Impact*

As stated above in Response 10.b., the City of Wildomar participates in the MSHCP. The MSHCP establishes areas of sensitivity considered criteria areas or cells. Projects outside of these areas can proceed consistent with the provisions of CEQA and are subject to payment of an MSHCP Mitigation Fee. This is a standard condition and not considered unique mitigation under CEQA. The MSHCP establishes procedures for the determination of sensitivity. The proposed Project is subject to the MSHCP but is outside of any criteria area or cell. The proposed Project will not conflict with any habitat conservation plan or natural community conservation plan. No impacts are anticipated. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. Prior to the issuance of a grading permit, the developer shall pay the regional impact mitigation fee established by the Riverside County MSHCP.

MITIGATION MEASURES

None.

11. MINERAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				✓

DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state? *No Impact*

The proposed Project site is located within an area designated at MRZ-3 by the Wildomar General Plan. The proposed Project site is designated MRZ-3 (areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposits is undetermined). The proposed Project site has not known to have been mined in the past. Since the proposed Project site has not been used for mining, the proposed Project is not expected to result in the loss of availability of a known mineral resource in an area classified or designated by the State that would be of value to the region or the residents of the State. No impacts are expected from the proposed Project and no mitigation is required.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? *No Impact*

There are no known locally important mineral resource recovery sites identified on the proposed Project site in the Wildomar General Plan or in a specific plan or other land use plan of value to the region or to the residents of the state. No impacts are anticipated. No mitigation measure is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

None.

12. NOISE.

Issues, would the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓		
b) The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Preliminary Acoustical Analysis – Rancon Medical and Educational Center, Plot Plan No. 36492*, prepared by Albert A. Webb Associates, dated July 2012, Revised July 17, 2013, (Acoustical Analysis), and is contained Appendix J, of the enclosed CD. Please refer to the Acoustical Analysis for a detailed discussion of the setting and methodology uses for the Acoustical Analysis. The discussion below will center on noise impacts to and from the proposed Project.

a) The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? *Less Than Significant Impact with Mitigation Incorporated*

Temporary on-site noise increases will occur during proposed Project construction. Once the proposed Project is operational, potentially long-term or permanent noise increases will occur on site as a result of proposed Project operations and off site as a result of Project-generated traffic on area roadways.

Temporary noise impacts will result during Proposed Project construction. Construction noise levels will vary significantly based upon the size and topographical features of the active construction zone, duration of the work day, and types of equipment utilized. Proposed Project construction will involve multiple phases (site preparation, grading, building construction, paving, architectural coating) employing differing types and quantities of mechanical equipment. Each piece of equipment will produce varying levels of noise at varying distances from within the active maintenance/construction area, as indicated in Table 5.12-1, *Construction Equipment Noise Levels*.

Table 5.12-1
Construction Equipment Noise Levels

Type of Equipment	Range of Maximum Sound Levels Measured at 50 Feet (dBA)	Suggested Maximum Sound Levels for Analysis (dBA)	Maximum Sound Levels at 70 Feet (dBA)
Pile Drivers, 12,000 to 18,000 feet-lb/blow[a]	81–96	93	90
Rock Drills	83–99	96	93
Jack Hammers	75–85	82	79
Pneumatic Tools	78–88	85	82
Pumps	74–84	80	77
Scrapers	83–91	87	84
Haul Trucks	83–94	88	85
Cranes	79–86	82	79
Portable Generators	71–87	80	77
Rollers	75–82	80	77
Dozers	77–90	85	82
Tractors	77–82	80	77
Front-End Loaders	77–90	86	83
Hydraulic Backhoe	81–90	86	83
Hydraulic Excavators	81–90	86	83
Graders	79–89	86	83
Air Compressors	76–89	86	83
Trucks	81–87	86	83

Source: Bolt, Beranek & Newman, Noise Control for Buildings and Manufacturing Plants, 1987
[a] feet-lb/blow = foot-pounds per blow

To provide a point of reference, a typical construction day with an 8-hour duration can potentially generate 84 dBA CNEL at a distance of 50 feet from the noise source, on average. Using soft site parameters (a loss of 6 dBA per doubling of distance from the source), the 65 dBA CNEL contour (applicable to exterior areas of Residential uses) is calculated to occur at a distance of approximately 320 feet.

The City of Wildomar has determined that certain noise levels may jeopardize the health or general welfare of City residents; therefore, City Municipal Code Chapter 9.48 established noise standards, as shown in Table 5.12-2, *Sound Level Standards (dB L_{max})*, below.

Table 5.12-2
Sound Level Standards (dB L_{max})

General Plan Foundation Component	General Plan Land Use Designation	General Plan Land Use Designation Name	Density	Maximum Decibel Level	
				7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Community Development	LDR	Low Density Residential	½ acre	55	45
	MDR	Medium Density Residential	2-5	55	45
	MHDR	Medium High Density Residential	5-8	55	45
	VHDR	Very High Density Residential	14-20	55	45
	CR	Retail Commercial	--	65	55
	LI	Light Industrial	--	75	55
	BP	Business Park	--	65	45
Open Space	CH	Conservation Habitat	--	45	45
	REC	Recreation	--	45	45

Source: City Municipal Code Section 9.48.040, Table 1 (abridged based on designations in vicinity of the Project shown on **Figure 4**).

The City Municipal Code determined that construction noise is exempt from noise restrictions if private projects located within one-fourth mile of occupied residences adhere to certain hours. Since occupied residential uses are within one-fourth mile of the Project site, Project-related noise shall be regulated pursuant to the hours set forth in the Municipal Code. Consistent with the intent of this restriction on construction noise hours, noise impacts resulting from construction within specified hours are not considered to jeopardize the health or general welfare of City residents. Therefore, compliance with the construction hours outlined in Section 9.48.020(I)(2) ensures compliance with City standards, as detailed in mitigation measure **NOI-1**.

There are two areas with existing sensitive receptors that could be affected by Project-related construction activity. The closest area includes a multi-family residential development located to the southwest of the proposed Project's southern boundary. There are also single-family residences northeast of the proposed Project site, across Clinton Keith Road, an urban arterial roadway, behind an existing block wall. Mitigation measures will be incorporated to further minimize exposure upon neighboring residential properties from noise generated by typical construction methods anticipated to be used by the proposed Project. **NOI-1** requires proper tuning of equipment, **NOI-2**, requires staging for the greatest distance between noise sources and receptors is incorporated and **NOI-3** requires stationary noise-generating construction equipment be placed a minimum of 320 feet from the property line of the closest existing residences. **NOI-4** requires noises barriers for impacts to existing residential development adjacent to the proposed Project. With incorporation of these mitigation measures, proposed Project impacts will remain less than significant.

Noise Impacts from Future On-Site Activities

The proposed Project consists of a multi use development consisting of a mix of business park, general offices, medical and dental-use facilities, commercial retail, and a drive-thru fast food restaurant. Noise impact sources typically associated with these types of uses could include mechanical equipment, such as air conditioning units. Limited amounts of truck trips also occur with business park uses and commercial retail uses. Commercial retail uses typically contain one to three loading areas that are located at the rear of the building and screened from view and considering the small size of the business park parcels (approximately two acres or less), truck trips within the proposed Project site would be limited and at low speeds. Therefore, the noise from these sources is not anticipated to exceed the City's normally acceptable noise levels. On-site noise associated with any manufacturing uses would not be substantial as they would be conducted indoors.

Mechanical Equipment

It is anticipated that all buildings will be air conditioned. Air conditioning units will be roof-mounted. A mitigation measure (**NOI-5**) has been included to ensure mechanical air conditioning equipment has a 25-foot setback from the roof's edge, or the equipment is set back from the building's edge far enough to break the line of sight between the air conditioning units and potential receivers, whichever is greater of the two. This will provide a minimum 3 to 5 dBA reduction immediately at the building's edge, prior to spacial distance from this noise source, which will provide an additional 3 dBA attenuation per doubling of distance. With this mitigation incorporated, impacts will remain less than significant. In addition, **NOI-5** requires a subsequent noise analysis be submitted prior to building permit issuance to ensure the noise generated by the AC units do not exceed the maximum noise allowed under the Wildomar Municipal Code.

Noise Impacts from Project-Specific Traffic Increases

It is widely accepted that most people only notice a change in the noise environment when the difference in noise levels is greater than 3 dBA. However, it is widely accepted that the average healthy ear can barely perceive changes of 3 dBA and that a change of 5 dBA is readily perceptible.

There is the potential for noise increases along area roadways, resulting from Project-related traffic. The City Municipal Code exempts roadway noise from motor vehicles; it only regulates off-highway vehicle noise produced by its tailpipe and motor vehicle sound systems (Section 9.48.060(A)). These regulations are enforced by the Riverside County Sheriff's Department. Nonetheless, for purposes of this analysis, noise level increases resulting from Project-related increases in traffic volumes on Clinton Keith Road, Elizabeth Lane and Yamas Drive are quantified and evaluated for the proposed Project area for the following scenarios:

- Existing and Existing plus proposed Project; and
- Existing plus cumulative projects plus proposed Project conditions.

The two (2) scenarios, above, were modeled to determine increases in noise levels. The increase in traffic due to the addition of proposed Project traffic allows for direct comparisons of potential increases or decreases in noise levels based upon the associated growth in traffic. Therefore, the incremental change in a noise level is the focus of this portion of the analysis results, rather than the resulting independent noise level for any given receiver.

Table 5.12-3, *Noise Contours at 50 feet from Roadway Centerline from Existing Plus Project Conditions*, compares existing noise levels (without the proposed Project) with predicted noise levels resulting from Project-specific traffic. Noise levels associated from Project-specific traffic increases are expected to increase by approximately 18.4 dBA over existing levels along Elizabeth Lane, south of Clinton Keith Road. Although this increase in noise levels is perceptible, it does not exceed the acceptable levels (reference Figure 6 of the Acoustical Analysis - Land Use Compatibility for Community Noise Exposure) for adjacent land uses and there are no sensitive receivers adjacent to this segment. There is an existing mini-storage development located east of Elizabeth Lane and south of Clinton Keith; however, there is an existing wall along the perimeter of this mini-storage facility along Elizabeth Lane. The wall is approximately 6 feet in height and is elevated on an existing landscaped berm which will provide additional attenuation to the neighboring mini-storage facility.

Table 5.12-3
Noise Contours at 50 feet from Roadway Centerline
from Existing Plus Project Conditions

Road Segment	Existing		Existing Plus Project				
	ADT	dB CNEL	ADT	Project Only ADT	dB CNEL	Total dB CNEL	Change
N/S Road Segment							
Yamas Dr. s/o Project	810	56.8	1,725	915	60.3	61.9	5.1
Elizabeth Ln s/o Clinton Keith	175	50.1	6,443	6,258	68.7	68.7	18.6
E/W Road Segment							
Clinton Keith w/o I-15	20,725	70.9	23,528	2,603	65.2	71.9	1.0
Clinton Keith e/o I-15	19,480	70.6	24,561	5,081	67.8	72.4	1.8
Clinton Keith w/o Inland Valley	18,250	70.3	23,467	5,217	67.9	72.3	2.0
Clinton Keith w/o Salida del Sol	12,890	68.8	18,127	5,237	67.9	71.4	2.6
Clinton Keith w/o Elizabeth Ln	12,765	68.8	18,002	5,237	67.9	71.4	2.6
Clinton Keith w/o Nutmeg	11,355	68.3	13,015	1,660	62.9	69.4	1.1
Clinton Keith w/o California Oaks	15,640	69.6	16,563	923	60.4	70.1	0.5
Prielipp Rd e/o Yamas	4,590	64.3	5,504	914	60.3	65.8	1.5
Prielipp Rd e/o Elizabeth	5,170	64.8	6,084	914	60.3	66.1	1.3

Table 5.12-4
Noise Contours at 50 feet from Roadway Centerline from Existing Plus Cumulative Project Traffic Plus Project Conditions

Road Segment	Existing+Cumulative		Existing Plus Cumulative Plus Project				
	ADT	dB CNEL	ADT	Project Only ADT	dB CNEL	Total	Change
N/S Road Segment							
Yamas Dr. s/o Project	851	57.0	1,766	915	60.3	62.0	5.0
Elizabeth Ln s/o Clinton Keith	184	50.3	6,452	6,268	68.7	68.7	18.4
E/W Road Segment							
Clinton Keith w/o I-15	27.497	72.1	30,300	2,803	65.2	72.9	0.8
Clinton Keith e/o I-15	26,353	71.9	31,434	5,081	67.8	73.3	1.4
Clinton Keith w/o Inland Valley	24,209	71.5	29,446	5,237	67.9	73.1	1.6
Clinton Keith w/o Salida del Sol	16,667	69.9	21,904	5,237	67.9	72.0	2.1
Clinton Keith w/o Elizabeth Ln	16,535	69.9	21,772	5,237	67.9	72.0	2.1
Clinton Keith w/o Nutmeg	14,675	69.4	16,335	1,660	62.9	70.3	0.9
Clinton Keith w/o California Oaks	18,257	70.3	19,180	923	60.4	70.7	0.4
Prielipp Rd e/o Yamas	6,924	66.1	7,838	914	60.3	67.1	1.0
Prielipp Rd e/o Elizabeth	7,662	66.5	8,576	914	60.3	67.5	0.9

As shown in Table 5.12-4, above, the proposed Project's traffic increases noise levels compared to that existing without the proposed Project, but is also not expected to exceed acceptable levels for adjacent land uses. Any impacts are considered less than significant.

b) The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? *Less Than Significant Impact*

Regarding the proposed Project's potential to generate ground-borne vibrations during construction, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Common sources of ground-borne vibration are trains, buses on rough roads, and heavy construction activities such as blasting, pile-driving, and extensive grading and heavy earth-moving equipment. Construction of the proposed Project will not incorporate the use of blasting or pile-driving. Vibration from equipment can only be felt out to a distance of approximately 50 feet from

the source. Additionally, ground-borne vibrations are not associated with the typical operation of the land uses proposed by the proposed Project. Thus, construction and operation will not produce any substantial ground-borne vibration. Any impacts would be considered less than significant. No mitigation is required.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? *Less Than Significant Impact with Mitigation Incorporated*

Please reference Response 12.a, above. Construction impacts will be of short duration and, with the incorporation of mitigation measures, will be considered less than significant. Operational impacts have been determined to be less than significant. Therefore, implementation of the proposed Project will not result in a substantial permanent increase in ambient noise levels in the proposed Project vicinity above levels existing without the proposed Project.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? *Less Than Significant Impact with Mitigation Incorporated*

Please reference Response 12.a, above. Construction impacts will be of short duration and, with the incorporation of mitigation measures, will be considered less than significant. Operational impacts have been determined to be less than significant. Therefore, implementation of the proposed Project will not result in a substantial temporary or periodic increase in ambient noise levels in the proposed Project vicinity above levels existing without the proposed Project.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? *No Impact*

The closest public airport is French Valley Airport, which is located approximately 5.6 miles southeast of the proposed Project site. The proposed Project site is outside of the airport noise and safety influence or flight surface control areas. As a result, no impacts are anticipated, and no mitigation measures are required.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? *No Impact*

The closest private airstrip to the proposed Project site is Skylark Field, which is located approximately 4.6 miles northwest of the proposed Project site. Skylark Airport is used primarily by skydiving aircraft. Given the proximity of the proposed Project to Skylark Field, no impacts are anticipated, and no mitigation measures are required.

STANDARD CONDITIONS & REQUIREMENTS

1. The proposed Project shall comply with the development standard of Chapter 9.48 of the City of Wildomar Zoning Code.

MITIGATION MEASURES

NOI-1 To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-2 The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-3 Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-4 Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence.

It is important to note that the barriers' attenuation will be accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.

Timing/Implementation: Prior to the issuance of occupancy permits and during project operations.

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

NOI-5 Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.

Timing/Implementation: Reviewed at building plan check.

Enforcement/Monitoring: City of Wildomar Building Department.

13. POPULATION AND HOUSING.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

DISCUSSION

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? *No Impact*

The proposed Project would not result in any increase in substantial population growth. Development of Phase 1 and Phase 2 on the proposed Project site will be consistent with the current land use designation and included in the anticipated buildout of the General Plan. The California Employment Development Department estimates that the unemployment rate in Riverside County is 11.1 percent. (EDD). The California Department of Finance estimates that the vacancy rate of homes in Wildomar is less than 8 percent, which means that of the 10,857 homes in the City, approximately 800 of them are vacant. While the number of employees is unknown at this time, it is reasonable to assume that the new jobs created by this development could be accommodated by existing residents in Wildomar. If new employees did move to the area, the existing number of vacant homes would accommodate their housing needs. As the proposed Project would not result in the construction of new homes, and the development is consistent with the General Plan, no significant impacts are anticipated. No mitigation measure is required.

b,c) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or, displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? *No Impact*

Since the proposed Project site is vacant, no housing units or people would be affected and the construction of replacement housing is not required. No significant impacts are anticipated. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

None.

14. PUBLIC SERVICES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?			✓	
b) Police protection?			✓	
c) Schools?			✓	
d) Parks?				✓
e) Other public facilities?			✓	

DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Fire protection? *Less Than Significant Impact*

The Riverside County Fire Department provides fire protection and safety services to the City of Wildomar. The nearest fire station is Wildomar Fire Station #61, located at 32637 Gruwell Street, 2¾-miles from the proposed Project site. In addition to Fire Station #61, several other Riverside County fire stations in the surrounding area would be able to provide fire protection safety services to the proposed Project site if needed. The proposed Project must comply with the requirements of the Riverside Fire Protection Department and the payment of standard development impact fees, prior to the issuance of a building permit, pursuant to Chapter 3.44.070 of the Wildomar Municipal Code. All Phases of the proposed Project are not expected to result in activities that create unusual fire protection needs or significant impacts. Any impacts would be considered incremental, and would be offset through the payment of the development impact fee. No additional mitigation is required.

b) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Police protection? *Less Than Significant Impact*

Police protection services are provided the Riverside County Sheriff's Department. The nearest sheriff's station is located at 333 Limited Street in Lake Elsinore, approximately 7.4 miles from the proposed Project site. Traffic enforcement is provided for Riverside County in this area by the California Highway Patrol, with additional support from the local Riverside County Sheriff's Department. The proposed Project is required to pay the standard development impact fees, prior to the issuance of a building permit, pursuant to Chapter 3.44.070 of the Wildomar Municipal Code. Therefore, implementation of the proposed Project is not expected to result in activities that create unusual police protection needs or significant impacts. Any impacts would be considered incremental, and would be offset through the payment of the development impact fee. No additional mitigation is required.

c) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Schools? *Less Than Significant Impact*

The proposed Project site is located within the Lake Elsinore Unified School District (LEUSD). The LEUSD has established school impact mitigation fees to address the facility impacts created by residential, commercial, and industrial development. Due to the Business Park (BP) land use designation of the proposed Project site, any development associated with the proposed Project would not generate any additional students into the LEUSD, and, therefore; has no potential to directly impact the local school system. No new population would be generated as a result of implementing the proposed Project; however, indirect impacts may result from people relocating to the area due to the potential employment opportunities created by the proposed Project. All development will be required to pay school mitigation impact fees, prior to the issuance of a building permit, which has been established by the Lake Elsinore Unified School District to mitigate any potential effects to school services. Any impacts would be considered incremental, and would be offset through the payment of the school impact mitigation fee. No additional mitigation is required.

d) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Parks? *No Impact*

Development associated with the proposed Project would be commercial retail or office in nature and would not be expected to directly affect community recreational facilities. In addition, as discussed in V.15 a and b (Recreation Resources) in the next section of this IS, the proposed Project would also not adversely affect any existing parks, recreation sites, or programs. No impacts are anticipated. No mitigation is required.

e) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities? *Less Than Significant Impact*

Development associated with the proposed Project may result in a slight increase in the demand for other governmental services such as economic development and the other community support services commonly provided by the City of Wildomar. The demand for these additional public service impacts would be incremental. This increment of impact will be off-set through the payment of the appropriate development impact fees and through the City budget for non-impact-fee programs and expenses. The City budget is based on a combination of property tax, sales tax, user fees, and state and federal government pass-through funding. Most of these revenue sources are from commercial sales, population, or development related, which means the more residents or business activity within the city, the greater the amount of funding that could be available. Therefore, while the proposed Project may add a small incremental impact to other public faculties, these impacts are considered less than significant. No additional mitigation measures, beyond the standard requirements, are required.

STANDARD CONDITIONS & REQUIREMENTS

1. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required development impact fees for police and fire services pursuant to Chapter 3.44.070 of the Wildomar Municipal Code and in effect at the time of building permit issuance.

2. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required school impact mitigation fees established by the Lake Elsinore Unified School District and in effect at the time of building permit issuance.

MITIGATION MEASURES

None.

15. RECREATION.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			✓	

DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated? *Less Than Significant Impact*

All Phases of development associated with the proposed Project are not expected to result in an increase in use of existing neighborhood and regional parks or other recreational facilities. Retail commercial and office uses do not typically result in increases in impacts to recreation resources. However, there may be a potential increase in residential growth, due to persons relocating to the area as a result of the jobs created by the proposed Project. This growth and the associated impacts would be indirect, or secondary impacts, are would be at most, a small, incremental increase. Due to this, any impacts to recreation resources, as a result of implementation of the proposed Project, would be considered less than significant. No mitigation is required.

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? *Less Than Significant Impact*

The proposed Project will not require the construction or expansion of new recreational facilities. There are no parks or recreational facilities included as part of any Phase of the proposed Project. Please reference the discussion above about incremental impacts due to increased residential growth. Any impacts to recreation resources, as a result of implementation of the proposed Project, would be considered less than significant. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

None.

16. TRANSPORTATION / TRAFFIC.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		✓		
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			✓	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?			✓	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			✓	

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Traffic Impact Analysis Report, Tentative Parcel Map No. 36492* (TIA), prepared by Albert A. Webb Associates, dated February 2013, Revised July 15, 2013, and is contained Appendix K, of the enclosed CD. Please refer to the TIA for a detailed discussion of the setting and methodology uses for the TIA. The discussion below will center on impacts to transportation/traffic resources from the proposed Project.

Based on direction from the City's Traffic Engineer, the study area for the proposed Project includes the following intersections:

1. I-15 Southbound Ramps (NS) / Clinton Keith Road (EW)
2. I-15 Northbound Ramps (NS) / Clinton Keith Road (EW)
3. George Avenue (NS) / Clinton Keith Road (EW)
4. Inland Valley Drive (NS) / Clinton Keith Road (EW)
5. Salida Del Sol (NS) / Clinton Keith Road (EW)
6. Project Driveway 1 (NS) / Clinton Keith Road (EW)
7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
8. Nutmeg Street (NS) / Clinton Keith Road (EW)
9. California Oaks Road (NS) / Clinton Keith Road (EW)
10. Elizabeth Lane (NS) / Project Driveway 2 (EW)
11. Elizabeth Lane (NS) / Project Driveway 3 (EW)
12. Elizabeth Lane (NS) / Project Driveway 4 (EW)
13. Elizabeth Lane (NS) / Project Driveway 5 (EW)
14. Yamas Drive (NS) / Project Driveway 6 (EW)
15. Yamas Drive (NS) / Project Driveway 7 (EW)
16. Yamas Drive (NS) / Prielipp Road (EW)
17. Elizabeth Lane (NS) / Prielipp Road (EW)
18. Nutmeg Street (NS) / Jackson Avenue (EW)

The method of traffic projection for the proposed Project is based on the following criteria:

- Existing traffic conditions;
- Ambient growth projections;
- Project generated traffic; and
- Cumulative project generated traffic.

As is standards practice in traffic forecasting and impact analysis, an opening year of the proposed Project is provided as a starting, or reference point, for the TIA. The proposed Project TIA uses a study year for the proposed Project of 2017 for analysis purposes.

a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? *Less Than Significant Impact with Mitigation Incorporated*

Intersection and roadway functioning is often described by its level of service (LOS). LOS A constitutes light traffic conditions with no interruptions in service or delays at intersections, while LOS F represents congested and unstable conditions with slow moving traffic accompanied by significant delays at many intersections. The City of Wildomar has adopted the County of Riverside General Plan. According to the County of Riverside General Plan, Policy C 2.1:

Maintain the following countywide target Levels of Service:

LOS "C" along all County maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways,

Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections.

LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities.

Table 5.16-1, *Project Trip Generation*, presents the daily and peak hour trip generation for the proposed Project. As shown, the proposed Project is anticipated to generate approximately 9,193 gross daily trip-ends. These gross daily trip-ends are reduced due to internal trip-ends, and pass-by trips; thereby, netting 7,969 daily trip ends, including 713 gross trip-ends during the AM peak hour and 782 gross trip-ends during the PM peak hour.

Table 5.16-1
Project Trip Generation

Land Use	Qty	Unit	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Business Park	294.9	TSF	413	347	66	408	94	314	3,918
General Office Building	42.42	TSF	94	83	11	126	21	105	689
Internal Trips[1]						(9)	(5)	(4)	(148)
NET NEW TRIPS FOR LAND USE			94	83	11	117	16	101	541
Medical-Dental Office Building	31.42	TSF	72	57	15	109	29	80	1,135
Internal Trips[1]						(9)	(5)	(4)	(148)
NET NEW TRIPS FOR LAND USE			72	57	15	100	24	76	987
Shopping Center	19.4	TSF	59	36	23	212	104	108	2,339
Internal Trips[1]						(31)	(14)	(17)	(595)
Pass-by Trips (34% for PM Peak only)[2]						(62)	(31)	(31)	(62)
NET NEW TRIPS FOR LAND USE			59	36	23	119	59	60	1,682
Fast-Food Restaurant with Drive-Through Window	3	TSF	148	75	73	102	53	49	1,488
Internal Trips[1]						(25)	(13)	(12)	(535)
Pass-by Trips (49% for AM Peak, 50% for PM Peak)[2]			(73)	(37)	(36)	(39)	(20)	(19)	(112)
NET NEW TRIPS FOR LAND USE			75	38	37	38	20	18	841
NET NEW TRIPS FOR TOTAL PROJECT			713	561	152	782	213	569	7,969

TSF = 1,000 Square Feet Gross Floor Area
[1] See Multi-Use Development Trip Generation and Internal Capture Summary in Appendix A for internal trip calculations.
[2] Average pass-by trip percentages from *Trip Generation Handbook* by Institute of Transportation Engineers (ITE), 2001.

Level of Service

Levels of Service – Existing Conditions

The existing levels of service for proposed Project the study area intersections vary from LOS A to D. The existing intersection of I-15 Southbound Ramps @ Clinton Keith Road operates at a LOS "D". Based on this information, none of the proposed Project study area intersections operate at an unacceptable LOS.

Levels of Service – Existing Plus proposed Project Conditions

For existing plus proposed Project traffic conditions without off-site improvements, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to F. The following study area intersection is expected to operate at an unacceptable LOS:

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)

With the recommended improvements presented in Mitigation Measure TR-1, levels of service at the impacted proposed Project study area intersection could be improved to meet the required level of service as required in County of Riverside General Plan, Policy C 2.1, discussed above. Impacts will be considered less than significant with mitigation incorporated.

Levels of Service – Existing Plus Ambient Growth Plus Cumulative Conditions

For existing plus ambient growth plus cumulative traffic conditions, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to C. None of the proposed Project study area intersections are expected to operate at an unacceptable LOS.

Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project Conditions

For existing plus ambient growth plus cumulative plus proposed Project traffic conditions without off-site improvements, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to F. The following proposed Project study area intersection is expected to operate at an unacceptable LOS:

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)

With the recommended improvements presented in Mitigation Measure TR-1, levels of service at the impacted proposed Project study area intersection could be improved to meet the required level of service as required in County of Riverside General Plan, Policy C 2.1, discussed above. Impacts will be considered less than significant with mitigation incorporated.

Traffic Signal Warrants

Traffic Signal Warrants – Existing Conditions

For existing traffic conditions, the peak hour traffic control signal warrant is not satisfied for any of the proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations).

Traffic Signal Warrants – Existing Plus proposed Project Conditions

For existing plus proposed Project traffic conditions, the peak hour traffic control signal warrant is expected to be satisfied for the following proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations):

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
10. Elizabeth Lane (NS) / Project Driveway 2 (EW)

With the recommended improvements presented in Mitigation Measure TR-1, traffic control service at the impacted proposed Project study area intersections could be improved to meet the City's requirements. Impacts will be considered less than significant with mitigation incorporated.

Traffic Signal Warrants – Existing Plus Ambient Growth Plus Cumulative Conditions

For existing plus ambient growth plus cumulative traffic conditions, no proposed Project study area unsignalized intersections are expected to meet the peak hour traffic control signal warrant (see Appendix D of the TIA for technical calculations).

Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project Conditions

For existing plus ambient growth plus other projects plus proposed Project traffic conditions, the peak hour traffic control signal warrant is expected to be satisfied for the following proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations):

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
10. Elizabeth Lane (NS) / Project Driveway 2 (EW)

With the recommended improvements presented in Mitigation Measure **TR-1**, traffic control service at the impacted proposed Project study area intersections could be improved to meet the City's requirements. Impacts will be considered less than significant with mitigation incorporated.

In addition to Mitigation Measure **TR-1**, the proposed Project will pay fees to the City pursuant to the TUMF program and the City's DIF Program. Payment of these fees is a standard condition to off-set cumulative and region wide traffic increment added by the implementation of the proposed Project.

b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? *Less Than Significant Impact*

Clinton Keith Road is not designated as part of the Riverside County Congestion Management Program (CMP). However, it is possible that some of the vehicle trips generated by development on the proposed Project site may connect to the CMP network at Interstate 15 (I-15). Development associated with the proposed Project could add an additional increment of traffic to the designated CMP network. The increment of potential impact associated with this proposed Project would be off-set through standard conditions of approval that require payment of existing roadway network fees (e.g., development impact fees and the Transportation Uniform Mitigation Fee). Consequently, the proposed Project and associated future development would not significantly affect the designated CMP road network. Any impacts would be considered incremental, yet less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? *No Impact*

No elements of the proposed Project would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. The maximum height of the buildings in Phase 1 is 36'0" and the maximum height allowed in Industrial Park (IP) for Phase II development would be 50 feet. As discussed in Section 8 Hazards and Hazardous Materials), the proposed Project site is not located in proximity to a public or private use airport. Since the location and height of the proposed Project would not affect air traffic patterns or aircraft operations from any private or public airport, no impacts are foreseen; therefore, no mitigation measures are required.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? *Less Than Significant Impact*

The proposed Project includes dedication of right-to-way to the City to accommodate anticipated vehicle movement as a result of development on the proposed Project site. This dedication of right-of-way would be for the proposed Project's perimeter roadways (Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C"). The City has site design criteria that govern the placement of driveways to allow for adequate site distance and turning movements. These provisions would become effective at the time of plot plan consideration and approval. As the proposed Project will widen existing roadways and install improvements along its frontage, and existing city ordinances will review the placement of driveways for sight distance and turning movements, this impact is considered less than significant.

e) Result in inadequate emergency access? *Less Than Significant Impact*

Development associated with the proposed Project would include access from Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C". However, the proposed Project includes right-of-way dedication along these roadways that will serve to enhance circulation in the immediate vicinity of the proposed Project. Therefore, the proposed Project would not

interfere with area wide emergency access or the implementation of local emergency response plans. Any impacts would be considered less than significant. No mitigation is required.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? *Less Than Significant Impact*

The proposed Project includes sidewalk improvements along Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C". All improvements would be designed to comply with design criteria contained in Chapter 16.08 of the Wildomar Municipal Code, including the construction of sidewalks, curbs, and gutters along the property frontage. The City's plot plan application process would review future development's need to provide bicycle lanes, bus turnouts, or other design components to support alternative transportation as part of the proposed Project design. Any necessary improvements would be a condition of future development approval. Therefore, the proposed Project would not conflict with adopted policies supporting alternative transportation. Any impacts would be considered less than significant. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. Prior to issuance of any building permit on the proposed Project site, the Project applicant(s) shall pay the appropriate Transportation Uniform Mitigation Fee and the City of Wildomar Development Impact Fee (DIF).
2. Sight distance at the proposed Project entrance roadway should be reviewed with respect to standard City of Wildomar sight distance standards at the time of preparation of final grading, landscape and street improvement plans.
3. Participate in the phased construction of off-site traffic signals through payment of proposed Project's fair share of traffic signal fees.
4. Signing/striping should be implemented in conjunction with detailed construction plans for the proposed Project site.

MITIGATION MEASURES

TR-1 The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service. The following improvements shall be constructed:

Roadways

- Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line (Phase 1).
- Construct partial width improvements on the westerly side of Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line (Phase 1).
- Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line (Phase 2).

Intersections (proposed Project's actual improvements necessary are shown in bold, italic, underlined. The items that are not bold, italic, underlined are already existing)

- Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics (Phase 1):
  Northbound: ***One right-turn lane. Stop controlled.***
  Southbound: Not applicable.
  Eastbound: One through lane. ***One right-turn lane.***
  Westbound: One through lane.
- ***Install a traffic signal*** at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics (Phase 1):
  Northbound: ***One left-turn lane.*** One shared through and right-turn lane.
  Southbound: ***One left-turn lane.*** One shared through and right-turn lane.
  Eastbound: One left-turn lane. One through lane. ***One right-turn lane.***
  Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.
- Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics (Phase 1):
  Northbound: One shared left-turn, through and right-turn lane.
  Southbound: One shared left-turn, through and right-turn lane.
  Eastbound: ***One shared left-turn, through and right-turn lane. Stop controlled.***
  Westbound: One shared left-turn, through and right-turn lane. Stop controlled.
- Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW) with the following geometrics (Phase 1):
  Northbound: One shared left-turn and through lane.
  Southbound: One shared through and right-turn lane.
  Eastbound: ***One shared left-turn and right-turn lane. Stop controlled.***
  Westbound: Not applicable.
- Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):
  Northbound: Not applicable.
  Southbound: One right-turn lane.
  Eastbound: ***One shared left-turn and right-turn lane. Stop controlled***
  Westbound: Not applicable.
- Construct the intersection of Project Driveway 4 (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):
  Northbound: Not Applicable.
  Southbound: ***One shared left-turn and right-turn lane. Stop controlled.***
  Eastbound: One shared left-turn and through lane.
  Westbound: One shared through and right-turn lane.
- Construct the intersection of Yamas Drive (NS) and proposed Project Driveway 5(EW) with the following geometrics (Phase 2):
  Northbound: ***One shared through and right-turn lane.***
  Southbound: ***One shared left-turn and through lane.***
  Eastbound: Not applicable.
  Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***

- Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):
  Northbound: ***One shared through and right-turn lane.***
  Southbound: ***One shared left-turn and through lane.***
  Eastbound: Not applicable.
  Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***

  Timing/Implementation: Implemented during the appropriate Phase of proposed Project construction.

  Enforcement/Monitoring: City of Wildomar Traffic Engineering Department.

17. UTILITIES AND SERVICES SYSTEMS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			✓	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?			✓	
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			✓	

The Elsinore Valley Municipal Water District (EVWMD) will provide water and sewer services for the proposed Project. Electric, gas, cable, and telephone services would be extended onto the site from existing main lines, either in Clinton Keith Road or Elizabeth Lane. Electricity would be provided by Southern California Edison, gas by Southern California Gas, and telephone service would be provided by Verizon. The site is located within the boundaries of the Lake Elsinore Unified School District (LEUSD). Municipal or local government services are provided by the City of Wildomar. Fire and security services are provided by the City of Wildomar through contracts with the Riverside County Fire Department and the Riverside County Sheriff's Department. Solid waste disposal services are provided to the City of Wildomar by Waste Management, Inc.

DISCUSSION

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? *Less Than Significant Impact*

The San Diego Regional Water Quality Control Board regulates wastewater discharges within the portion of the City of Wildomar encompassing the proposed Project site. Development on the proposed Project site would receive wastewater services from the Elsinore Valley Municipal Water District (EVMWD). The proposed Project will not require or will not result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects. Therefore, impacts are considered less than significant and no additional mitigation measures are required. For a complete discussion of urban runoff-related water quality impacts associated with construction and operation of the proposed Project, please refer to Section 9, Hydrology and Water Quality, of this Initial Study.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? *Less Than Significant Impact*

The proposed Project site is within the service boundary for EVMWD. All development on the proposed Project site would be connecting to EVMWD water and sewer service infrastructure. Phase 1 development would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Service Planning Letter #2448-0 (see Appendix M of this Initial Study) has been issued by EVWMD for Phase 1 of development. As a result, any potential impacts are considered incremental and less than significant. No additional mitigation is required

The proposed Project is consistent with the City's General Plan designations. No amendments to the current General Plan designations are included as part of the proposed Project. These General Plan Land Use designations have been in place on the proposed Project site since 2003. According to the Elsinore Valley Municipal Water District, *Draft Program Environmental Impact Report Water Distribution System Master Plan and Wastewater Master Plan (SCH No. 2008111100),* April 2010(http://www.evmwd.com/civica/filebank/blobdload.asp?BlobID=5369), (p. 1-3), the Wastewater Master Plan (WMP) anticipated an increase the capacity of water and wastewater infrastructure and would therefore accommodate the population growth projected for the service area through 2030. As a result, the development proposed in Phase 2 has been anticipated as part of the WMP. Any impacts from Phase 2 would be considered less than significant and no additional mitigation is required.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? *Less Than Significant Impact*

The proposed Project would not result in the generation of stormwater. Phase 2 development on the proposed Project site would connect to the existing storm drainage facilities. On-site runoff would be incorporated into the existing drainage system after treatment by the best management practices identified in the required Water Quality Management Plan (and discussed

in Section 9, Hydrology and Water Quality, of this Initial Study). All development would be required to be designed to ensure that post-construction stormwater runoff rates do not exceed pre-construction flows. Therefore, existing infrastructure would have adequate capacity to serve future development on the proposed Project site and no new or expansion of existing stormwater drainage facilities would be necessary. Impacts associated with new or expanded stormwater water drainage facilities are considered less than significant. No additional mitigation is required.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? *Less Than Significant Impact*

The proposed Project site is within the service boundary for the EVMWD, and future development on the proposed Project site would be connecting to EVMWD water service infrastructure. EVMWD utilizes both groundwater and imported water supplies to ensure adequate water is available for consumers. Imported water is utilized to ensure that significant overdraft of local groundwater supplies does not occur. Based on the EVMWD's Urban Water Master Plan, no adverse impacts to groundwater resources are forecast to occur from implementing the proposed Project. Service Planning Letter #2448-0 (see Appendix L of this Initial Study) has been issued by EVWMD for Phase 1 of development. Any impacts are considered less than significant. No mitigation is required.

e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? *Less Than Significant Impact*

As described above, all development on the proposed Project site would connect to water and sewer service infrastructure. All Phases of development would be conditioned to obtain approvals from the Riverside County Department of Environmental Health. The proposed Project would not impact the EVMWD's ability to serve existing customers. Impacts are considered less than significant. No additional mitigation is required.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? *Less Than Significant Impact*

The main disposal site in the vicinity of the proposed Project site is the El Sobrante Landfill in Corona. The El Sobrante Landfill is projected to reach capacity in 2030. Development on the proposed Project site would be served by a landfill with sufficient permitted capacity to accommodate the proposed Project's solid waste disposal needs. Impacts are considered incremental, yet less than significant. No additional mitigation is required.

The proposed Project would not substantially alter existing or future solid waste generation patterns and disposal services. The proposed Project would be consistent with the County Integrated Waste Management Plan. All development would be required to comply with the recommendations of the Riverside County Waste Management Department and be consistent with the County Integrated Waste Management Plan. These requirements are standard to all retail commercial, restaurant and office projects, and are not considered mitigation pursuant to CEQA. Any impacts would be less than significant. No additional mitigation is required.

g) Comply with federal, state, and local statutes and regulations related to solid waste? *Less Than Significant Impact*

The proposed Project will comply with federal, state, and local statutes and regulations related to solid waste. Please refer to Response 17.f., above. The proposed Project does not any propose activities that would conflict with the any applicable programmatic requirements. In addition, any future development shall comply with construction and debris removal and recycling requirements and shall contract with the City's waste hauler/franchisee for all bins and their removal in accordance with City Ordinance. As a result, the proposed Project will comply with all of the applicable requirements and any impacts will be less than significant. No additional mitigation measures are required.

STANDARD CONDITIONS & REQUIREMENTS

1. The Project applicant(s) for future development on the proposed Project site shall obtain approval from the Riverside County Department of Environmental Health before receiving water and wastewater service from the Elsinore Valley Municipal Water District.

2. Prior to issuance of a building permit, a recycling collection and loading area plan shall be submitted to the City and to Riverside County Waste Management Division.

MITIGATION MEASURES

None.

VI. MANDATORY FINDINGS OF SIGNIFICANCE

Issues, does the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		✓		
c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

DISCUSSION

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a) **Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?** *Less Than Significant Impact with Mitigation Incorporated*

Based on evaluations and discussions contained in this IS, the proposed Project and associated future commercial development on the proposed Project site has a very limited potential to incrementally degrade the quality of the environment because it is not in an environmentally sensitive location, and it is consistent with the City of Wildomar General Plan. As a result, the proposed Project would not significantly affect the environment with implementation of the mitigation measures contained in this IS.

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) *Less Than Significant Impact with Mitigation Incorporated*

Aesthetics

Implementation of the proposed Project would not contribute to cumulative visual resource or aesthetic impacts. The City's plot plan application process will ensure development is in compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Thus, while incremental, impacts to aesthetic resources are not considered cumulatively considerable. Cumulative conditions were anticipated in the City's General Plan Land Use Plan designation of BP (Business Park). The proposed Project is consistent with the General Plan.

Agricultural Resources

Implementation of the proposed project would not contribute to cumulative impacts to agricultural resources or forestland impacts. No agricultural resources will be impacted through the implementation of the proposed Project. Thus, less than cumulatively considerable impacts to agricultural resources and forestland resources are anticipated under cumulative conditions.

Air Quality

The proposed project may contribute to cumulative air quality impacts in the vicinity. As previously stated, the SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. In other words, the SCAQMD considers projects that are consistent with the AQMP, which is intended to bring the basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts. The discussion under Impact a) describes the SCAQMD criteria for determining consistency with the AQMP and further demonstrates that the proposed project would be consistent with it. As such, cumulative impacts would be less than significant per the SCAQMD significance threshold since the project would be consistent with the AQMP.

Biological Resources

The potential for biological impacts is addressed through mitigation measures **BIO-1** through **BIO-6**, resulting in the proposed Project having a less than cumulatively considerable impact on biological resources. The proposed Project is consistent with the Riverside County MSHCP, which was created to address biological resources County-wide. In addition, Project impacts to state and federal resources will be avoided to the greatest extent possible, and where impacts shall occur, will be mitigated to result in a no net loss of resources.

Cultural Resources

Development on the proposed Project site would contribute to an increase in cultural resource impacts. Based on the analysis contained in this Initial Study, the potential for there is potential

for these sub-surface resources to be present on the proposed Project site. However, mitigation measures **CUL-1** though **CUL-8** would reduce the potential impacts associated with development on the Project site, resulting in either: avoidance, preservation, or curation of any resources found on site during ground disturbance and grading activities. Thus, the proposed Project would have a less than cumulatively considerable impact, as determined by the agencies that have jurisdiction over these resources.

Geology and Soils

Project-related impacts on geology and soils associated with development on the proposed Project site are site-specific, and development on the site would not contribute to seismic hazards or water quality impacts associated with soil erosion. However compliance with Standard Conditions and Requirements would result in a decreased exposure to the risks associated with seismic activity. Therefore, the proposed Project is anticipated to have no impact on cumulative geophysical conditions in the region.

Greenhouse Gas Emissions

The greenhouse gas analysis provided in subsection 7, Greenhouse Gas Emissions, analyzed the proposed Project's cumulative contribution to global climate change and determined that the proposed Project would not create a cumulatively considerable environmental impact resulting from greenhouse gas emissions. The proposed Project will provide jobs in a housing rich environment.

Hazards and Hazardous Materials

The proposed Project is not expected to utilize or contribute to hazards associated with the accidental release of hazardous materials. However, even if hazardous materials are used on the site, implementation of mitigation measures **HAZ-1** through **HAZ-4** and compliance with federal, state, and City regulations will ensure that cumulative hazard conditions are less than cumulatively considerable.

Hydrology and Water Quality

Development on the proposed Project site has the potential to result in cumulative hydrology and water quality impacts; however, implementation of mitigation measure **HYD-1** would reduce the proposed Project's potential cumulative impacts on hydrology and water quality to less than cumulatively considerable. There will be no changes to off-site and on-site drainage patterns as a result of Project design and compliance with mitigation measure **HYD-1**.

Land Use and Planning

The proposed Project is consistent with the existing land use designation of the General Plan and is consistent with the existing zoning. The proposed Project is consistent with existing and proposed development in the project vicinity . Because the proposed Project area is surrounded by existing urban development and land designated for urban development, and the proposed Project is consistent with both the General Plan and zoning designations for the site, the proposed Project would result in no cumulative impacts to land uses.

Mineral Resources

Currently, no mineral resources are known to exist at the proposed Project site and there is no significant potential that unknown mineral resources exist at the site. There are no known locally important mineral resource recovery sites identified by the Wildomar General Plan and the proposed project will not impact access to any unknown mineral sites located outside of the proposed project boundaries. Any impacts would be less than cumulatively considerable.

Noise

Development on the proposed Project site would result in temporary and permanent changes in the ambient noise levels in the vicinity; however, implementation of mitigation measures **NOI-1** though **NOI-5** would reduce cumulative noise impacts to less than cumulatively considerable. With mitigation incorporation, construction noise and noise from Project operations, will be within the acceptable standards mandated in the City's General Plan.

Population and Housing

Cumulative development in the vicinity of the proposed Project would indirectly increase the population and number of housing units in Wildomar and Riverside County. However, development at the proposed Project site is consistent with current land use designations and growth assumed in the Land Use Element of the Wildomar General Plan. The cumulative environmental and growth inducement effects are evaluated in the technical sections of this IS/MND. Given that this growth is anticipated in the General Plan, this impact is considered less than cumulatively considerable.

Public Services

Implementation of the proposed Project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the immediate area, may increase the demand for public services. However, with the implementation of the City's Standard Conditions and Requirements, any necessary infrastructure or facilities expansion will be reviewed for potential impacts. Impacts related to the proposed Project are less than cumulatively considerable.

Recreation

Implementation of the proposed Project will have a minimal impact upon Recreation Resources. Because the proposed Project is non-residential , any impacts are considered indirect, incremental and less than significant. Impacts related to the proposed Project are less than cumulatively considerable.

Transportation/Traffic

Development on the proposed Project site would contribute trips to the circulation network under cumulative conditions. As a standard condition, the Project applicant will be responsible to implement and pay its fair-share contribution toward necessary improvements through a payment of the TUMF. Mitigation Measure **TR-1** requires improvements to roadways and

intersections that will be affected by the implementation of the proposed Project. The proposed Project's impacts to cumulative traffic conditions would be less than cumulatively considerable as analyzed in the proposed Project TIA. The TIA analyzed Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project Conditions and determined that all impacts could be mitigated to a less than significant level.

Utilities and Service Systems

Construction and operational activities related to the development on the proposed Project may result in impacts to utilities and service systems, including solid waste. However, any impacts would be less than cumulatively considerable. As discussed and analyzed in Section V.17, Utilities and Service Systems, of this Initial Study, implementation of the proposed Project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Sufficient water supplies are available to serve the project from existing entitlements and resources and no new or expanded entitlements are needed. Adequate wastewater capacity exists to serve the project's projected demand in addition to the provider's existing commitments. Lastly, the proposed Project will be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and the proposed Project will comply with federal, state, and local statutes and regulations related to solid waste. Project impacts, while incremental, will not be cumulatively considerable.

c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? *Less Than Significant Impact with Mitigation Incorporated*

The proposed Project does not have the potential to significantly adversely affect humans, either directly or indirectly. While a number of impacts were identified as having a potential to significantly impact humans, with the identified mitigation measures and standard requirements, these impacts are expected to be less than significant. With implementation of the identified measures, the proposed Project and associated future development are not expected to cause significant adverse impacts to humans. All significant impacts are avoidable, and the City of Wildomar will ensure that measures imposed to protect human beings are implemented.

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April 2023 | Addendum to the Rancon Medical Office/Retail Project Plot Plan and Tentative Parcel Map No. 36492 IS/MND
State Clearinghouse No. 2013111063

PA 22-0085 Wildomar Commerce Center (Addendum to the Rancon Medical Office/Retail Project Plot Plan and Tentative Parcel Map No. 36492 IS/MND)

City of Wildomar

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1. Introduction

The City of Wildomar ("City") approved the Rancon Medical Office/Retail Project Plot Plan and Tentative Parcel Map No. 3649 ("Approved Project") on October 1, 2014. An Initial Study/Mitigated Declaration (IS/MND) was prepared for the Approved Project in 2013 (SCH# 2013111063). The applicant is proposing to make changes to the Approved Project, as detailed in Section 3, *Modified Project Description*, below. The Wildomar Commerce Center ("Modified Project") proposes revisions to the Approved Project's site plan.

1.1 BACKGROUND

1.1.1 2014 Adopted IS/MND

The City prepared an Initial Study/Mitigated Negative Declaration for the Rancon Medical Office/Retail Project Plot Plan and Tentative Parcel Map No. 36492 project to analyze the impacts associated with the construction and development of 294,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses, and a 3,000 square foot drive-through fast food restaurant at the vacant project site. The Approved Project included the approval of Tentative Parcel Map No. 36492 to subdivide 29.40 gross acres/25.99 net acres into 13 parcels for commercial, industrial, and open space uses. Plot Plan No. 12-0053 of the Approved Project included two phases—Phase 1 would have included 96,240 square feet of commercial, retail, restaurant, office (including medical), and light industrial, and Phase 2 would have result in 198,660 square feet of building space on the southern portion of the project site. Ultimate development of the Approved Project would have resulted in 294,900 square feet of business park uses, 42,400 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses, and a 3,000-square foot drive-through fast food restaurant.

The Approved Project also consisted of several roadway improvements, including the dedication of approximately 3.41 acres to the City of Wildomar on Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive, and "Lot C" for right-of-way purposes. The Approved Project provided access via entry/exit points off of Clinton Keith Road, Elizabeth Lane, Bunny Trail, and "Lot C," and Yamas Drive. Construction for Phase 1 of the Approved Project was anticipated to commence in fall of 2013, lasting for approximately 23 months, and construction for Phase 2 was anticipated to commence in spring of 2015, lasting for approximately 26 months.

The IS/MND was circulated for public review from November 20, 2013, to December 30, 2013, and the City adopted the IS/MND ("Adopted IS/MND") on October 1, 2014 (State Clearinghouse No. 2013111063). The IS/MND for the Approved Project found that impacts to Aesthetics, Agricultural Resources, Geology and Soils, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems would either result in no impact or less than significant impacts. Mitigation measures were identified for Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas

Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, and Transportation. While impacts to Air Quality and Greenhouse Gas Emissions were determined to be less than significant, the Approved Project voluntarily adopted mitigation measures to further reduce project impacts from construction and operational emissions. Upon implementation of the mitigation measures, all impacts were found to be reduced to a level of less than significant.

1.1.2 Addendum to the Approved Project

The City is preparing an addendum to the Adopted IS/MND ("Addendum") to amend the Approved Project, including revisions to the approved site plan. The changes proposed (see Section 3, *Modified Project Description*, below) by the City will trigger a requirement for additional CEQA review since the changes proposed under the Modified Project were not initially part of the Approved Project, nor was the Modified Project analyzed for its impacts in the Adopted IS/MND.

1.2 ENVIRONMENTAL PROCEDURES

1.2.1 CEQA Requirements

According to Section 15164(a) of the CEQA Guidelines, an addendum shall be prepared if some changes or additions to a previously certified EIR are necessary, but none of the conditions enumerated in CEQA Guidelines Sections 15162(a)(1)-(3) calling for the preparation of a subsequent EIR have occurred. As stated in CEQA Guidelines Section 15162 (Subsequent EIRs and Negative Declarations):

> When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
>
> 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
>
> 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
>
> 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or negative declaration was adopted, shows any of the following:
>
> (a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The proposed changes from the Modified Project will not result in any of the conditions outlined in CEQA Guidelines Sections 15162(a)(1)-(3) because they will not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects requiring major revisions to the Adopted IS/MND. Accordingly, the Addendum provides the substantial evidence required by CEQA Guidelines Section 15164(e) to support the finding that a subsequent EIR is not required and an addendum to the Adopted IS/MND is the appropriate environmental document to address changes proposed by the Modified Project.

As stated in CEQA Guidelines Section 15164 (Addendum to an EIR):

a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

After careful consideration of the potential environmental impacts of the Modified Project, the City, as lead agency, has determined that none of the conditions requiring preparation of a subsequent or supplemental EIR have occurred. The City, therefore, has determined that the circumstances described in CEQA Guidelines Section 15164 apply to the Modified Project, and an addendum to the Adopted IS/MND is

appropriate. This Addendum compares the Modified Project to the designated land uses and impacts for the Approved Project as evaluated in the Adopted IS/MND.

1.2.2 Scope of Subsequent Analysis

The Addendum evaluates the changes to the Approved Project. The Modified Project will increase the total building square footage for the development in the northern portion of the site by 28 square feet. The uses in this portion of the project site will also be modified to replace the Approved Project's two medical/professional office buildings, three retail buildings, and one fast-food building (totaling 96,240 square feet), with two retail/service-oriented commercial, office, showroom and industrial buildings, and one flex office/warehouse building (totaling 96,268 square feet).

In the southern portion of the site, the Modified Project will reduce the total buildings by seven and the total square footage by 1,745 square feet compared to what was analyzed under Phase 2 of the Approved Project. The Approved Project proposed to construct nine industrial buildings totaling 198,660 square feet, while the Modified Project proposes to construct two industrial buildings totaling 196,915 square feet. The Modified Project will construct the roadway improvements for Clinton Keith Road, Elizabeth Lane, and Bunny Trail as described and analyzed in the Adopted IS/MND; access to the site will remain similar to the Approved Project, with the exception of the addition of a second and third driveway on Clinton Keith Road and a second driveway on Elizabeth Lane.

As the Modified Project will result in changes to the total building square footages in addition to the number, uses, and configuration of the buildings on-site, changes to Air Quality, Energy, Greenhouse Gas Emissions (GHG), Noise, and Transportation may occur. As such, the Addendum will provide technical studies to evaluate these impacts associated with the Modified Project. In the case that new conditions arise from the evaluation of these topics, the Addendum will modify the existing adopted mitigation measures, as applicable. The Addendum also considers whether there is any new information of substantial importance that was not known and could not have been known with exercise of reasonable diligence at the time that the IS/MND was adopted in 2014. The Addendum examines whether, as a result of any changes or any new information, a subsequent Environmental Impact Report (EIR) or MND may be required. This Addendum includes an analysis of the provisions of California Public Resources Code, Section 21166, and Section 15164 of the CEQA Guidelines and their applicability to the Modified Project.

Pursuant to the provisions of CEQA and the State CEQA Guidelines, the City is the lead agency with the responsibility of deciding whether to approve the requested action. As lead agency under CEQA, the City is required to evaluate the environmental impacts associated with the Modified Project as it requires a discretionary approval.

2. Environmental Setting

2.1 PROJECT LOCATION

The project site is in the City of Wildomar in western Riverside County, as shown in Figure 1, *Regional Location*. The site is located at the southwest corner of Clinton Keith Road and Elizabeth Lane, bound by Clinton Keith Road to the north, Yamas Drive to the west, Elizabeth Lane to the east, and Bunny Trail to the south, as shown in Figure 2, *Local Vicinity,* and Figure 3, *Aerial Photograph*. The site encompasses Assessor's Parcel Numbers (APN) 380-250-052, -053, -054, -055, -056, and -057, which have been revised as part of the Modified Project's proposed Tentative Parcel Map. However, project activity under the Modified Project will occur within the same footprint as the Approved Project. The Modified Project's proposed parcel revisions are shown in Figure 4, *Modified Project Conceptual Parcel Map*.

2.2 ENVIRONMENTAL SETTING

Existing Land Use

The project site is currently vacant and contains sparse vegetation. Two portions of the site fronting Elizabeth Lane contain residual concrete foundations and fencing surrounds these foundations.

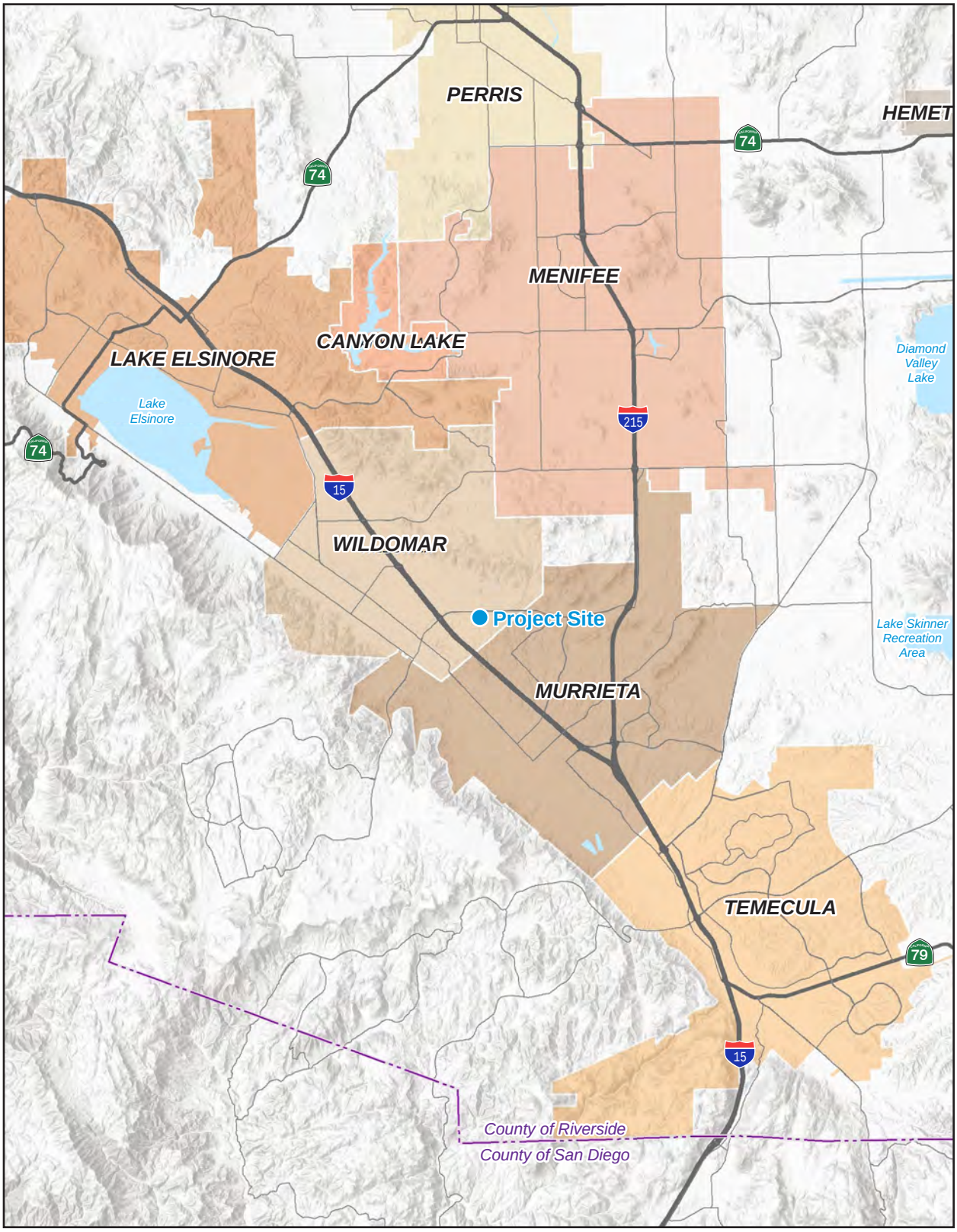
Surrounding Land Use

The project site is surrounded by vacant land to the north, west and south. The vacant site north of the project site is designated Open Space Recreation Freeway and zoned Rural Residential; the site south of the project site is designated High Density Residential and Highest Density Residential, and zoned Rural Residential and Industrial Park; and the site west of the project site is designated Highest Density Residential and Commercial Retail, and zoned Rural Residential. East of the project site is a self-storage facility with General Plan designation Commercial Office and Manufacturing-Service Commercial zoning. A multi-family residential apartment complex is located approximately 100 feet southwest of the project site and a single-family residential subdivision is located approximately 150 feet northeast of the site, as shown in Figure 3.

2. Environmental Setting

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Figure 1 - Regional Location



Note: Unincorporated county areas are shown in white.

0 3
Scale (Miles)

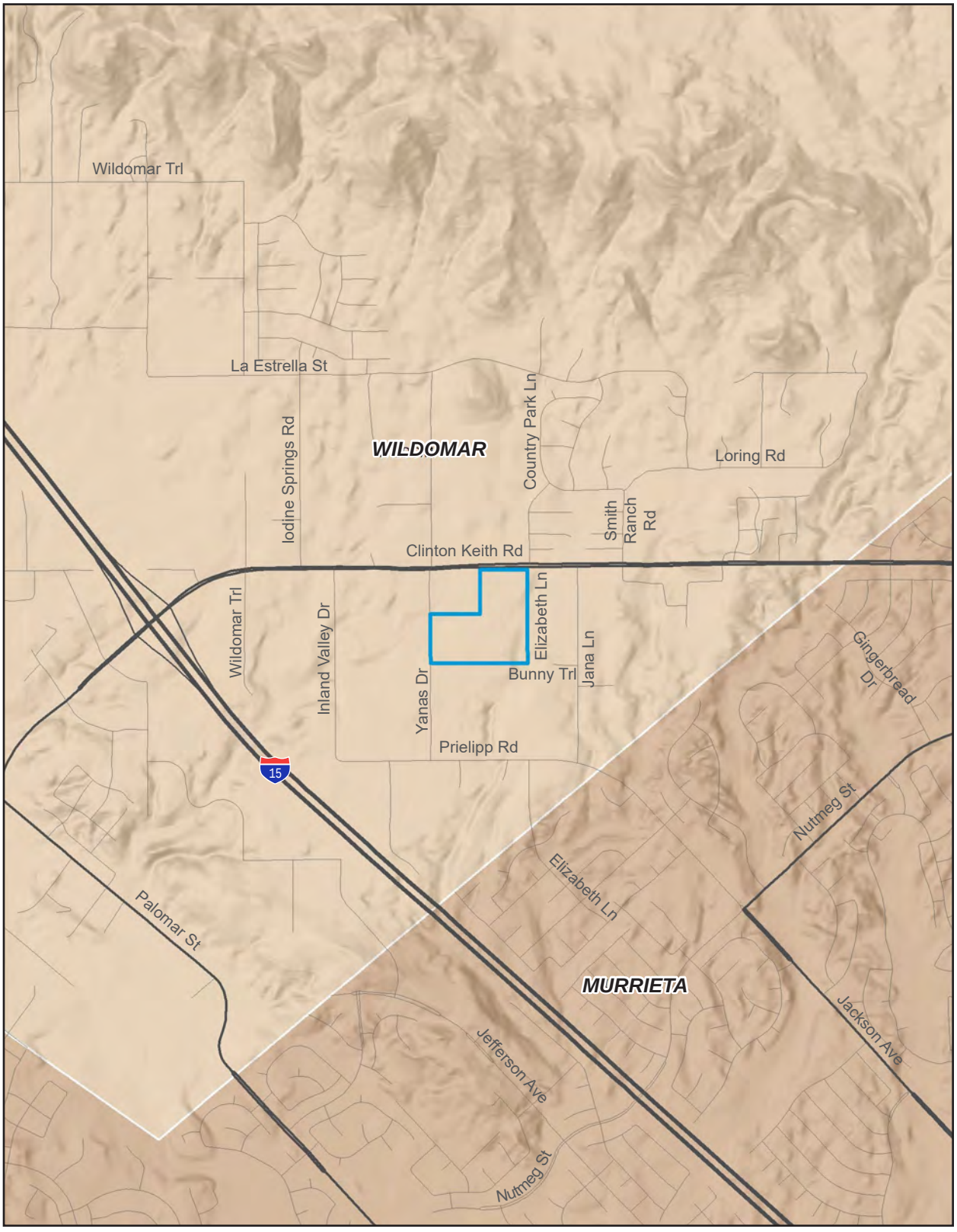
Source: Generated using ArcMap, Inc., 2023.

PlaceWorks

2. Environmental Setting

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Figure 2 - Local Vicinity



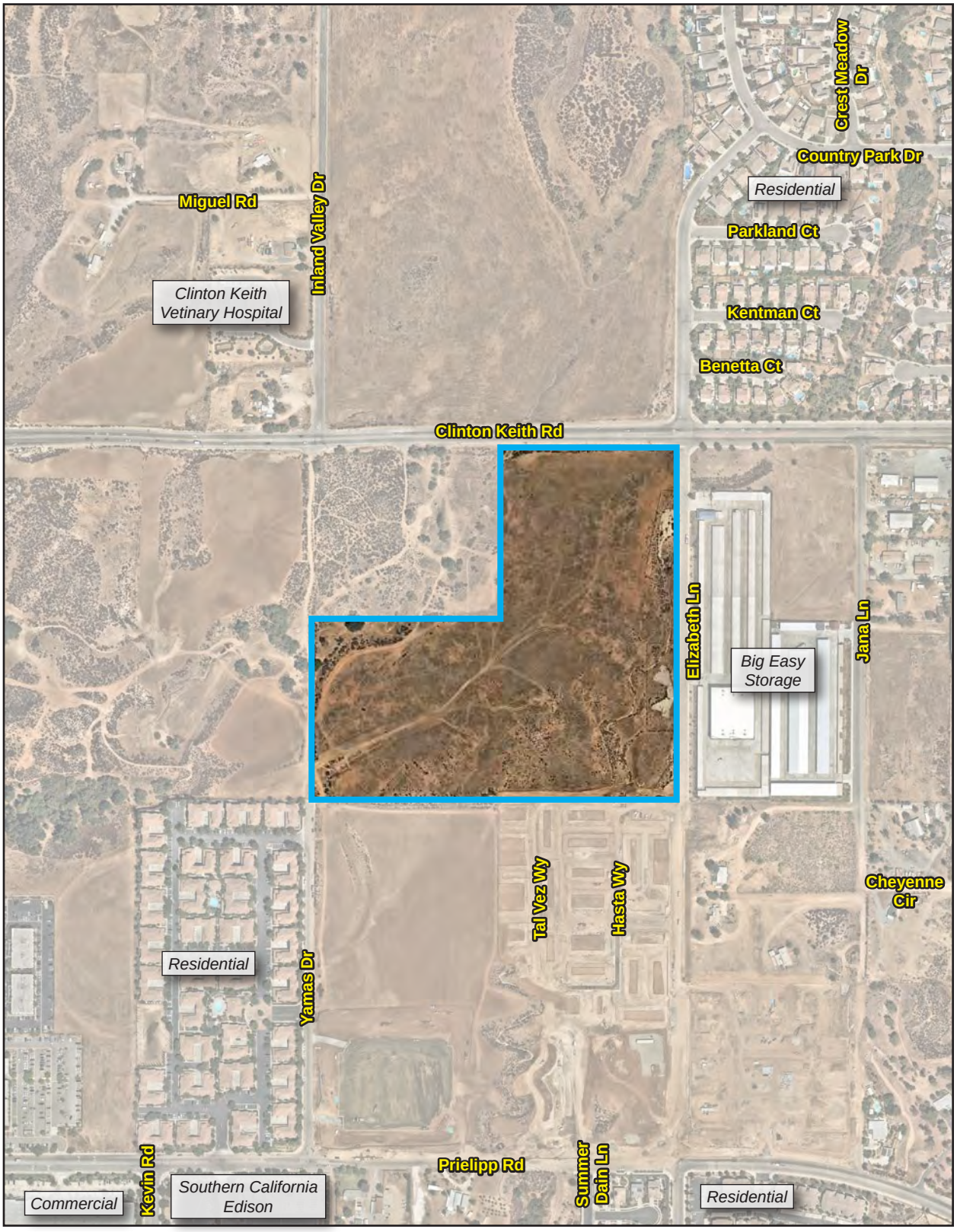
Source: Generated using ArcMap, Inc., 2023.

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2. Environmental Setting

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Figure 3 - Aerial Photograph



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Scale (Feet)

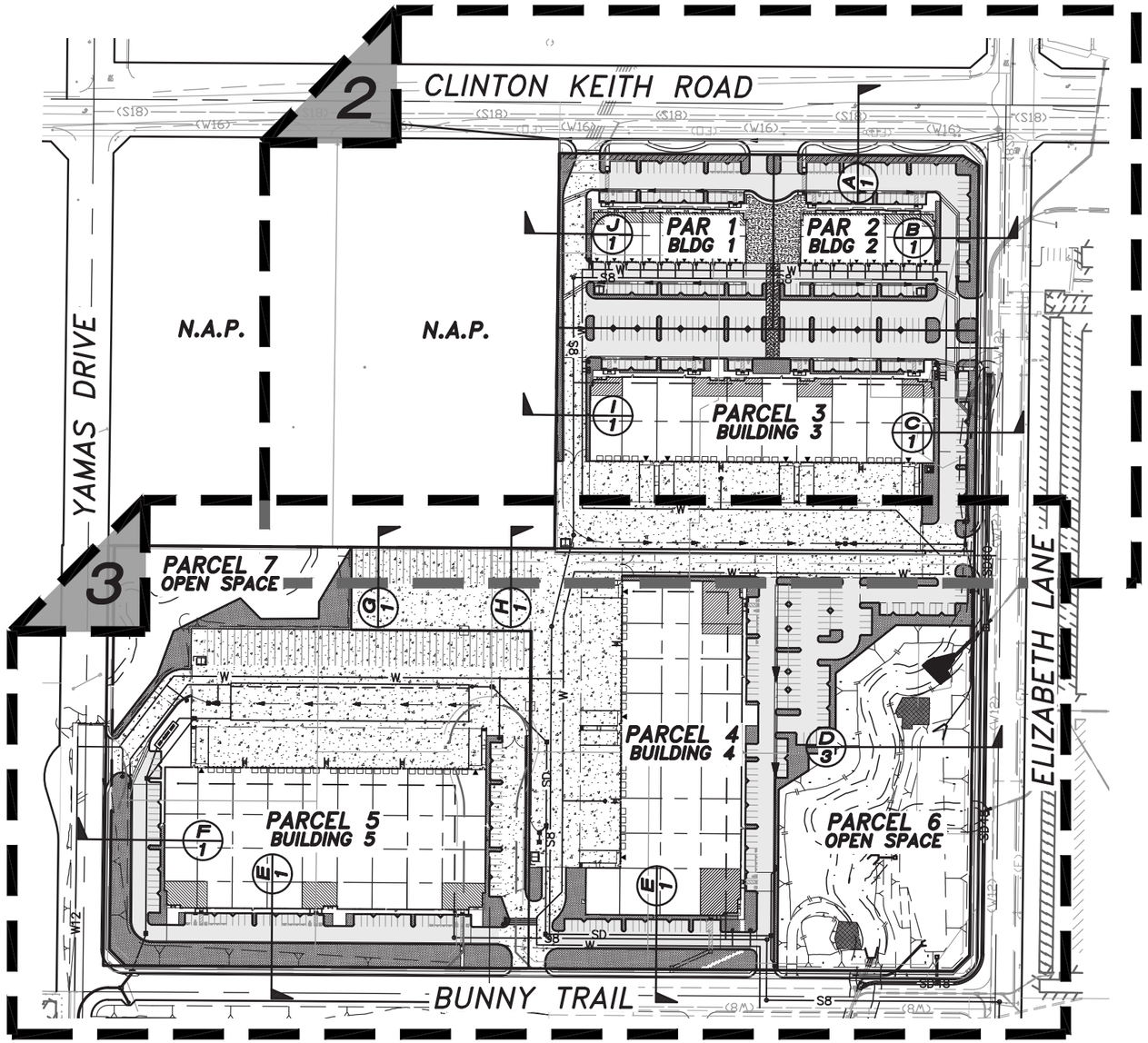
Source: Nearmap, Inc., 2023.

PlaceWorks

2. Environmental Setting

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Figure 4 - Modified Project Conceptual Parcel Map



0 170
Scale (Feet)

Source: SB&O, Inc., 2023.

2. Environmental Setting

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3. Modified Project Description

3.1 MODIFIED PROJECT

The Modified Project, known as the Wildomar Commerce Center project, is a proposed five building complex that will encompass approximately 30 gross acres on the same project site as the previously proposed Rancon Medical and Education Center project. The Modified Project will also revise the existing parcel map for the project site resulting in the subdivision of the site into seven parcels, five of which will each contain one of the proposed buildings with the remaining two containing open space, as shown on Figure 4.

Proposed Buildings and Uses

On the northern portion of the site, the Modified Project will construct two retail/service oriented commercial, office, showroom, and industrial use buildings, referred to in Figure 5, *Modified Project Site Plan,* as Buildings 1 and 2. Building 1 will consist of 15,005 square feet and Building 2 will consist of 17,255 square feet. Building 3, located south of Buildings 1 and 2, will consist of 64,008 square feet of flex office/warehouse use space. The southern portion will consist of Buildings 4 and 5, each containing private truck courts and yard areas. Both buildings will house industrial uses; Building 4 consists of 96,975 square feet and Building 5 consists of 99,940 square feet. The total building square footage under the Modified Project will be 293,183 square feet. The complex will also contain 303,191 square feet of landscaping including on-site and off-site landscaping and the preservation areas on the site which are encompassed by Parcels 6 and 7 (see Figure 4).

Roadway and Offsite Improvements

As with the Approved Project, the Modified Project will construct several roadway improvements on streets surrounding the project site to provide circulation within and access to/from the proposed development. These improvements will include the widening of Clinton Keith Road and Elizabeth Lane in addition to the construction of a new roadway, Bunny Trail, on the southern boundary of the project site. These improvements are elaborated upon in the Adopted IS/MND.

Additionally, the Modified Project will be completing the following improvements on Yamas Drive:

- Extend a new 24-inch storm drain main approximately 775 feet south of Bunny Trail and construct a new 24-inch storm drain approximately 340 feet north of Bunny Trail into the project site.

- Construct approximately 400 linear feet of a new 12-inch water main along the project frontage with connections to an existing water main in Bunny Trail at the southern westerly corner of the project site.

3. Modified Project Description

- Construct approximately 400 feet of new pavement approximately 40 feet wide and a new curb/gutter, sidewalk, parkway landscape, street lights, and necessary ADA ramps and driveway approaches north of Bunny Trail.

Access and Parking

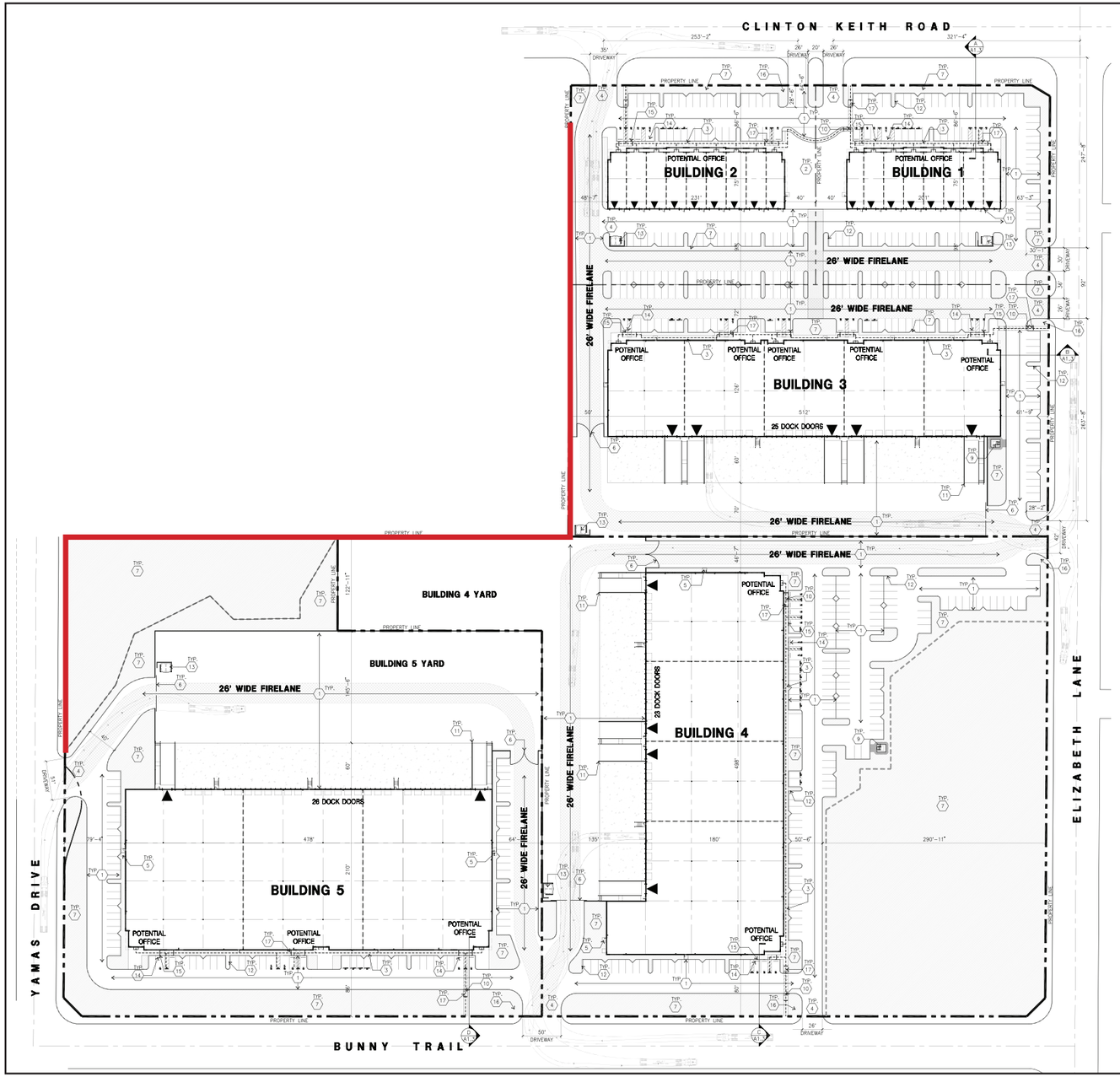
Access to the northern portion of the development (Buildings 1, 2 and 3) will be provided via three driveway entrances/exits on Clinton Keith Road north of the site and two driveway exit/entrance on Elizabeth Lane east of the site. A third driveway on Elizabeth Lane will provide access to both portions of the site. Access to the southern portion of the development (Buildings 4 and 5) will be provided via one driveway on Bunny Trail south of the site and one driveway on Yamas Drive from west of the site. The northern and southern portions of the site will be internally accessible to one another.

The Modified Project will provide a total of 559 parking stalls on-site (484 standard auto-parking stalls and 75 larger trailer parking stalls).

Sound Wall

The Modified Project will also include an eight-foot tall Concrete Masonry Unit (CMU) wall on the northern boundary of the southern portion of the site, as shown in Figure 5. This project design feature was originally incorporated into the Approved Project as a requirement under Mitigation Measure NOI-4, discussed in the analysis below. However, while Mitigation Measure NOI-4 required the construction of a noise control barrier of six feet in height to minimize construction noise impacts to sensitive receptors, the Modified Project will construct a wall that is eight feet in height.

Figure 5 - Modified Project Site Plan



SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONC. PAVEMENT.
2. OUTDOOR EMPLOYEE PATIO AREA WITH TABLE/BENCH AND PLANTER, SEE CONCEPTUAL LANDSCAPE PLANS.
3. CONCRETE WALKWAY
4. SCORED CONCRETE DRIVEWAY APRONS, SEE CONCEPTUAL LANDSCAPE PLANS.
5. 5'-6"X5'-6"X4" MIN. THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. SLOPE TO BE 1/4" : 12" MAX. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY W/ 1:20 MAX. AS REQ. BY CITY INSPECTOR.
6. 8' HIGH METAL MANUAL OPERATED GATES W/ KNOX-PAD LOCK PER FIRE DEPARTMENT STANDARDS.
7. LANDSCAPE. SEE CONCEPTUAL LANDSCAPE PLANS.
8. BIKE RACK.
9. APPROXIMATE LOCATION OF TRANSFORMER. PROVIDE SCREENING TO BLOCK VIEW FROM THE PUBLIC. MAINTAIN 5' CLEAR FROM PAVING ALL SIZE.
10. TRUNCATED DOME.
11. CONC. FILLED GUARD POST "6 DIA. U.N.O. 42" HIGH.
12. PROVIDE 12" WIDE CONCRETE STEP-OUT ADJACENT TO PARKING STALLS.
13. TRASH ENCLOSURE PER CITY STANDARD.
14. PRE-CAST CONCRETE WHEEL STOP.
15. HANDICAPPED PARKING STALL SIGN.
16. HANDICAPPED ENTRY SIGN.
17. ACCESSIBLE CURB RAMP

SITE LEGEND

- LANDSCAPED AREA
- STANDARD PARKING STALL (9' X 18')
- HANDICAP PARKING STALL (9' X 18')
- PROPERTY LINE
- PATH OF TRAVEL
- 26' FIRE LANE.

LEGAL DESCRIPTION

(PER FIRST AMERICAN TITLE COMPANY PRELIMINARY REPORT NO. NCS-1119864-ONT1 DATED MARCH 30, 2022.)

THE LAND REFERRED TO IN THIS COMMITMENT IS SITUATED IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL A:

PARCEL 1 THROUGH 5 AND LETTERED LOTS "A" THROUGH "E" OF PARCEL MAP NO. 36492-1, IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 251, PAGES 51 THROUGH 54, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL B:

PARCEL 1 THROUGH 4 OF PARCEL MAP NO. 36492-2, IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 251, PAGES 55 THROUGH 57, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL C:

PARCEL 1 THROUGH 4 OF PARCEL MAP NO. 36492, IN THE CITY OF WILDOMAR, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 251, PAGES 72 THROUGH 74, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

FOR CONVEYANCES PURPOSES ONLY APN: 380-250-022

THE LAND SHOWN IN THIS SURVEY IS THE SAME AS THAT DESCRIBED PER FIRST AMERICAN TITLE COMPANY PRELIMINARY REPORT NO. NCS-1119864-ONT1 DATED MARCH 30, 2022.

8-Foot CMU Wall

0 165
Scale (Feet)

Source: HPA, 2023.

3. Modified Project Description

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3.1.2 Approved Project vs. Modified Project

The Modified Project will replace the Approved Project's two medical/professional office buildings, three retail buildings and one fast food restaurant, totaling 96,240 square feet, on the northern portion of the site with two retail/service oriented commercial, office, showroom and industrial use buildings (Buildings 1 and 2) totaling 32,260 square feet and an additional flex office/warehouse use building totaling 64,008 square feet (Building 3). The total proposed building square footage for the north portion of the site is 96,268 square feet. This portion of the development was documented as Phase 1 in the Adopted IS/MND.

Under the Approved Project, nine industrial buildings were planned for Phase 2 of the project on the southern portion of the site, totaling 198,660 square feet. The Modified Project will replace these buildings with two industrial buildings for industrial/warehouse uses, totaling 196,915 square feet (Buildings 4 and 5). The Modified Project will also involve a change to the existing parcel map; each building will be constructed on a separate parcel.

As a result of the Modified Project's changes to the number, configuration, uses and square footage of the buildings on-site, it will also revise the number of parking stalls on-site and landscaping square footage. The Approved Project would have provided 502 parking spaces and 91,453 square feet of landscaping for Phase 1 of the development (the northern portion of the site). Phase 2 (southern portion of the site) would have provided parking in accordance with the City's standards. Landscaping for Phase 2 had not yet been determined at the time of the publishing the Adopted IS/MND.

Access to the site under the Modified Project will remain similar to the Approved Project with the exception of the addition of a second and third entrance/exit driveway from Clinton Keith Road to the northwestern boundary of the project site and a second entrance/exit driveway from Elizabeth Lane to the eastern boundary of the project site.

4. Environmental Analysis

As explained in Section 1.2.1, no subsequent MND or negative declaration must be prepared for the 2022 Modified Project unless the City (as lead agency under CEQA) determines that specified conditions are met under California Public Resources Code Section 21166, and Sections 15162 and 15164 of the CEQA Guidelines.

The Approved Project's Adopted IS/MND found that development of the project would result in less than significant impacts with regard to Aesthetics, Agricultural and Forestry Resources, Geology and Soils, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems. The following issues were found to be less than significant with the incorporation of mitigation measures: Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, and Transportation. While impacts to Air Quality and Greenhouse Gas Emissions were determined to be less than significant, the Approved Project voluntarily adopted mitigation measures to further reduce project impacts from construction and operational emissions.

4.1 IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT

The following discussion compares the impacts of the Modified Project to the Approved Project, as evaluated in the Adopted IS/MND.

Aesthetics

According to the Adopted IS/MND, impacts to aesthetics from the Approved Project would be less than significant through compliance with City standards.

The Modified Project will result in a different configuration of the buildings on-site when compared to the Approved Project, though it does not propose any substantial change in the intensity or scale of the approved development. Four of the buildings under Phase 1 of the Approved Project would have had a maximum building height of 26 feet while the other two had proposed maximum building heights of 36 feet. The building heights under the Modified Project will be shorter; two buildings will have a maximum height of 18 feet and the other three buildings will have a maximum height of 32 feet. Additionally, the Approved Project and Modified Project feature similar exterior façades—both the Approved Project and Modified Project largely feature concrete panels with aluminum accents and a metal canopy.

Furthermore, the Modified Project's uses are consistent with, and permitted by, the project site's existing Business Park General Plan land use designation and Industrial Park zoning. Like the Approved Project, the Modified Project will comply with all existing City design regulations and guidelines, such as the placement of buildings and structures; the design of setback areas; landscaping; and architectural design parameters, lighting standards, and sign standards. With adherence to regulatory requirements, the aesthetic impacts of

the Modified Project will be no more substantial than analyzed in the Adopted IS/MND, which found impacts to Aesthetics to be less than significant. No new mitigation measures are necessary, and no alternatives analyses are required.

Agricultural Resources

The project site and nearby vicinity are not located within the an agricultural preserve (Williamson Act) or classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program of the California Department of Conservation. There are no agricultural or forestry uses on-site. The Adopted IS/MND found impacts to Agricultural Resources to be less than significant.

The Modified Project will not result any new or more severe impacts beyond those addressed in the Adopted IS/MND. No new mitigation measures are necessary, and no alternatives analyses are required.

Air Quality

The Approved Project was determined to have less than significant impacts on air quality. However, the Approved Project voluntarily adopted two mitigations measures to reduce the project's construction and operational emissions. See Mitigation Measures AQ-1 and AQ-2 in Appendix 1, *Approved Project Mitigation Monitoring and Reporting Program*.

Air quality impacts under the Modified Project were analyzed by MD Acoustics in a study dated September 20, 2022 (see Appendix 2, *Wildomar Commerce Center Air Quality, Greenhouse Gas, Health Risk, and Energy Impact Study*). The study found that construction-source emissions will not exceed either applicable regional thresholds of significance or Localized Significance Thresholds established by the South Coast Air Quality Management District (SCAQMD). Additionally, the Modified Project's will comply with all applicable SCAQMD construction-source emission reduction rules and guidelines, remaining consistent with the Basin Air Quality Management Plan (AQMP) (MD Acoustics 2022a). Furthermore, potential construction-source odor impacts are therefore considered less than significant due to the temporary, short-term, and intermittent nature of such odors (MD Acoustics 2022a). Compliance with the applicable SCAQMD rules will ensure that impacts from construction emissions are less than significant.

The Modified Project's operational emissions will also not exceed the SCAQMD's applicable regional thresholds or result in or cause a localized air quality impact. Project-related traffic will not cause or result in CO concentrations exceeding applicable state and/or federal standards (MD Acoustics 2022a). The Modified Project's operational emissions will not conflict with the AQMP, nor does it propose any uses or activities that would result in potentially significant operational-source odor impacts (MD Acoustics 2022a). Potential operational-source odor impacts are therefore considered less than significant.

Operation of the Modified Project may result in the emission of diesel particulate emissions associated with truck idling at the proposed loading docks. To assess these conditions, the study conducted a Health Risk Assessment for the Modified Project and concluded that distance from the loading docks to sensitive receptors is adequate to eliminate any health risk associated with diesel trucks. The study also notes that the State restrictions on truck idling will also help with ensuring there is no health risk from the Modified Project.

4. Environmental Analysis

Overall, impacts to air quality from the Modified Project will be similar to those of Approved Project. While the Approved Project voluntarily adopted mitigation measures to reduce air quality impacts, both the Approved Project and the Modified Project have less than significant impacts with regard to air quality. The following mitigation measures from the Approved Project, in which their impacts were analyzed in the Adopted IS/MND, will be incorporated into the Modified Project as Conditions of Approval:

- **COA-1 – Construction.**

  a. Install and maintain track-out control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access).

  b. Limit fugitive dust sources to 20 percent opacity.

  c. Require a dust control plan for earthmoving operations.

  d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

  e. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite,

  f. Post a publicly visible with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.

  g. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.

  h. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.

  i. Require high pressure injectors on diesel construction equipment.

  j. Utilize only CARB Tier 3 or better certified equipment for construction activities.

  k. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.

  l. Suspend use of all construction equipment operations during second stage smog alerts.

- **COA-2 – Operation.**

  a. Install EV charging facilities for a minimum of 1% of all parking spaces.

  b. Provide preferential parking locations for EVs and CNG vehicles.

c. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.

d. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by City ordinance. Consider roadside, sidewalk, and driveway shading.

e. Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment or contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.

f. Provide secure, bicycle parking for employees.

g. Provide direct safe, direct bicycle access to adjacent bicycle routes.

h. Provide short-term bicycle parking for retail customers and other non-commute trips.

Biological Resources

As discussed in the Adopted IS/MND, the Approved Project would result impacts to burrowing owls and migratory birds in addition to interfering with a portion of a jurisdictional drainage. To address these impacts, the Approved Project adopted Mitigation Measures BIO-3 through BIO-6. The Approved Project also adopted Mitigation Measure BIO-2, requiring payment of the Stephen's Kangaroo Rat Habitat Conservation Plan fee and Mitigation Measure BIO-7 which requires that the project comply with the provisions of the Western Riverside County Multiple Species Habitat Conservation Plan. In anticipation of potential off-site grading, the Approved Project included Mitigation Measure BIO-1 to require an assessment of potentially suitable habitat for sensitive plant species if any grading activities are to occur off-site.

The Modified Project will not result in the development of any land that was not evaluated in the Adopted IS/MND, and any development of that same land would result in the same impacts to biological resources. Regulatory requirements and mitigation measures specified in the IS/MND will continue to apply to the Modified Project. No new mitigation measures are necessary, and no alternatives analyses are required.

Cultural Resources, Tribal Cultural Resources, and Paleontological Resources

The Adopted IS/MND did not find any historical resources or sites of tribal cultural value within or adjacent to the project site. However, due to possibility of disturbing unknown sub-surface resources on the project site, Mitigation Measures CUL-1 through CUL-6 were adopted as part of the Approved Project, reducing impacts to archaeological and tribal cultural resources to less than significant. The IS/MND also determined that the project vicinity has high paleontological sensitivity and adopted Mitigation Measures CUL-7 through CUL-9 to reduce impacts to paleontological less than significant.

All actions under the Modified Project will occur within the project site boundary that was analyzed in the Adopted IS/MND and therefore impacts to cultural, tribal cultural, and paleontological resources are expected to remain the same. The Modified Project will be required to comply with all regulations and

mitigation measures applicable to the Approved Project. No new mitigation measures are necessary, and no alternatives analyses are required.

Energy

The Adopted IS/MND notes in the analysis of the Approved Project's energy-related greenhouse gas emissions that the Approved Project would be required to implement the 2013 Title 24 California Building Energy Efficiency Standards, which represented 30 percent reduction in energy usage from the 2008 Title 24 standards. The Adopted IS/MND also noted that Approved Project would be consistent with the CARB Scoping Plan including the measure to maximize energy efficiency in buildings and appliances which the Approved Project would have met through compliance with the 2013 Title 24 standards.

The Modified Project's construction equipment, transportation energy demands, and facility energy demands use were calculated in the MD Acoustics study (Appendix 2). The study concluded that the project activities expected under the Modified Project will not result in the inefficient or wasteful consumption of energy or fuel.

The construction equipment used during the Modified Project's construction phase would be required to conform to the California Air Resources Board's (CARB) regulations and the California emissions standards. The CARB Airborne Toxic Control Measure limits idling times of construction vehicles to no more than five minutes, thereby minimizing unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. The project is also required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by Southern California Edison and the Southern California Gas Company. Overall, the Modified Project does not propose uses or operations that would inherently result in excessive and wasteful energy consumption.

Impacts under the Modified Project will be less than significant with regard to energy. No mitigation is required.

Geology and Soils

A Preliminary Geotechnical/Fault Investigation was conducted for the Approved Project, and the Adopted IS/MND concluded that the Approved Project would less than significant impacts related to geology and soils. Conditions of approval were required under the Approved Project include the requirements that all grading shall conform to the California Building Code, planting shall occur within 30 days of meeting final grades to minimize erosion, and a geotechnical soils report be submitted to the City engineer for review.

The Modified Project will have no additional geological and soil impacts. The general placement of structures resulting from the proposed changes does not vary substantially from the plan for structure placement in the Adopted IS/MND. The Modified Project will occur within the same project site boundary as analyzed in the Adopted IS/MND. Therefore, the impact analysis of soil stability presented in the IS/MND is still applicable. The Modified Project will continue to comply with all applicable regulations and conditions of approval to ensure that impacts are less than significant. No new mitigation measures are necessary, and no alternatives analyses are required.

Greenhouse Gas Emissions

Greenhouse gas emissions under the Approved Project were analyzed in an Air Quality and Greenhouse Gas Impact Analysis Report dated February 13, 2013. Impacts for the Approved Project were determined to be less than significant. Nevertheless, the Approved Project voluntarily adopted one mitigation measure that would further reduce impacts to greenhouse gas emissions (Mitigation Measure GHG-1). Mitigation Measures AQ-1 and AQ-2, which would also reduce impacts to air quality and are discussed above, include requirements to reduce construction and operation related emissions, respectively. Since the requirements included in Mitigation Measures AQ-1 and AQ-2 would also reduce greenhouse gas emissions, the Approved Project also adopted GHG-1, requiring the implementation of Mitigation Measures AQ-1 and AQ-2. Mitigation Measure GHG-1 also required that the project applicant implement the measures contained in Table 5.7-5 of the Adopted IS/MND. This Table in the Adopted IS/MND shows the Approved Project's annual water-related greenhouse gas emissions.

The Modified Project's emissions and greenhouse gas emissions Impacts were calculated and analyzed in the MD Acoustics study (Appendix 2). Emissions from project construction and worker vehicles are estimated to be 90.69 metric tons of CO_2e per year amortized over a period of 30 years. (MD Acoustics 2022a). Total project emissions are expected to be 4,903.35 metric tons of CO_2e per year. These emissions do not exceed the SCAQMD threshold of 10,000 metric tons of CO_2e per year for industrial uses and therefore considered less than significant (MD Acoustics 2022a). The Modified Project was also analyzed for consistency with greenhouse gas emissions reducing plans, and was determined to be consistent with the Western Riverside Council of Government's Subregional Climate Action Plan as well as the CARB 2017 Scoping Plan.

Overall, impacts to greenhouse gas emissions from the Modified Project will be similar to those of Approved Project. While the Approved Project voluntarily adopted mitigation measures to reduce greenhouse gas emissions, both the Approved Project and the Modified Project have less than significant impacts with regard to greenhouse gas emissions. The following mitigation measure from the Approved Project, in which its impacts were analyzed in the Adopted IS/MND, will be incorporated into the Modified Project as a Condition of Approval (underline text shows revisions and ~~strikethrough~~ text shows deletions):

- **COA-3.** Prior to building permit approval, the City of Wildomar Planning ~~Department~~ Division shall require that the Project applicant implement the measures contained in Table 5.7-5 (of the Adopted IS/MND), as well as ~~Mitigation Measures~~ Conditions of Approval COA-1 and COA-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed project.

Hazards and Hazardous Materials

The Adopted IS/MND concluded that the Approved Project may create an additional possible hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. During the construction phase, it was determined that there could be potential for accidental release of petroleum products in sufficient quantity to pose a hazard. To mitigate this impact, the Approved Project adopted Mitigation Measure HAZ-1 to require a Stormwater Pollution Prevention Plan (SWPPP) (see Appendix 1). Additionally, the Adopted IS/MND concluded that the medical use portion of the project had the potential

to result in the accidental release of hazardous materials, necessitating the implementation of Mitigation Measures HAZ-2 and HAZ-3. These mitigation measures would require the preparation of a Hazardous Materials and Waste Management Plan and the inclusion of copies of Material Safety Data Sheets on-site during operation. Mitigation Measure HAZ-4 was also incorporated to control the accidental release of gas and included provisions for the storage of gas canisters containing hazardous or toxic substances. With the implementation of these mitigation measures, impacts related to the storage, use and disposal of hazardous materials and accidents involving the release of hazardous materials, were mitigated to less than significant.

All other thresholds under the Approved Project including the emission or handling of hazardous materials within a quarter mile of schools, being located on a list of hazardous materials sites, safety hazards from airports, interference with emergency response plans, and wildfire hazards were determined to have no impact.

Similar to the Approved Project, the Modified Project could also result in the routine transport, use and disposal of hazardous materials, including petroleum products, requiring the implementation of Mitigation Measure HAZ-1. The Modified Project may also store gas canisters containing hazardous or toxic substances, thereby, Mitigation Measure HAZ-4 is still applicable to the Modified Project. However, unlike the Approved Project, the Modified Project will not include medical office uses, and instead will consist of retail/service oriented commercial, office, showroom and industrial uses. Therefore, the Mitigation Measures HAZ-2 and HAZ-3, as shown in Appendix 1, are not applicable to the Modified Project. The other uses proposed under the Modified Project are similar to those of the Approved Project, and all other impacts related to hazards and hazardous materials are to be similar.

It should be noted since the adoption of the Adopted IS/MND, which determined that the project site is not within a Very High Fire Hazard Severity Zone (VHFHSZ), according to the most recent California Department of Forestry and Fire Protection's adopted Fire Hazard Severity Zone Maps, the project site is within a VHFHSZ (CAL FIRE 2023). As with all projects in the City, regardless of whether they are located in a VHFHSZ, the Modified Project would be required to demonstrate to the satisfaction of the City Building Official and the Riverside County Fire Chief, compliance with the 2022 California Building Code and the 2022 California Fire Code, prior to the issuance of building permits. The Modified Project, as with all projects in the City, shall also demonstrate compliance with the vegetation management requirements prescribed in California Fire Code Section 4906 and California Government Code Section 51182, prior to the issuance of a certificate of occupancy. Compliance with these regulations will ensure that wildfire impacts are less than significant under the Modified Project.

Hydrology and Water Quality

The Adopted IS/MND found that impacts related to groundwater supplies; flood hazard areas; failure of dams or levees; and inundation by seiches, tsunamis, and mudflows would either result in no impacts or less than significant impacts under the Approved Project. However, the IS/MND concluded that the Approved Project could result in the violation of water quality standards or waste discharge requirements, substantially alter the existing drainage pattern of the site resulting in erosion or flooding, exceed the capacity of existing stormwater drainage systems and contribute additional sources of polluted runoff, and degrade water quality.

To mitigate these impacts, the Approved Project adopted Mitigation Measure HYD-1, requiring a SWPPP and a Water Quality Management Plan (see Appendix 1).

The Modified Project will include revisions to the site plan approved under the Approved Project but does not propose development of any land not considered under the Adopted IS/MND. The Modified Project would be constructed within the same project site boundaries as analyzed in the Adopted IS/MND. The Modified Project will conform to all regulatory requirements in addition to those specified Mitigation Measure HYD-1 from the Approved Project. Therefore, impacts to hydrology and water quality will remain less than significant with mitigation incorporated under the Modified Project and no additional analyses or mitigation is required.

Land Use and Planning

The Adopted IS/MND found that the Approved Project would not physically divide an existing community or conflict with any applicable land use plans, policies, or regulations, and impacts were determined to be less than significant.

Like the Approved Project, the uses under the Modified Project, industrial and commercial uses, are consistent with the site's General Plan land use designation, Business Park, and zoning, Industrial Park, and are therefore, consistent with the City's General Plan and local ordinances. Furthermore, the adoption of the Approved Project's Mitigation Measures BIO-2, requiring the payment of the Stephen's Kangaroo Rat Habitat Conservation Plan fee, and BIO-7, requiring compliance with the Western Riverside County Multiple-Species Habitat Conservation Plan (MSHCP), would ensure that the Modified Project is consistent with the MSHCP.

Impacts would remain not significant under the Modified Project and no additional mitigation or analyses are required.

Mineral Resources

The Adopted IS/MND determined that the Approved Project would not result in the loss of a known mineral resource of regional or local value, resulting in no impacts related to mineral resources. The Modified Project will be developed within the same footprint as the Approved Project and therefore the Modified Project will not result in any additional impacts. No mitigation or further analyses are required.

Noise

The Adopted IS/MND conducted a preliminary acoustical analysis for the Approved Project dated July 2012. The Adopted IS/MND concluded that less than significant or no impacts related to excessive vibration and airport/airstrip noise would occur. However, impacts related to construction and operational noise were determined to be potentially significant requiring the implementation of Mitigation Measures NOI-1 through NOI-5 to mitigate impacts to less than significant.

Noise impacts under the Modified Project were analyzed by MD Acoustics in a study dated September 30, 2022 (see Appendix 3, *Wildomar Commerce Center Noise Impact Study*). Under the Modified Project, construction noise levels and vibration were determined to be less than significant with no mitigation required. However,

the noise impact study recommends the following construction noise reduction measures: (bracketed text references mitigation measure from the Approved Project)

- During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices. (NOI-1)
- The contractor should locate equipment staging areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction. (NOI-2)
- Idling equipment should be turned off when not in use. (NOI-1)
- Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging. (NOI-1)

The noise impact study also determined that Modified Project's operational noise levels would not exceed the City's noise limits as outlined in Section 9.48.040, General sound level standards, of the Wildomar Municipal Code, nor would the Modified Project's maximum operational noise levels exceed the existing ambient noise levels at the project site, resulting in less than significant impacts. As a project design feature, the Modified Project will include an 8-foot tall Concrete Masonry Units (CMU) wall along the western edge of the property, as shown in Figure 5. Traffic noise as a result of the Modified Project, was also determined to be less than significant since the anticipated increases would remain within the "normally acceptable range" of the project's use type as specified in the General Plan (MD Acoustics 2022b).

To incorporate these recommendations and project design features, the following mitigation measures from the Adopted IS/MND, shall be revised and incorporated as follows (underline text shows revisions and ~~strikethrough~~ text shows deletions):

- **Mitigation Measure NOI-1**: To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment and to avoid rattling and banging, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. The construction contractor shall also ensure all construction equipment is equipped with appropriate noise attenuating devices, and that idling equipment is turned off when not in use. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.

- ~~**Mitigation Measure NOI-4**: Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence.~~

  ~~It is important to note that the barriers' attenuation will be accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being~~

~~constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.~~

Noise and vibration impacts under the Modified Project will be less than significant with adherence to all applicable regulations, the incorporation of the project design feature, and the adoption of the modified Mitigation Measure NOI-1. As the Modified Project includes an 8-foot CMU wall as a project design feature, Mitigation Measure NOI-4 is no longer applicable; the remaining noise mitigation measures from the Approved Project (see Appendix 1) are still applicable to the Modified Project.

Population and Housing

The Adopted IS/MND determined that the Approved Project would not induce substantial unplanned population, nor would it result in the substantial displacement of a significant amount of people necessitating the construction of replacement housing. The Modified Project is expected to generate a similar number of employment opportunities as the Approved Project. It is anticipated that this employment will not lead to a significant relocation of workers due to the size of the existing labor pool in the area. Furthermore, due to the project site being vacant no displacement would occur under the Modified Project, as with the Approved Project.

Impacts under the Modified Project would remain less than significant, and no additional mitigation or analyses are required.

Public Services and Recreation

As determined in the Adopted IS/MND, impacts to public services and recreation under the Approved Project were less than significant. The Approved Project is not expected to result in activities that would create unusual fire or police protection needs nor is it expected to generate any new substantial population growth in the City. The Modified Project, as with the Approved Project, would be required to pay development impact fees for police and fire services as well as the Lake Elsinore School District school mitigation impact fee at the time of building permit issuance. Similar to the Approved Project, the Modified Project proposes commercial and industrial uses for the site, resulting in no additional population impacts beyond those discussed in the Adopted IS/MND.

Impacts under the Modified Project would remain less than significant, and no additional mitigation or analyses are required.

Transportation

The Adopted IS/MND conducted a study of the Approved Project's contribution to future traffic conditions in a Traffic Impact Analysis (TIA) Report dated July 2013. The TIA concluded that the Approved Project would be required to implement a series of improvements at affected roadways and intersections in order to meet the required level of service. These improvements were incorporated as Mitigation Measure TR-1 (see Appendix 1). The Approved Project was also required to pay the Western Riverside Council of Government's Transportation Uniform Mitigation Fee and the City's Development Impact Fee as a condition of approval.

4. Environmental Analysis

The Approved Project was determined to have less than significant impacts with respect to all other transportation impacts, including conflicts with an applicable congestion management program; changes to air traffic patterns resulting in safety risks; increases in hazards due to a design feature; inadequate emergency access; and conflicts with adopted policies, programs, and plans regarding transit, bicycle, or pedestrian facilities.

A Trip Generation Analysis was conducted for the Modified Project on January 18, 2023, which is included as Appendix 4, *Clinton Keith Corporate Center Trip Generation Analysis, City of Wildomar*. The Analysis concluded that the peak hour trip generation for both AM and PM peak hour will decrease by 350 trips and 287 trips, respectively, under the Modified Project when compared to the Approved Project. Daily trips under the Modified Project are also expected to decrease by 3,628 daily trips when compared to the Approved Project (TJW Engineering 2023a). The Analysis also notes that the Modified Project's revision to include more industrial square footage is likely to increase the utilization of truck routes and freeways including Interstate 15 and Interstate 215, while fewer trips will occur on local collector streets when compared to the Approved Project. The Modified Project will implement the additional proposed roadway improvements to Clinton Keith Road, Elizabeth Lane, and Bunny Trail, discussed in the project description of the Adopted IS/MND. The following mitigation measure from the Approved Project, in which its impacts were analyzed in the Adopted IS/MND, will be incorporated into the Modified Project as a Condition of Approval (underline text shows revisions and ~~strikethrough~~ text shows deletions):

- **COA-4.** The direct traffic impacts generated by the proposed project can be ~~mitigated to a less than significant level~~ reduced, to meet the required level of service of the following recommended improvements are implemented, prior to the respective phase of development:

Onsite Recommendations

Roadways

- Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed project boundary line.
- Construct partial width improvements on the westerly side of Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed project boundary line.
- Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed project boundary line.

Intersections (proposed project's actual improvements necessary are shown in ***bold, italic, underline***. The items that are not bold, italic, underlined are already existing).

- Construct the intersection of proposed project driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics:

- Northbound: ***One right-turn lane. Stop controlled.***
- Southbound: Not applicable.
- Eastbound: One through lane. ***One right-turn lane.***
- Westbound: One through lane.

- ***Install a traffic signal*** at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics:
  - Northbound: ***One left-turn lane.*** One shared through and right-turn lane.
  - Southbound: ***One left-turn lane.*** One shared through and right-turn lane.
  - Eastbound: One left-turn lane. One through lane. ***One right-turn lane.***
  - Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.
- Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics:
  - Northbound: One shared left-turn, through and right-turn lane.
  - Southbound: One shared left-turn, through and right-turn lane.
  - Eastbound: ***One shared left-turn, through and right-turn lane. Stop controlled.***
  - Westbound: One shared left-turn, through and right-turn lane. Stop controlled.
- Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW) with the following geometrics:
  - Northbound: One shared left-turn and through lane.
  - Southbound: One shared through and right-turn lane.
  - Eastbound: ***One shared left-turn and right-turn lane. Stop controlled.***
  - Westbound: Not applicable.
- Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics:
  - Northbound: Not applicable.
  - Southbound: One right-turn lane.

  - Eastbound: ***One shared left-turn and right-turn lane. Stop controlled.***
  - Westbound: Not applicable.

- Construct the intersection of Project Driveway 4 (NS) and Bunny Trail (EW) with the following geometrics:
  - Northbound: Not Applicable.
  - Southbound: ***One shared left-turn & right-turn lane. Stop controlled.***
  - Eastbound: One shared left-turn and through lane.
  - Westbound: One shared through and right-turn lane**.**

- Construct the intersection of Yamas Drive (NS) and proposed Project Driveway 5 (EW) with the following geometrics:
  - Northbound: ***One shared through and right-turn lane.***
  - Southbound: ***One shared left-turn and through lane.***
  - Eastbound: Not applicable.
  - Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***

- Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics:
  - Northbound: ***One shared through and right-turn lane.***
  - Southbound: ***One shared left-turn and through lane.***
  - Eastbound: Not applicable.
  - Westbound: ***One shared left-turn & right-turn lane. Stop controlled.***

Furthermore, as discussed in Appendix 5, *Clinton Keith Corporate Center VMT Screening, City of Wildomar*, the Modified Project is expected to generate less than 110 trips per day and is therefore screened from Vehicle Miles Traveled (VMT) analysis per the City's Threshold Policy Guidelines. As such, impacts to VMT are considered less than significant. Other transportation impacts under the Modified Project are expected to be similar to the Approved Project. The Modified Project will include two additional access points to/from Clinton Keith Road and one additional access point to/from Elizabeth Lane, though like the Approved Project, the Modified Project will be required to adhere to all City standards to ensure adequate emergency access, compliance with alternative transportation plans, and the minimization of roadway hazards.

Utilities and Service Systems

As discussed in the Adopted IS/MND, the Approved Project will have less than significant impacts with respect to utilities and service systems. Like the Approved Project, the Modified Project would be required to comply with all applicable regulations and requirements including the Approved Project's conditions of approval to obtain approval from the Riverside County Department of Environmental Health before receiving water and wastewater from the Elsinore Valley Municipal Water District and to submit a recycling collection and loading area plan to the City and Riverside County Waste Management Division. All utility improvements will be required to be installed to meet the City and utility providers' standards. Additionally, offsite improvements will be reviewed by the City's Engineering Department to ensure all improvements meet the applicable city standard plans.

Impacts under the Modified Project would remain less than significant, and no additional mitigation or analyses are required.

Wildfire

The Adopted IS/MND did not analyze impacts to wildfire. As noted above, the project site is within a VHFHSZ as designated by the adopted CAL FIRE Fire Hazard Severity Zone Maps. As with all projects in the City, the Modified Project is required to comply with the applicable regulations for building standards and vegetation management as outlined in the 2022 California Building Code and the 2022 California Fire Code. Compliance with these regulations will ensure that wildfire impacts are less than significant under the Modified Project.

4.2 ADDENDUM REQUIREMENTS

This section provides an analysis to determine whether the Modified Project meets any conditions that would require a subsequent MND.

1. **Substantial project changes are proposed that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.**

The Modified Project would have similar environmental impacts to those discussed in the Adopted IS/MND for the Approved Project, as discussed above. The Modified Project would be located and operate within the same footprint as the Approved Project, and therefore, would not be anticipated to result in any additional impacts. Further, the Modified Project would continue to comply with all applicable federal, state, and local laws, as well as the applicable mitigation measures of the Adopted IS/MND, and it would be consistent with the City's General Plan. Therefore, no substantial changes are proposed that will require major revisions to the Adopted IS/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

2. **Substantial changes would occur with respect to the circumstances under which the project is undertaken that require major revisions to the previous EIR or negative declaration due to the**

involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

There are no substantial changes in circumstances that would require major revisions to the Adopted IS/MND. As also noted above, the Modified Project would be located and operate within the same footprint of the Approved Project.

Additionally, the impacts of the Modified Project would be similar to those analyzed in the Adopted IS/MND, as described above. For example, emissions under the Modified Project would remain under the applicable air quality and greenhouse gas emissions thresholds, as shown in Appendix 2. The Modified Project is also expected to result in a greater reduction to existing traffic noise levels than the Approved Project (see Table 5.12-3 in the Adopted IS/MND and Table 6 in Appendix 3). Furthermore, the Modified Project is expected to result in less than half the number of daily trips that would have been generated under the Approved Project, including less trips at both AM and PM peak hours (see Appendix 4). Therefore, no major revisions to the Adopted IS/MND would be required due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

3. **New information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified or the negative declaration was adopted shows any of the following:**

    a. **The project will have one or more significant effects not discussed in the previous EIR or negative declaration.**

The Modified Project will result in minor revisions to the Approved Project's site plan and proposed uses. However, all project activities will occur in the same footprint as the Approved Project and the proposed uses of the site are consistent with the project site's General Plan designation and zoning. As discussed above, air quality, greenhouse gas, energy, noise, and transportation impacts under the Modified Project have been analyzed and determined to be less than significant or less than significant with no additional mitigation beyond that identified in the Adopted IS/MND required. Additionally, there is no new information of substantial importance (that was not known and could not have been known with exercise of reasonable diligence at the time that the Adopted IS/MND was certified) that identifies a new significant impact. The Modified Project would not result in significant effects not discussed or disclosed in the Certified EIR.

    b. **Significant effects previously examined will be substantially more severe than identified in the previous EIR.**

The Modified Project would have similar significant impacts as those disclosed in the Adopted IS/MND. The Adopted IS/MND identified significant impacts for biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise and transportation, all of which can be mitigated to less than significant with the implementation of mitigation measures. While impacts as a result of air quality and greenhouse gas emissions were found to be less than significant in the Adopted IS/MND, mitigation measures were also provided.

As the Modified Project proposes minor changes to the Approved Project and would occur within the same footprint as the Approve Project, most of the mitigation measures from the Adopted IS/MND would be applicable to the Modified Project (see analysis above) and would ensure that impacts remain less than significant. However, some mitigation measures under the Approved Project no longer apply to Modified Project. For example, Mitigation Measures HAZ-2 and HAZ-3, which would reduce impacts related to the Approved Project's medical uses, no longer apply since the Modified Project no longer includes medical uses. Mitigation Measure NOI-4 no longer applies as the Modified Project includes the implementation of a sound wall as part of its design features. Mitigation Measure NOI-1 has been revised to reflect the recommendations made in Appendix 3, and will continue to apply to the Modified Project. Mitigation Measures AQ-1, AQ-2, GHG-1, and TR-1, from the Approved Project, will be included as Conditions of Approval (COA-1 through COA-4) for the Modified Project.

As substantiated in the technical studies that have been prepared for the Modified Project, implementation of the Modified Project would not lead to new or greater impacts for air quality, greenhouse gas emissions, energy, noise or transportation, in addition to any other environmental topic, as discussed above, than those disclosed in the Adopted IS/MND. Therefore, no impacts of the Modified Project would be more severe than those analyzed in the Adopted IS/MND.

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measures or alternatives.

All impacts under the Approved Project were mitigated to less than significant with mitigation incorporated. The Modified Project would not have any new substantial impacts when compared to the Approved Project and would therefore not require the implementation of any new mitigation measures. The Approved Project voluntarily adopted three mitigation measures that would further reduce impacts to air quality and greenhouse gas emissions, despite air quality and greenhouse gas emission impacts being less than significant. However, both the Modified Project and Approved Project would not result in significant impacts to air quality and greenhouse gas emissions and the Modified Project would incorporate these mitigation measures as conditions of approval. As discussed above, most of the mitigation measures discussed in the Adopted IS/MND would continue to be applicable to the Modified Project to reduce potential environmental impacts to less than significant. Therefore, the Modified Project would not result in new significant environmental impacts; thus, there is no need for new mitigation measures.

d. Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the Modified Project would result in similar impacts to those of the Approved Project. As stated previously, no new or more severe impacts would occur as a result of the Modified Project; therefore, there are no new mitigation measures required for the Modified Project. Additionally, all of the previous mitigation measures discussed in the Adopted IS/MND would continue to be applicable to the

Modified Project, to reduce potential environmental impacts to less than significant, with the exception of Mitigation Measures HAZ-2 and HAZ-3 since these would only apply to medical office uses, and Mitigation Measure NOI-4 as the implementation of a sound wall is part of the Modified Project's design features. Mitigation Measure NOI-1 has been revised to reflect the recommendations made in Appendix 3. Mitigation Measures AQ-1, AQ-2, GHG-1, and TR-1, from the Approved Project, will be included as Conditions of Approval (COA-1 through COA-4) for the Modified Project.

4.3 CONCLUSION

Preparation of an Addendum to an IS/MND is appropriate when none of the conditions specified in CEQA Guidelines Section 15162 are present and some changes or additions to the previously Adopted IS/MND are necessary.

As demonstrated in this Addendum, the Modified Project does not meet the criteria for preparing a supplemental or subsequent IS/MND. Under the Modified Project, the project site would be developed with slightly different uses than those proposed under the Approved Project, including more industrial uses and the elimination of the fast-food and medical office uses. The Modified Project also revises the Approved Project's site plan resulting in less total building square footage than Approved Project. These changes have been analyzed in this addendum where it has been determined that the Modified Project would not result in an increase in severity of any previously identified environmental impacts from the Adopted IS/MND.

All other conditions surrounding the construction and operation of the Modified Project would be largely similar to the Approved Project, including the implementation of the roadway improvements under the Approved Project. While the Modified Project will result in slightly different conditions with respect to traffic, air pollution, greenhouse gas emissions, and noise, no impact under the Modified Project will be greater than the Approved Project. No further analysis is required.

The Modified Project will require revisions to the current Mitigation Monitoring and Reporting Plan, which was adopted by the City with the Adopted IS/MND and which remains in effect. This includes the elimination of several Mitigation Measures that no longer apply to the Modified Project, including Mitigation Measures HAZ-2 and HAZ-3 and Mitigation Measure NOI-4. Mitigation Measure NOI-1 has been revised to reflect the recommendations made in Appendix 3. Mitigation Measures AQ-1, AQ-2, GHG-1, and TR-1, from the Approved Project, will be included as Conditions of Approval (COA-1 through COA-4) for the Modified Project. No new mitigation measures would be required for the Modified Project.

4.4 REFERENCES

California Department of Forestry and Fire Protection (CAL FIRE). 2023, February 3 (Accessed). Fire Hazard Severity Zones Map. https://egis.fire.ca.gov/FHSZ/

MD Acoustics, LLC. 2022a, September 20. Wildomar Commerce Center Air Quality, Greenhouse Gas, Health Risk, and Energy Impact Study City of Wildomar, CA. (Appendix 2).

_____. 2022b, September 30. Wildomar Commerce Center Noise Impact Study City of Wildomar, CA. (Appendix 3).

TJW Engineering Inc. 2023a, January 18. Clinton Keith Corporate Center Trip Generation Analysis, City of Wildomar. (Appendix 4).

_____. 2023b, January 18. Clinton Keith Corporate Center VMT Screening, City of Wildomar. (Appendix 5).

4. Environmental Analysis

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Appendix 1

Approved Project Mitigation Monitoring and Reporting Program

RANCON MEDICAL OFFICE/RETAIL PROJECT PLOT PLAN & TENTATIVE PARCEL MAP NO. 36492 (PLANNING APPLICATION NO. 12-0053)
MITIGATION MONITORING AND REPORTING PROGRAM

1 INTRODUCTION

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Rancon Medical Office/Retail Project Plot Plan & Tentative Parcel Map No. 36492 (Planning Application No. 12-0053) project (proposed Project). This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to "adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." An MMRP is required for the proposed project because the EIR has identified significant adverse impacts and measures have been identified to mitigate those impacts.

2 MITIGATION MONITORING AND REPORTING PROGRAM

As the lead agency, the City of Wildomar will be responsible for monitoring compliance with all mitigation measures. Different departments within the City are responsible for aspects of the proposed Project. The MMRP identifies the department with the responsibility for ensuring the measure is completed; however, it is expected that one or more departments will coordinate efforts to ensure compliance.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below:

- **Mitigation Measure:** The mitigation measures are taken from the Initial Study/Mitigated Negative Declaration (IS/MND), in the same order that they appear in the IS/MND.

- **Timing:** Identifies at which stage of the proposed Project the mitigation must be completed.

- **Monitoring Responsibility:** Identifies the department within the City with responsibility for mitigation monitoring.

- **Verification (Date and Initials):** Provides a contact who reviewed the mitigation measure and the date the measure was determined complete.

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
3.1 Aesthetics – none required	N/A	N/A	N/A
3.2 Agricultural Resources – none required	N/A	N/A	N/A
3.3 Air Quality			
AQ-1 <u>Construction Mitigation</u> a. Install and maintain track-out control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.) b. Limit fugitive dust sources to 20 percent opacity. c. Require a dust control plan for earthmoving operations. d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. e. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. f. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours. g. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily. h. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period. i. Require high pressure injectors on diesel construction equipment.* j. Utilize only CARB Tier 3 or better certified equipment for	During construction activities	City of Wildomar Planning and Public Works Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
construction activities.* k. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.* l. Suspend use of all construction equipment operations during second stage smog alerts.* * Would reduce impacts to GHG's as well			
AQ-2 <u>Operation Mitigation</u> a. Install EV charging facilities for a minimum of 1% of all parking spaces.* b. Provide preferential parking locations for EVs and CNG vehicles.* c. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.* d. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.* e. Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment **or** contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.* f. Provide secure, bicycle parking for employees.* g. Provide direct safe, direct bicycle access to adjacent bicycle routes.* h. Provide short-term bicycle parking for retail customers and other non-commute trips.* * Would reduce impacts to GHGs as well	Implemented during site plan review and verified prior to Certificate of Occupancy	City of Wildomar Planning and Public Works Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
3.4 Biological Resources			
BIO-1 Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.	Implemented prior to any off-site grading	City of Wildomar Planning and Public Works Departments	
BIO-2 The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently $500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.	The fee must be paid prior to the issuance of a grading permit	City of Wildomar Planning and Public Works Departments	
BIO-3 Due to the presence of suitable habitat and in compliance with the MSHCP, a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.	Implemented 30 days prior to ground disturbance	City of Wildomar Planning and Engineering Departments	
BIO-4 If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the *Staff Report on Burrowing Owl Mitigation*.	Implemented prior to ground any disturbance for Phase 2	City of Wildomar Planning and Engineering Departments	
BIO-5 Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.	Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor	City of Wildomar Planning and Engineering Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds. 2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.	and songbird nests		
BIO-6 Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, Impacts to Jurisdictional Features, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFG. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies: 1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank. 2. On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.	Implemented prior to ground any disturbance in areas designated as jurisdictional features	City of Wildomar Planning and Engineering Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
BIO-7 Prior to the issuance of any grading permit, the Project applicant shall comply with all of the provisions of the MSHCP, including payment of the MSHCP Local Development Mitigation Fee and compliance with Section 6.1.2 of the MSHCP pertaining to Riparian/Riverine Areas.	Prior to the issuance of a grading permit.	City of Wildomar Planning and Engineering Departments	
3.5 Cultural Resources			
CUL-1 Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation: If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and the Developer, the project archaeologist and the Pechanga Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Commission and/or City Council. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique, as defined by relevant state and local law, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Building and Planning Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
CUL-2 At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe[1] to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.	Prior to the issuance of a grading permit	City of Wildomar Engineering and Planning Departments	
CUL-3 Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation: If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant" within 24 hours of receiving notification from the Coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section	As a condition of Project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	

[1] It is anticipated that the Pechanga Tribe will be the "appropriate" Tribe due to their prior and extensive coordination with the City and project applicant in determining potentially significant impacts and appropriate mitigation measures.

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
5097.98.			
CUL-4 All cultural materials – with the exception of sacred items, burial goods and human remains which will be addressed in the Treatment Agreement required in CUL-2, that are collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's curation facility which meets the standards set forth in 36 CRF Part 79 for federal repositories.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	
CUL-5 All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	
CUL-6 To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified archaeologist shall monitor all construction activities that could potentially impact archaeological (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.	As a condition of future development approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	
CUL-7 A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be	As a condition of Project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.			
CUL-8 Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	
CUL-9 Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).	As a condition of project approval, and implemented during ground-disturbing activities	City of Wildomar Engineering and Planning Departments	
3.6 Geology and Soils – none required	N/A	N/A	N/A
3.7 Greenhouse Gas Emissions			
GHG-1 Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.	During Construction Activities and Project Operations	City of Wildomar Planning and Building Departments	
3.8 Hazards and Hazardous Materials			
HAZ-1 All spills or leakage of any hazardous products, including petroleum products, during regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan prepared for the Project development.	Prior to the issuance of a grading permit	City of Wildomar Engineering Department	
HAZ-2 Prior to the certificate of occupancy for a medical office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be	Prior to the issuance of a building permit	City of Wildomar Building and Safety	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.		Department	
HAZ-3 As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).	Prior to the issuance of a building permit	City of Wildomar Building and Safety and Fire Departments	
HAZ-4 Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.	Prior to the issuance of a building permit	City of Wildomar Building and Safety and Fire Departments	
3.9 Hydrology and Water Quality			
HYD-1 Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management	Prior to the issuance of a grading permit	City of Wildomar Engineering Department	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.			
3.10 Land Use and Planning – none required	N/A	N/A	N/A
3.11 Mineral Resources – none required	N/A	N/A	N/A
3.12 Noise			
NOI-1 To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.	Implemented during Project operations	City of Wildomar Building Department	
NOI-2 The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.	Implemented during Project operations	City of Wildomar Building Department	
NOI-3 Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.	Implemented during Project operations	City of Wildomar Building Department	
NOI-4 Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence. It is important to note that the barriers' attenuation will be	Prior to the issuance of occupancy permits and during project operations	City of Wildomar Building and Planning Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.			
NOI-5 Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.	Reviewed at building plan check	City of Wildomar Building Department	
3.13 Population and Housing – none required	N/A	N/A	N/A
3.14 Public Services – none required	N/A	N/A	N/A
3.15 Recreation – none required	N/A	N/A	N/A
3.16 Transportation/Traffic			
TR-1 The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service of the following recommended improvements are implemented, prior to the respective phase of development: **On-Site Recommendations** **<u>Roadways</u>** • Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line. • Construct partial width improvements on the westerly side of	Implemented during the appropriate Phase of proposed Project construction	City of Wildomar Public Works Department	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line. • Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line. Intersections (proposed Project's actual improvements necessary are shown in ***bold, italic, underlined***. The items that are not bold, italic, underlined are already existing) Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics: Northbound: *One right-turn lane. Stop controlled.* Southbound: Not applicable. Eastbound: One through lane. *One right-turn lane.* Westbound: One through lane. *Install a traffic signal* at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics: Northbound: *One left-turn lane.* One shared through and right-turn lane. Southbound: *One left-turn lane.* One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. *One right-turn lane.* Westbound: One left-turn lane. One through lane. One shared through and right-turn lane. Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics: Northbound: One shared left-turn, through and right-turn lane. Southbound: One shared left-turn, through and right-turn lane. Eastbound: *One shared left-turn, through and right-turn lane. Stop*			

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
controlled. Westbound: One shared left-turn, through and right-turn lane. Stop controlled. Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW) with the following geometrics: Northbound: One shared left-turn and through lane. Southbound: One shared through and right-turn lane. Eastbound: *One shared left-turn and right-turn lane. Stop controlled.* Westbound: Not applicable. Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics: Northbound: Not applicable. Southbound: One right-turn lane. Eastbound: *One shared left-turn and right-turn lane. Stop controlled* Westbound: Not applicable. Construct the intersection of Project Driveway 4 (NS) and Bunny Trail (EW) with the following geometrics: Northbound: Not Applicable. Southbound: *One shared left-turn & right-turn lane. Stop controlled.* Eastbound: One shared left-turn and through lane. Westbound: One shared through and right-turn lane. Construct the intersection of Yamas Drive (NS) and proposed Project Driveway 5(EW) with the following geometrics: Northbound: *One shared through and right-turn lane.* Southbound: *One shared left-turn and through lane.* Eastbound: Not applicable. Westbound: *One shared left-turn and right-turn lane. Stop controlled.*			

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics: Northbound: *One shared through and right-turn lane.* Southbound: *One shared left-turn and through lane.* Eastbound: Not applicable. Westbound: *One shared left-turn & right-turn lane. Stop controlled.*			
3.17 Utilities and Service Systems – none required	N/A	N/A	N/A

Appendix 2

Wildomar Commerce Center Air Quality, Greenhouse Gas, Health Risk, and Energy Impact Study, City of Wildomar, CA

Wildomar Commerce Center

Air Quality, Greenhouse Gas, Health Risk, and Energy Impact Study

City of Wildomar, CA

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MD ACOUSTICS
Sound Solutions for Planning and Design

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GLOSSARY OF TERMS

AQMP	Air Quality Management Plan
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CH_4	Methane
CNG	Compressed natural gas
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DPM	Diesel particulate matter
GHG	Greenhouse gas
HFCs	Hydrofluorocarbons
LST	Localized Significant Thresholds
$MTCO_2e$	Metric tons of carbon dioxide equivalent
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
NO_2	Nitrogen dioxide
N_2O	Nitrous oxide
O_3	Ozone
PFCs	Perfluorocarbons
PM	Particle matter
PM10	Particles that are less than 10 micrometers in diameter
PM2.5	Particles that are less than 2.5 micrometers in diameter
PMI	Point of maximum impact
PPM	Parts per million
PPB	Parts per billion
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SF_6	Sulfur hexafluoride
SIP	State Implementation Plan
SOx	Sulfur Oxides
SRA	Source/Receptor Area
TAC	Toxic air contaminants
VOC	Volatile organic compounds
WRCC	Western Regional Climate Center

1.0 Introduction

1.1 Purpose of Analysis and Study Objectives

This air quality and greenhouse gas (GHG) analysis was prepared to evaluate whether the estimated criteria pollutants and GHG emissions generated from the project would cause a significant impact to the air resources in the project area. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The assessment is consistent with the methodology and emission factors endorsed by South Coast Air Quality Management District (SCAQMD), California Air Resource Board (CARB), and the United States Environmental Protection Agency (US EPA).

1.2 Project Summary

1.2.1 Site Location

The project site is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar, CA, as shown in Exhibit A. The site is current zoned Industrial Park in the City of Wildomar Zoning Map. The proposed use is a mix of industrial uses with some office and retail space. Land uses surrounding the site include vacant land to the south and west, an apartment complex to the southeast, Clinton Keith Road to the north with vacant land further, and Elizabeth Lane to the east with a self-storage facility further.

1.2.2 Project Description

The Project proposes to develop the site with five industrial buildings, covering a total of 26.56 acres for the entire site. Building 1 consists of approximately 14,630 sqft, building 2 consists of approximately 16,860 sqft, building 3 consists of approximately 64,510 sqft, building 4 consists of 99,940 sqft with 22 loading docks and building 5 consists of 98,720 sqft with 28 loading docks. The site is also to include a parking lot with 574 parking stalls and 261,320 square feet of landscaping. Exhibit B demonstrates the site plan for the project.

Construction activities within the Project area will consist of site preparation, on-site grading, building, paving, and architectural coating. Table 1 summarizes the land use description for the Project Site.

<Table 1, next page>

Table 1: Land Use Summary

Land Use	Unit Amount	Size Metric
General Light Industry	85	1000sqft
General Heavy Industry	188.66	1000sqft
General Office Building	10.5	1000sqft
Strip Mall	10.5	1000sqft
Parking Lot	574	Space
Other Asphalt Surfaces	8.62	Acre
Other Non-Asphalt Surfaces	261.32	1000sqft

1.2.3 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, a sensitive receptor would be a location where a sensitive individual could remain for 24-hours or longer, such as residencies, hospitals, and schools (etc).

The closest existing sensitive receptors (to the site area) are the residential land uses located approximately 65 feet to the southwest and 210 feet northeast of the project site.

1.3 Executive Summary of Findings and Mitigation Measures

The following is a summary of the analysis results:

Construction-Source Emissions
Project construction-source emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. For localized emissions, the project will not exceed applicable Localized Significance Thresholds (LSTs) established by the SCAQMD.

Project construction-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). As discussed herein, the project will comply with all applicable SCAQMD construction-source emission reduction rules and guidelines. Project construction source emissions would not cause or substantively contribute to violation of the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS).

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect

substantial numbers of people. Potential construction-source odor impacts are therefore considered less-than-significant.

Operational-Source Emissions

The project operational-sourced emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. Project operational-source emissions would not result in or cause a significant localized air quality impact as discussed in the Operations-Related Local Air Quality Impacts section of this report. Additionally, project-related traffic will not cause or result in CO concentrations exceeding applicable state and/or federal standards (CO "hotspots). Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the project.

Project operational-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). The project's emissions meet SCAQMD regional thresholds and will not result in a significant cumulative impact. The project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential operational-source odor impacts are therefore considered less-than significant.

Project-related GHG emissions meet the SCAQMD industrial screening threshold of 10,000 metric tons of carbon dioxide equivalents (MTCO2e) per year and are also considered to be less than significant. The project also complies with the goals of the WRCOG Subregional CAP, CARB Scoping Plan, AB-32, and SB-32.

Mitigation Measures

A. Construction Measures

Adherence to SCAQMD Rule 403 is required.

No construction mitigation required.

B. Operational Measures to Reduce Greenhouse Gas Emissions

No operational mitigation required.

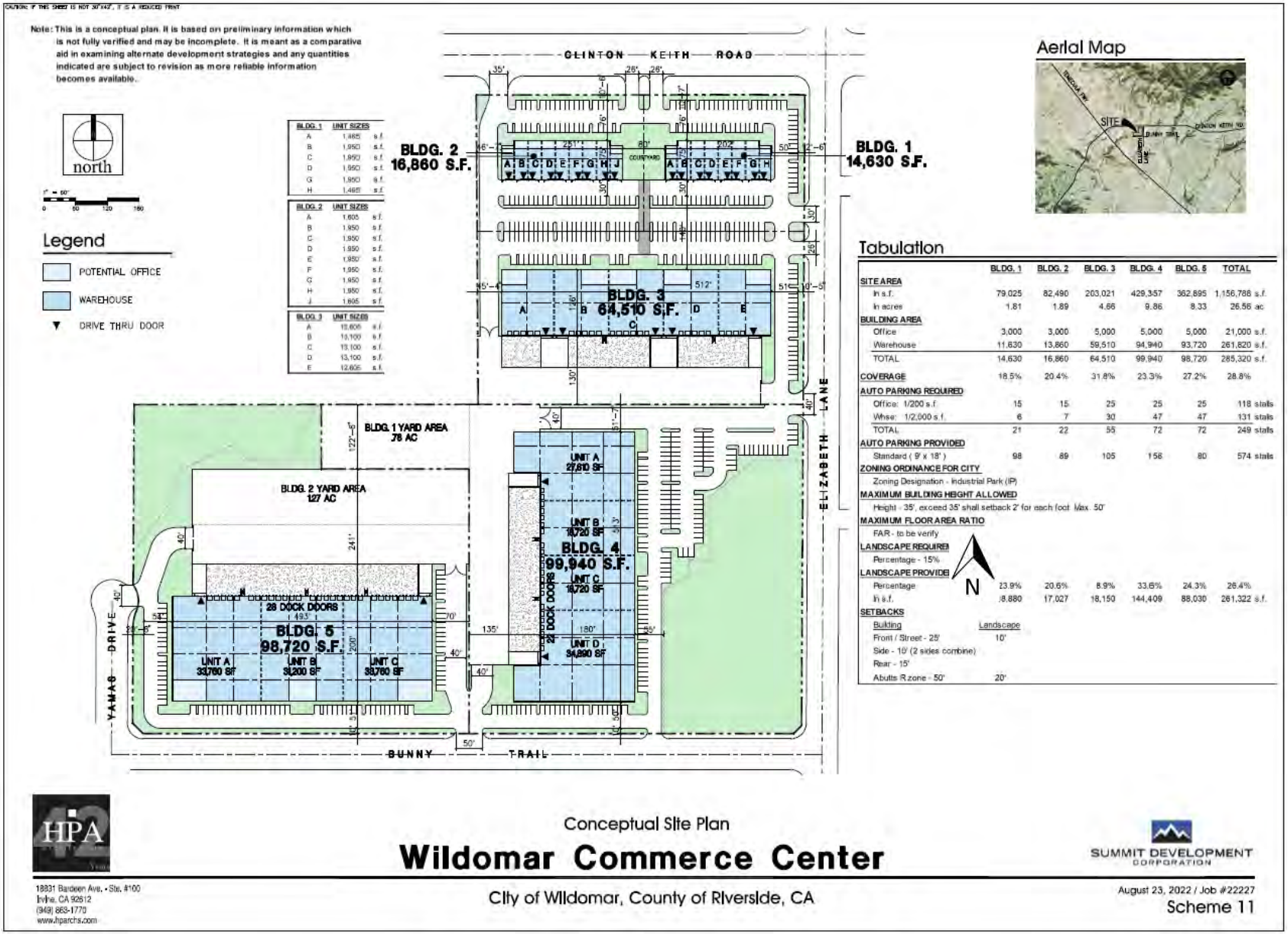
Exhibit A

Location Map



Exhibit B

Site Plan



	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	TOTAL
SITE AREA						
In s.f.	79,025	82,490	203,021	429,357	362,895	1,156,788 s.f.
In acres	1.81	1.89	4.66	9.86	8.33	26.56 ac
BUILDING AREA						
Office	3,000	3,000	5,000	5,000	5,000	21,000 s.f.
Warehouse	11,630	13,860	59,510	94,940	93,720	261,820 s.f.
TOTAL	14,630	16,860	64,510	99,940	98,720	285,320 s.f.
COVERAGE	18.5%	20.4%	31.8%	23.3%	27.2%	28.8%
AUTO PARKING REQUIRED						
Office: 1/200 s.f.	15	15	25	25	25	118 stalls
Whse: 1/2,000 s.f.	6	7	30	47	47	131 stalls
TOTAL	21	22	55	72	72	249 stalls
AUTO PARKING PROVIDED						
Standard (9' x 18')	98	89	105	158	80	574 stalls
ZONING ORDINANCE FOR CITY						
Zoning Designation - Industrial Park (IP)						
MAXIMUM BUILDING HEIGHT ALLOWED						
Height - 35', exceed 35' shall setback 2' for each foot Max. 50'						
MAXIMUM FLOOR AREA RATIO						
FAR - to be verify						
LANDSCAPE REQUIRED						
Percentage - 15%						
LANDSCAPE PROVIDED						
Percentage	23.9%	20.6%	8.9%	33.6%	24.3%	26.4%
In s.f.	18,880	17,027	18,150	144,409	88,030	261,322 s.f.
SETBACKS						
Building	Landscape					
Front / Street - 25'	10'					
Side - 10' (2 sides combine)						
Rear - 15'						
Abutts R zone - 50'	20'					

2.0 Regulatory Framework and Background

2.1 Air Quality Regulatory Setting

Air pollutants are regulated at the national, state, and air basin level; each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level. The California Air Resources Board (ARB) regulates at the state level. The South Coast Air Quality Management District (SCAQMD) regulates at the air basin level.

2.1.1 National and State

The EPA is responsible for global, international, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Air Quality Standards, also known as federal standards. There are six common air pollutants, called criteria pollutants, which were identified from the provisions of the Clean Air Act of 1970.

- Ozone
- Nitrogen Dioxide
- Lead
- Particulate Matter (PM10 and PM2.5)
- Carbon Monoxide
- Particulate Matter
- Sulfur Dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to project the public health.

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The State Implementation Plan for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual federal attainment plans for regional air districts—air district prepares their federal attainment plan, which sent to ARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. See http://www.arb.ca.gov/research/aaqs/aaqs.htm for additional information on criteria pollutants and air quality standards.

The federal and state ambient air quality standards are summarized in Table 2 and can also be found at http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

Table 2: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentrations[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O3)	1-Hour	0.09 ppm	Ultraviolet Photometry	- -	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm		0.070 ppm (147 µg/m³)		
Respirable Particulate Matter (PM10)[8]	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µ/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		- -		
Fine Particulate Matter (PM2.5)[8]	24-Hour	- -	- -	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1-Hour	20 ppm (23 µg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 µg/m³)	- -	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 µg/m³)		9 ppm (10 µg/m³)	- -	
	8-Hour (Lake Tahoe)	6 ppm (7 µg/m³)		- -	- -	
Nitrogen Dioxide (NO_2)[9]	1-Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	- -	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (357 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[10]	1-Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	- -	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	- -		- -	0.5 ppm (1300 mg/m³)	
	24-Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[10]	- -	
	Annual Arithmetic Mean	- -		0.130ppm (for certain areas)[10]	- -	
Lead[11,12]	30 Day Average	1.5 µg/m³	Atomic Absorption	- -		High Volume Sampler and Atomic Absorption
	Calendar Qrtr	- -		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	- -		0.15 µg/m³		
Visibility Reducing Particles[13]	8-Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Notes:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

10. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

11. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Several pollutants listed in Table 2 are not addressed in this analysis. Analysis of lead is not included in this report because the project is not anticipated to emit lead. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed. The project is not expected to generate or be exposed to vinyl chloride because proposed project uses do not utilize the chemical processes that create this pollutant and there are no such uses in the project vicinity. The proposed project is not expected to cause exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

2.1.2 South Coast Air Quality Management District

The agency for air pollution control for the South Coast Air Basin (basin) is the South Coast Air Quality Management District (SCAQMD). SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the basin. SCAQMD, in coordination with the Southern California Association of Governments, is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the basin. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or California ambient air quality standards. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

Every three (3) years the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon.

On March 23, 2017 CARB approved the 2016 AQMP. The 2016 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air.

The 2016 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time. As with every AQMP, a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures is updated with the latest data and methods. The most significant air quality challenge in the Basin is to reduce nitrogen oxide (NOx) emissions sufficiently to meet the upcoming ozone standard deadlines. The primary goal of this Air Quality Management Plan is to meet clean air standards and protect public health, including ensuring benefits to environmental justice and disadvantaged communities. Now that the plan has been approved by CARB, it has been forwarded to the U.S. Environmental Protection Agency for its review. If approved by EPA, the plan becomes federally enforceable

The 2012 AQMP built upon the approaches taken in the 2007 AQMP for the attainment of federal PM and ozone standards, and highlights the significant amount of reductions needed and the need to engage in interagency coordinated planning of mobile sources to meet all of the federal criteria pollutant standards. Compared with the 2007 AQMP, the 2012 AQMP utilized revised emissions inventory projections that use 2008 as the base year. On-road emissions are calculated using CARB EMFAC2011 emission factors and the transportation activity data provided by SCAG from their 2012 Regional Transportation Plan (2012 RTP). Off-road emissions were updated using CARB's 2011 In-Use Off-Road Fleet Inventory Model. Since the 2007 AQMP was finalized new area source categories such as liquid propane gas (LPG) transmission losses, storage tank and pipeline cleaning and degassing, and architectural colorants, were created and included in the emissions inventories. The 2012 AQMP also includes analysis of several additional sources of GHG emissions such as landfills and could also assist in reaching the GHG target goals in the AB32 Scoping Plan.

South Coast Air Quality Management District Rules

The AQMP for the basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the state and federal standards. Some of the rules and regulations that apply to this Project include, but are not limited to, the following:

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access

roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable suppression techniques are indicated below and include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas in active for 10 days or more).
- Water active sites at least three times daily.
- Cover all trucks hauling dirt, san, soil, or other loose materials, or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Pave construction access roads at least 100 feet onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-iste streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of project must comply with Rule 1113.

Idling Diesel Vehicle Trucks – Idling for more than 5 minutes in any one location is prohibited within California borders.

Rule 2702. The SCAQMD adopted Rule 2702 on February 6, 2009, which establishes a voluntary air quality investment program from which SCAQMD can collect funds from parties that desire certified GHG emission reductions, pool those funds, and use them to purchase or fund GHG emission reduction projects within two years, unless extended by the Governing Board. Priority will be given to projects that result in co-benefit emission reductions of GHG emissions and criteria or toxic air pollutants within environmental justice areas. Further, this voluntary program may compete with the cap-and-trade program identified for implementation in CARB's Scoping Plan, or a Federal cap and trade program.

2.1.3 Local

Local jurisdictions, such as the County of Riverside and City of Wildomar, have the authority and responsibility to reduce air pollution through their police power and decision-making authority. Specifically, the County and City are responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The County and City are also responsible for the implementation of transportation control measures as outlined in the 2016 AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the County and City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

The County and City rely on the expertise of the SCAQMD and utilizes the SCAQMD CEQA Air Quality Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

County of Riverside General Plan

The Air Quality Element of the County of Riverside General Plan summarizes air quality issues in the Basin, air quality-related plans and programs administered by federal, state, and special purpose agencies, and establishes goals and policies to improve air quality. These goals and policies in the Air Quality Element that relate to the proposed project include:

Multi-jurisdictional Cooperation:

AQ 1.1 Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.

AQ 1.2 Support the Southern California Association of Government's (SCAG) Regional Growth Management Plan by developing intergovernmental agreements with appropriate governmental entities such as the Western Riverside Council of Governments (WRCOG), the Coachella Valley Association of Governments (CVAG), sanitation districts, water districts, and those subregional entities identified in the Regional Growth Management Plan.

AQ 1.3 Participate in the development and update of those regional air quality management plans required under federal and state law, and meet all standards established for clean air in these plans.

AQ 1.4 Coordinate with the SCAQMD and MDAQMD to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.

AQ 1.5 Establish and implement air quality, land use and circulation measures that improve not only the County's environment but the entire regions.

AQ 1.6 Establish a level playing field by working with local jurisdictions to simultaneously adopt policies similar to those in this Air Quality Element.

AQ 1.7 Support legislation which promotes cleaner industry, clean fuel vehicles and more efficient burning engines and fuels.

AQ 1.8 Support the introduction of federal, state or regional enabling legislation to permit the County to promote inventive air quality programs, which otherwise could not be implemented.

AQ 1.9 Encourage, publicly recognize and reward innovative approaches that improve air quality.

AQ 1.10 Work with regional and local agencies to evaluate the feasibility of implementing a system of charges (e.g., pollution charges, user fees, congestion pricing and toll roads) that requires individuals who undertake polluting activities to bear the economic cost of their actions where possible.

AQ 1.11 Involve environmental groups, the business community, special interests, and the general public in the formulation and implementation of programs that effectively reduce airborne pollutants.

Sensitive Receptors:

AQ 2.1 The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.

AQ 2.2 Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.

AQ 2.3 Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.

Stationary Pollution Sources:

AQ 4.1 Encourage the use of building materials/methods which reduce emissions.

AQ 4.2 Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.

AQ 4.3 Require centrally heated facilities to utilize automated time clocks or occupant sensors to control heating where feasible.

AQ 4.5 Require stationary pollution sources to minimize the release of toxic pollutants through:

- Design features;
- Operating procedures;
- Preventive maintenance;
- Operator training; and
- Emergency response planning

AQ 4.6 Require stationary air pollution sources to comply with applicable air district rules and control measures.

AQ 4.7 To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SOCAB, the Environmental Protection Agency and the California Air Resources Board.

AQ 4.8 Expand, as appropriate, measures contained in the County's Fugitive Dust Reduction Program for the Coachella Valley to the entire County.

AQ 4.9 Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.

AQ 4.10 Coordinate with the SCAQMD and MDAQMD to create a communications plan to alert those conducting grading operations in the County of first, second, and third stage smog alerts, and when wind speeds exceed 25 miles per hour. During these instances all grading operations should be suspended.

Energy Efficiency and Conservation:

AQ 5.1 Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

AQ 5.4 Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

Particulate Matter:

AQ 15.1 Identify and monitor sources, enforce existing regulations, and promote stronger controls to reduce particulate matter.

Multi-jurisdictional Cooperation:

AQ 16.1 Cooperate with local, regional, state and federal jurisdictions to better control particulate matter.

Control Measures:

AQ 17.1 Reduce particulate matter from agriculture, construction, demolition, debris hauling, street cleaning, utility maintenance, railroad rights-of-way, and off-road vehicles to the extent possible.

AQ 17.3 Identify and create a control plan for areas within the County prone to wind erosion of soil.

AQ 17.4 Adopt incentives, regulations and/or procedures to manage paved and unpaved roads and parking lots so they produce the minimum practicable level of particulates.

AQ 17.5 Adopt incentives and/or procedures to limit dust from agricultural lands and operations, where applicable.

AQ 17.6 Reduce emissions from building materials and methods that generate excessive pollutants, through incentives and/or regulations.

2.2 Greenhouse Gas Regulatory Setting

2.2.1 International

Many countries around the globe have made an effort to reduce GHGs since climate change is a global issue.

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations. The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC) (signed on March 21, 1994). Under the Convention, governments gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

The 2014 UN Climate Change Conference in Lima Peru provided a unique opportunity to engage all countries to assess how developed countries are implementing actions to reduce emissions.

Kyoto Protocol. The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008 – 2012 (UNFCCC 1997). On December 8, 2012, the Doha Amendment to the Kyoto Protocol was adopted. The amendment includes: New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment

period from 2013 – 2020; a revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

2.2.2 National

Greenhouse Gas Endangerment. On December 2, 2009, the EPA announced that GHGs threaten the public health and welfare of the American people. The EPA also states that GHG emissions from on-road vehicles contribute to that threat. The decision was based on *Massachusetts v. EPA* (Supreme Court Case 05-1120) which argued that GHGs are air pollutants covered by the Clean Air Act and that the EPA has authority to regulate those emissions.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards would cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). The second phase of the national program would involve proposing new fuel economy and greenhouse gas standards for model years 2017 – 2025 by September 1, 2011.

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce greenhouse gas emissions and improve fuel efficiency of heavy-duty trucks and buses. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the agencies are proposing engine and vehicle standards starting in the 2014 model year which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by 2018 model year.

Mandatory Reporting of Greenhouse Gases. On January 1, 2010, the EPA started requiring large emitters of heat-trapping emissions to begin collecting GHG data under a new reporting system. Under

the rule, suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of greenhouse gas emissions are required to submit annual reports to the EPA.

Climate Adaption Plan. The EPA Plan identifies priority actions the Agency will take to incorporate considerations of climate change into its programs, policies, rules and operations to ensure they are effective under future climatic conditions. The following link provides more information on the EPA Plan: https://www.epa.gov/arc-x/planning-climate-change-adaptation

2.2.3 California

California Code of Regulations (CCR) Title 24, Part 6. CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008 and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. 2013 and 2016 standards have been approved and became effective July 1, 2014 and January 1, 2016, respectively.

California Code of Regulations (CCR) Title 24, Part 11. All buildings for which an application for a building permit is submitted on or after January 1, 2020 must follow the 2019 standards.. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions. The following links provide more information on Title 24, Part 11:
https://www.dgs.ca.gov/BSC/Codes
https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf

California Green Building Standards. On January 12, 2010, the State Building Standards Commission unanimously adopted updates to the California Green Building Standards Code, which went into effect on January 1, 2011. The Housing and Community Development (HCD) updated CALGreen through the 2015 Triennial Code Adoption Cycle, during the 2016 to 2017 fiscal year. During the 2019-2020 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2019 Triennial Code Adoption Cycle.

The Code is a comprehensive and uniform regulatory code for all residential, commercial and school buildings. CCR Title 24, Part 11: California Green Building Standards (Title 24) became effective in 2001 in response to continued efforts to reduce GHG emissions associated with energy consumption. CCR Title 24, Part 11 now require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and

install low pollutant-emitting finish materials. One focus of CCR Title 24, Part 11 is water conservation measures, which reduce GHG emissions by reducing electrical consumption associated with pumping and treating water. CCR Title 24, Part 11 has approximately 52 nonresidential mandatory measures and an additional 130 provisions for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, a 50 percent construction waste diversion from landfills, use of building finish materials that emit low levels of volatile organic compounds, and commissioning for new, nonresidential buildings over 10,000 square feet.

The 2019 CalGreen Code includes the following changes and/or additional regulations:

Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades[1].

HCD modified the best management practices for stormwater pollution prevention adding Section 5.106.2 for projects that disturb one or more acres of land. This section requires projects that disturb one acre or more of land or less than one acre of land but are part of a larger common plan of development or sale must comply with the post-construction requirement detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board. The NPDES permits require post-construction runoff (post-project hydrology) to match the preconstruction runoff pre-project hydrology) with installation of post-construction stormwater management measures.

HCD added sections 5.106.4.1.3 and 5.106.4.1.5 in regards to bicycle parking. Section 5.106.4.1.3 requires new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. In addition, Section 5.106.4.1.5 states that acceptable bicycle parking facility for Sections 5.106.4.1.2 through 5.106.4.1.4 shall be convenient from the street and shall meeting one of the following: (1) covered, lockable enclosures with permanently anchored racks for bicycles; (2) lockable bicycle rooms with permanently anchored racks; or (3) lockable, permanently anchored bicycle lockers.

HCD amended section 5.106.5.3.5 allowing future charging spaces to qualify as designated parking for clean air vehicles.

[1] https://ww2.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf

HCD updated section 5.303.3.3 in regards to showerhead flow rates. This update reduced the flow rate to 1.8 GPM.

HCD amended section 5.304.1 for outdoor potable water use in landscape areas and repealed sections 5.304.2 and 5.304.3. The update requires nonresidential developments to comply with a local water efficient landscape ordinance or the current California Department of Water Resource's' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Some updates were also made in regards to the outdoor potable water use in landscape areas for public schools and community colleges.

HCD updated Section 5.504.5.3 in regards to the use of MERV filters in mechanically ventilated buildings. This update changed the filter use from MERV 8 to MERV 13.

The California Green Building Standards Code does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy. Enforcement is generally through the local building official. The following link provides more on CalGreen Building Standards:
http://www.bsc.ca.gov/Home/CALGreen.aspx

Executive Order S-3-05. California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following targets:

- By 2010, California shall reduce greenhouse gas emissions to 2000 levels;
- By 2020, California shall reduce greenhouse gas emissions to 1990 levels.
- By 2050, California shall reduce greenhouse gas emissions to 80 percent below 1990 levels.

The executive order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-01-07. Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The low carbon fuel standard is designed to provide a framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel producers and importers must meet each year beginning in 2011. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are "back-loaded", with more reductions required in the last five years, than the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume and low sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel as appropriate. Compressed natural gas and liquefied natural gas also may be low carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles are also considered as low carbon fuels for the low carbon fuel standard.

SB 97. Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Resource Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporate GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance are provided and no specific mitigation measures are identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.

- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

AB 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. ARB is the state agency charged with monitoring and regulating sources of greenhouse gases. AB 32 states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB Board approved the 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent (MMTCO2e) on December 6, 2007 (California Air Resources Board 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMTCO2e. Emissions in 2020 in a "business as usual" scenario are estimated to be 596 MMTCO2e.

Under AB 32, the ARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. Discrete early action measures are currently underway or are enforceable by January 1, 2010. The ARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of these early action measures, nine are considered discrete early action measures, as they are regulatory and enforceable by January 1, 2010. The ARB estimates that the 44 recommendations are expected to result in reductions of at least 42 MMTCO2e by 2020, representing approximately 25 percent of the 2020 target.

The ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 (California Air Resources Board 2008). The Scoping Plan identifies recommended measures for multiple greenhouse gas emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a

different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 greenhouse gas target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, Including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional greenhouse gas emission reductions.[4]

Senate Bill 100. Senate Bill 100 (SB 100) requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 was adopted September 2018.

The interim thresholds from prior Senate Bills and Executive Orders would also remain in effect. These include Senate Bill 1078 (SB 1078), which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) which changed the target date to 2010. Executive Order S-14-08, which was signed on November 2008 and expanded the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed the CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

SB 375. Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375

requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG), which has authority to develop the SCS or APS. For the SCAG region, the targets set by CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 13 percent below 2005 per capita GHG emissions levels by 2035. On April 4, 2012, SCAG adopted the 2012-2035 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), which meets the CARB emission reduction requirements. The Housing Element Update is required by the State to be completed within 18 months after RTP/SCS adoption or by October 2013.

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS or APS. However, new provisions of CEQA would incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS or APS and categorized as "transit priority projects."

Assembly Bill 939 and Senate Bill 1374. Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

Executive Order S-13-08. Executive Order S-13-08 indicates that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resource Agency 2009) was adopted, which is the "… first statewide, multi-sector, region-specific, and information-based climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15. Executive Order B-30-15, establishing a new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030, was signed by Governor Brown in April 2015.

Executive Order B-29-15. Executive Order B-29-15, mandates a statewide 25% reduction in potable water usage and was signed into law on April 1, 2015.

Executive Order B-37-16. Executive Order B-37-16, continuing the State's adopted water reduction, was signed into law on May 9, 2016. The water reduction builds off the mandatory 25% reduction called for in EO B-29-15.

2.2.4 South Coast Air Quality Management District

The Project is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.
- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

SCAQMD Threshold Development

The SCAQMD has established recommended significance thresholds for greenhouse gases for local lead agency consideration ("SCAQMD draft local agency threshold"). SCAQMD has published a five-tiered draft GHG threshold which includes a 10,000 metric ton of CO_2e per year for stationary/industrial sources and 3,000 metric tons of CO_2e per year significance threshold for residential/commercial projects (South Coast Air Quality Management District 2010c). Tier 3 is anticipated to be the primary tier by which the SCAQMD will determine significance for projects. The Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90-precent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to CEQA analysis. The 90-percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the SCAQMD's annual Emissions Reporting Program.

The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether or not the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose but must be consistent. A project's construction emissions are averaged over 30 years and are added to a project's

operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:

- All land use types: 3,000 MTCO2e per year
- Based on land use types: residential is 3,500 MTCO2e per year; commercial is 1,400 MTCO2e per year; mixed use is 3,000 MTCO2e per year; and industrial is 10,000 MTCO2e per year

- Tier 4 has the following options:
  - Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3: Year 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO2e/SP/year for projects and 6.6 MTCO2e/SP/year for plans;
  - Option 3, 2035 target: 3.0 MTCO2e/SP/year for projects and 4.1 MTCO2e/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

2.2.5 Local

WRCOG Subregional Climate Action Plan

The City of Wildomar is part of the Western Riverside Council of Government (WRCOG). The WRCOG adopted the WRCOG Subregional Climate Action Plan (CAP) in September 2014. Twelve cities in the subregion joined efforts to develop the Subregional CAP, which set forth a subregional emissions reduction target, emissions reduction measures, and action steps to assist each community to demonstrate consistency with California's Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). The CAP consists of an emissions reduction target of 15% below 2010 levels by 2020, and 49% below 2010 levels by 2035. As indicated in the CAP the emission reduction target of 15% from 2010 levels equates to a GHG emissions reduction of nearly 2,330,647 metric tons below business-as-usual (BAU) conditions by 2020. In order to reach these goals, the CAP provides feasible strategies, while affording its communities other economic and environmental benefits.

Therefore, to determine whether the project's GHG emissions are significant, this analysis uses the SCAQMD draft local agency tier 3 screening threshold of 10,000 MTCO2e for industrial uses.

The project will be subject to the latest requirements of the California Green Building and Title 24 Energy Efficiency Standards (currently 2019) which would reduce project-related greenhouse gas emissions.

3.0 Setting

3.1 Existing Physical Setting

The project site is located in the City of Wildomar in of the County of Riverside, which is part of the South Coast Air Basin (SCAB) that includes all of Orange County as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The South Coast Air Basin is located on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the South Coast Air Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east forming the inland perimeter.

3.1.1 Local Climate and Meteorology

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal areas and around the Los Angeles area is transported inland until it reaches the mountains where the combination of mountains and inversion layers generally prevent further dispersion. This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas. Air stagnation may occur during the early evening and early morning periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.

The annual average temperature varies little throughout much of the basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas where the project site is located. The majority of the annual rainfall in the basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thunderstorms in the coastal regions and slightly heavier showers in the eastern portion of the basin along the coastal side of the mountains. Year-to-year patterns in rainfall are unpredictable because of fluctuations in the weather.

Temperature inversions limit the vertical depth through which pollution can be mixed. Among the most common temperature inversions in the basin are radiation inversions, which form on clear winter nights when cold air off mountains sink to the valley floor while the air aloft over the valley remains warm. These inversions, in conjunction with calm winds, trap pollutants near the source. Other types of temperature inversions that affect the basin include marine, subsidence, and high-pressure inversions.

Summers are often periods of hazy visibility and occasionally unhealthful air. Strong temperature inversions may occur that limit the vertical depth through which air pollution can be dispersed. Air pollutants concentrate because they cannot rise through the inversion layer and disperse. These inversions are more common and persistent during the summer months. Over time, sunlight produces

photochemical reactions within this inversion layer that creates ozone, a particularly harmful air pollutant. Occasionally, strong thermal convections occur which allows the air pollutants to rise high enough to pass over the mountains and ultimately dilute the smog cloudtrap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic in inland valleys to cause any winter air pollution problems. Despite light wind conditions, especially at night and in the early morning, winter is generally a period of good air quality in the project vicinity.

In the winter, light nocturnal winds result mainly from the drainage of cool air off of the mountains toward the valley floor while the air aloft over the valley remains warm. This forms a type of inversion known as a radiation inversion. Such winds are characterized by stagnation and poor local mixing and trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic to cause any winter air pollution problems. Despite light wind conditions, especially at night and in the early morning, winter is generally a period of good air quality in the project vicinity.

The temperature and precipitation levels for the City of Lake Elsinore, the nearest available data, are in Table 3. Table 3 shows that August is typically the warmest month and December is typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Table 3: Meteorological Summary

Month	Temperature (˚F)		Average Precipitation (inches)
	Average High	Average Low	
January	66.0	38.9	2.56
February	67.7	40.9	2.68
March	72.3	43.4	1.77
April	77.7	47.0	0.67
May	83.8	52.5	0.20
June	91.0	56.5	0.05
July	97.7	61.0	0.16
August	98.6	62.5	0.05
September	93.4	58.9	0.17
October	83.4	52.0	0.59
November	70.4	42.1	0.90
December	65.8	38.5	2.11
Annual Average	**80.9**	**49.7**	**11.9**

Notes:
[1] Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca2805

3.1.2 Local Air Quality

The SCAQMD is divided into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located in the City of Wildomar in the Lake Elsinore

Source Receptor Area (Area 25). The nearest air monitoring station to the project site is the Lake Elsinore – W Flint Street Station (Lake Elsinore Station). The Lake Elsinore Station is located approximately 7.85 miles northwest of the project site, at 506 W Flint Street, Lake Elsinore; however this location does not provide all ambient weather data. Therefore, additional data was pulled from the SCAQMD historical data for the Lake Elsinore Area (Area 25) for both sulfur dioxide and carbon monoxide to provide the existing levels. Table 4 presents the monitored pollutant levels within the vicinity. However, it should be noted that due to the air monitoring station distance from the project site, recorded air pollution levels at the air monitoring station reflect with varying degrees of accuracy, local air quality conditions at the project site.

Table 4: Local Area Air Quality Levels from the Lake Elsinore Monitoring Stations

Pollutant (Standard)[2]	Year		
	2018	2019	2020
Ozone:			
Maximum 1-Hour Concentration (ppm)	0.116	0.108	0.130
Days > CAAQS (0.09 ppm)	**0**	**0**	**1**
Maximum 8-Hour Concentration (ppm)	0.960	0.089	0.100
Days > NAAQS (0.07 ppm)	**30**	**58**	**54**
Days > CAAQS (0.070 ppm)	**31**	**31**	**55**
Carbon Monoxide:			
Maximum 1-Hour Concentration (ppm)	-	-	-
Days > NAAQS (20 ppm)	-	-	-
Maximum 8-Hour Concentration (ppm)	-	-	-
Days > NAAQS (9 ppm)	-	-	-
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppm)	0.041	0.038	0.044
Days > NAAQS (0.25 ppm)	0	0	0
Sulfur Dioxide:			
Maximum 1-Hour Concentration (ppm)	-	-	-
Days > CAAQS (0.25 ppm)	-	-	-
Inhalable Particulates (PM10):			
Maximum 24-Hour Concentration (ug/m^3)	105.3	93.8	192.4
Days > NAAQS (150 ug/m^3)	0	*	1
Days > CAAQS (50 ug/m^3)	*	*	*
Annual Average (ug/m^3)	23.3	19.7	23.7
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	**Yes**	No	**Yes**
Ultra-Fine Particulates (PM2.5):			
Maximum 24-Hour Concentration (ug/m^3)	31.3	17.6	41.6
Days > NAAQS (35 ug/m^3)	*	*	*
Annual Average (ug/m^3)	6.7	*	7.2
Annual > NAAQS (15 ug/m3)	No	No	No
Annual > CAAQS (12 ug/m^3)	No	No	No

[1.] Source: obtained from https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year and /or https://www.arb.ca.gov/adam/topfour/topfour1.php

[2] CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million

[3] No data available.

The monitoring data presented in Table 4 shows that ozone and particulate matter (PM10) are the air pollutants of primary concern in the project area, which are detailed below.

Ozone
During the 2018 to 2020 monitoring period, the State 1-hour concentration standard for ozone has been exceeded one day in 2019 at the Lake Elsinore Station. The State 8-hour ozone standard has been exceeded between 30 and 58 days each year over the past three years at the Lake Elsinore Station. The Federal 8-hour ozone standard has been exceeded between 31 and 55 days each year over the past three years at the Lake Elsinore Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SCAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

Carbon Monoxide
CO is another important pollutant that is due mainly to motor vehicles. The Elsinore Area did not record an exceedance of the state or federal 1-hour or 8-hour CO standards for the last three years.

Nitrogen Dioxide
The Lake Elsinore Station did not record an exceedance of the State or Federal NO_2 standards for the last three years.

Sulfur Dioxide
The Elsinore Area did not record an exceedance of the State SO_2 standards for the last three years.

Particulate Matter
During the 2018 to 2020 monitoring period, there was insufficient data for the State 24-hour concentration standard for PM10 at the Lake Elsinore Station. Over the same time period, the Federal 24-hour standard for PM10 was exceeded once in 2020 and the Federal annual standard was not exceeded at the Lake Elsinore Station.

During the 2018 to 2020 monitoring period, there was insufficient data for the Federal 24-hour standard for PM2.5 at the Lake Elsinore Station.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM10 and PM2.5). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM10 and PM2.5. Other groups considered

sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

3.1.3 Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard. Table 5 lists the attainment status for the criteria pollutants in the basin.

Table 5: South Coast Air Basin Attainment Status

Pollutant	Averaging Time	National Standards[1]	Attainment Date[2]	California Standards[3]
1979 1-Hour Ozone[4]	1-Hour (0.12 ppm)	Nonattainment (Extreme)	11/15/2010 (Not attained[4])	Extreme Nonattainment
1997 8-Hour Ozone[5]	8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024	Nonattainment
2008 8-Hour Ozone	8-Hour (0.075 ppm)	Nonattainment (Extreme)	12/31/2032	
2015 8-Hour Ozone	8-Hour (0.070 ppm)	Designations Pending	~2037	
CO	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (Attained)	Maintenance
NO_2[6]	1-Hour (100 ppb) Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (Attained)	Attainment
SO_2[7]	1-Hour (75 ppb)	Designations Pending	Pending	Attainment
	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/ Attainment	3/19/1979 (Attained)	
PM10	24-Hour (150 µg/m^3)	Nonattainment (Serious)[8]	12/31/2006 (Redesignation request submitted)[8]	Nonattainment
PM2.5	24-Hour (35 µg/m^3)	Nonattainment	12/31/2006 (Redesignation request submitted)[8]	Unclassified
Lead	3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial)[9]	12/31/2015	Nonattainment (Partial)[9]

Notes:
[1] Obtained from Draft 2012 AQMP, SCAQMD, 2012. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassified/Attainment or Unclassifiable.
[2] A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.
[3] Obtained from http://www.arb.ca.gov/desig/adm/adm.htm.
[4] 1-hour O_3 standard (0.13 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard based on 2008-2010 data has some continuing obligations under the former standard.
[5] 1997 8-hour O_3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the 1997 O3 standard and most related implementation rules remain in place until the 1997 standard is revoked by U.S. EPA.
[6] New NO_2 1-hour standard, effective August 2, 2010; attainment designations June, 2013; annual NO_2 standard retained.
[7] The 1971 annual and 24-hour SO_2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO_2 1-hour standard. Area designations expected in 2012, with SSAB designated Unclassifiable/Attainment.
[8] Annual PM10 standard was revoked, effective December 18, 2006; redesignation request to Attainment of the 24-hour PM10 standard is pending with U.S. EPA
[9] Partial Nonattainment designation - Los Angeles County portion of Basin only.

3.2 Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO_2 and nitrous oxide (NO_2) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. Table 6 provides a description of each of the greenhouse gases and their global warming potential.

Additional information is available: https://www.arb.ca.gov/cc/inventory/data/data.htm

<Table 6 on next page>

Table 6: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (N_20),also known as laughing gas is a colorless gas. It has a lifetime of 114 years. Its global warming potential is 298.	Microbial processes in soil and water, fuel combustion, and industrial processes. In addition to agricultural sources, some industrial processes (nylon production, nitric acid production) also emit N_20.
Methane	Methane (CH_4) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 25.	A natural source of CH_4 is from the decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle farming.
Carbon dioxide	Carbon dioxide (CO_2) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). They are gases formed synthetically by replacing all hydrogen atoms in methane or methane with chlorine and/or fluorine atoms. Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone, therefore their production was stopped as required by the Montreal Protocol.
Hydrofluorocarbons	Hydrofluorocarbons (HFCs) are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Perfluorocarbons	Perfluorocarbons (PFCs) have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above the Earth's surface. They have a lifetime 10,000 to 50,000 years. They have a global warming potential range of 6,200 to 9,500.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Notes:
1. Sources: Intergovernmental Panel on Climate Change 2014a and Intergovernmental Panel on Climate Change 2014b. https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html

4.0 Modeling Parameters and Assumptions

4.1 Construction

Typical emission rates from construction activities were obtained from CalEEMod Version 2020.4.0 CalEEMod is a computer model published by the SCAQMD for estimating air pollutant emissions. The CalEEMod program uses the EMFAC2014 computer program to calculate the emission rates specific for the southwestern portion of Riverside County for construction-related employee vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy truck operations. EMFAC2014 and OFFROAD2011 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Using CalEEMod, the peak daily air pollutant emissions were calculated and presented below. These emissions represent the highest level of emissions for each of the construction phases in terms of air pollutant emissions.

The analysis assesses the emissions associated with the construction of the proposed project as indicated in Table 1. The project was modeled to be operational in 2023 and begin construction in the fourth quarter of 2022. The phases of the construction activities which have been analyzed below are: 1) site preparation, 2) grading, 3) building, 4) paving, and 5) architectural coating. For details on construction modeling and construction equipment for each phase, please see Appendix A.

The project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the Project area (disturbance area of approximately 26.56 acres) and the fact that the project won't export more than 5,000 cubic yards of material a day a Fugitive Dust Control Plan or Large Operation Notification would not be required.

SCAQMD's Rule 403 minimum requirements require that the application of the best available dust control measures are used for all grading operations and include the application of water or other soil stabilizers in sufficient quantity to prevent the generation of visible dust plumes. Compliance with Rule 403 would require the use of water trucks during all phases where earth moving operations would occur. Compliance with Rule 403 is required.

4.2 Operations

Operational or long-term emissions occur over the life of the Project. Both mobile and area sources generate operational emissions. Area source emissions arise from consumer product usage, heaters that consume natural gas, gasoline-powered landscape equipment, and architectural coatings

(painting). Mobile source emissions from motor vehicles are the largest single long-term source of air pollutants from the operation of the Project. Small amounts of emissions would also occur from area sources such as the consumption of natural gas for heating, hearths, from landscaping emissions, and consumer product usage. The operational emissions were estimated using the latest version of CalEEMod.

Mobile Sources
Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project are based upon the trip generation rates give in the project-specific traffic impact analysis (TJW Engineering, 2022) which uses the ITE 11th Trip Generation Manual. The traffic analysis shows a trip generation rate of 2,997 trips per day.

The program then applies the emission factors for each trip which is provided by the EMFAC2017 model to determine the vehicular traffic pollutant emissions. The CalEEMod default trip lengths were used in this analysis. Please see CalEEMod output comments sections in Appendix A and B for details.

Area Sources
Area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less and the CalEEMod model default was utilized as the new model takes this rule into account.

Energy Usage
2020.4.0 CalEEMod defaults were utilized.

4.3 Localized Construction Analysis

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011b). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the localized significance threshold lookup tables, the CEQA document should contain in its project design features or its mitigation measures the following parameters:

1. The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
2. The maximum number of acres disturbed on the peak day.
3. Any emission control devices added onto off-road equipment.
4. Specific dust suppression techniques used on the day of construction activity with maximum emissions.

The construction equipment showing the equipment associated with the maximum area of disturbance is shown in Table 7.

Table 7: Construction Equipment Assumptions[1]

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Site Preparation	Rubber Tired Dozers	3	0.5	1.5
	Tractors/Loaders/Backhoes	4	0.5	2.0
Total Per Phase				1.5
Grading	Graders	1	0.5	0.5
	Rubber Tired Dozers	1	0.5	0.5
	Scrapers	2	1	2.0
	Tractors/Loaders/Backhoes	2	0.5	1.0
Total Per Phase				4.0

Notes:

[1.] Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2

As shown in Table 7, the maximum number of acres disturbed in a day would be 4.0 acres during grading.

The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance Threshold Methodology, prepared by SCAQMD, revised July 2008. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. The emission thresholds were based on the Elsinore source receptor area (SRA 25) and a disturbance of 4 acres per day, interpolated from the 2- and 5-acre thresholds, at a distance of 25 meters (82 feet). The closest receptors are located 20 meters to the southeast of the site; therefore the 25-meter threshold was used.

4.4 Localized Operational Analysis

For operational emissions, the screening tables for a disturbance area of 4 acres per day and a distance of 25 meters were used to determine significance. The tables were compared to the project's onsite operational emissions.

5.0 Thresholds of Significance

5.1 Air Quality Thresholds of Significance

5.1.1 CEQA Guidelines for Air Quality

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the project must be evaluated.

The following air quality significance thresholds are contained in Appendix G of the CEQA Guidelines. A significant impact would occur if the project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable national or state ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, SCAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the Lead Agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. There are daily emission thresholds for construction and operation of a proposed project in the basin.

5.1.2 Regional Significance Thresholds for Construction Emissions

The following CEQA significance thresholds for construction emissions are established for the Basin:

- 75 pounds per day (lbs/day) of VOC
- 100 lbs/day of NO_x
- 550 lbs/day of CO
- 150 lbs/day of PM_{10}
- 55 lbs/day of $PM_{2.5}$
- 150 lbs/day of SO_2

Projects in the basin with construction-related emissions that exceed any of the emission thresholds are considered to be significant under SCAQMD guidelines.

5.1.3 Regional Significance Thresholds for Operational Emissions

The daily operational emissions significance thresholds for the basin are as follows:

- 55 pounds per day (lbs/day) of VOC
- 55 lbs/day of NO_x
- 550 lbs/day of CO
- 150 lbs/day of PM_{10}
- 55 lbs/day of $PM_{2.5}$
- 150 lbs/day of SO_2

Local Microscale Concentration Standards The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

5.1.4 Thresholds for Localized Significance

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. The SCAQMD has also provided Final Localized Significant Threshold Methodology (LST Methodology), June 2003, which details the methodology to analyze local air emission impacts. The Localized Significant Threshold Methodology found that the primary emissions of concern are NO2, CO, PM10, and PM2.5.

The emission thresholds were calculated based on the Elsinore source receptor area (SRA 25) and a disturbance of 4 acres per day at a distance of 25 meters (82 feet), for construction and 4 acres a day for screening of localized operational emissions.

5.2 Greenhouse Gas Thresholds of Significance

5.2.1 CEQA Guidelines for Greenhouse Gas

CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine if a project would have a significant impact on greenhouse gases, the type, level, and impact of emissions generated by the project must be evaluated.

The following greenhouse gas significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the project would:

(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

(b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

However, despite this, currently neither the CEQA statutes, OPR guidelines, nor the draft proposed changes to the CEQA Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency. As previously discussed (Section 2.2.4 of this report), SCAQMD has drafted interim thresholds. The screening threshold of 10,000 MTCO2e per year for industrial land uses was used in this analysis.

6.0 Air Quality Emissions Impact

6.1 Construction Air Quality Emissions Impact

The latest version of CalEEMod was used to estimate the onsite and offsite construction emissions. The emissions incorporate Rule 402 and 403. Rule 402 and 403 (fugitive dust) are not considered mitigation measures as the project by default is required to incorporate these rules during construction.

6.1.1 Regional Construction Emissions

The construction emissions for the project would not exceed the SCAQMD's daily emission thresholds at the regional level as demonstrated in Table 8, and therefore would be considered less than significant.

Table 8: Regional Significance - Construction Emissions (pounds/day)

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Site Preparation						
On-Site[2]	3.17	33.08	19.70	0.04	9.28	5.42
Off-Site[3]	0.07	0.05	0.72	0.00	0.20	0.05
Total	**3.24**	**33.13**	**20.42**	**0.04**	**9.48**	**5.48**
Grading						
On-Site[2]	3.62	38.84	29.04	0.06	5.33	2.95
Off-Site[3]	0.96	37.47	8.75	0.16	5.50	1.79
Total	**4.58**	**76.32**	**37.79**	**0.22**	**10.83**	**4.73**
Building Construction						
On-Site[2]	1.57	14.38	16.24	0.03	0.70	0.66
Off-Site[3]	1.99	7.72	20.39	0.08	6.73	1.87
Total	**3.56**	**22.11**	**36.63**	**0.11**	**7.43**	**2.52**
Paving						
On-Site[2]	2.02	9.52	14.63	0.02	0.47	0.43
Off-Site[3]	0.05	0.03	0.52	0.00	0.17	0.05
Total	**2.07**	**9.56**	**15.14**	**0.02**	**0.64**	**0.48**
Architectural Coating						
On-Site[2]	46.09	1.22	1.81	0.00	0.06	0.06
Off-Site[3]	0.33	0.20	3.33	0.01	1.09	0.29
Total	**46.42**	**1.42**	**5.14**	**0.01**	**1.15**	**0.35**
Total of overlapping phases[4]	**52.05**	**33.08**	**56.91**	**0.14**	**9.22**	**3.35**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds	No	No	No	No	No	No

Notes:
[1] Source: CalEEMod Version 2020.4.0
[2] On-site emissions from equipment operated on-site that is not operated on public roads.
[3] Off-site emissions from equipment operated on public roads.
[4] Construction, architectural coatings and paving phases may overlap.

6.1.2 Localized Construction Emissions

The data provided in Table 9 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. Therefore, a less than significant local air quality impact would occur from construction of the proposed project.

Table 9: Localized Significance – Construction

Phase	On-Site Pollutant Emissions (pounds/day)[1]			
	NOx	CO	PM10	PM2.5
Site Preparation	33.08	19.70	9.28	5.42
Grading	38.84	29.04	5.33	2.95
Building Construction	14.38	16.24	0.70	0.66
Paving	9.52	14.63	0.47	0.43
Architectural Coating	1.22	1.81	0.06	0.06
Total of overlapping phases	25.13	32.68	1.23	1.15
SCAQMD Threshold for 25 meters (82 feet) or less[2]	**325.33**	**1,676.67**	**11.00**	**6.67**
Exceeds Threshold?	No	No	No	No

Notes:
[1] Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for four acres in Lake Elsinore Source Receptor Area (SRA 25). Project will disturb a maximum of 4.0 acres per day (see Table 7).
[2] The nearest sensitive receptor is located 20 meters southeast; therefore, the 25-meter threshold has been used.

6.1.3 Odors

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are of short-term in nature and the odor emissions are expected cease upon the drying or hardening of the odor producing materials. Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not reach an objectionable level at the nearest sensitive receptors. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed project.

The SCAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the project would result in excessive nuisance odors, as defined under the California Code of Regulations and Section 41700 of the California Health and Safety Code, and thus would constitute a public nuisance related to air quality.

Potential sources that may emit odors during the on-going operations of the proposed project would include odor emissions from the trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402 no significant impact related to odors would occur during the on-going operations of the proposed project.

6.1.4 Construction-Related Toxic Air Contaminant Impact

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. The Office of Environmental Health Hazard Assessment (OEHHA) has issued the Air Toxic Hot Spots Program Risk Assessment Guidelines and Guidance Manual for the Preparation of Health Risk Assessments, February 2015 to provide a description of the algorithms, recommended exposure variates, cancer and noncancer health values, and the air modeling protocols needed to perform a health risk assessment (HRA) under the Air Toxics Hot Spots Information and Assessment Act of 1987. Hazard identification includes identifying all substances that are evaluated for cancer risk and/or non-cancer acute, 8-hour, and chronic health impacts. In addition, identifying any multi-pathway substances that present a cancer risk or chronic non-cancer hazard via non-inhalation routes of exposure.

Given the relatively limited number of heavy-duty construction equipment and construction schedule, the proposed project would not result in a long-term substantial source of toxic air containment emissions and corresponding individual cancer risk. Furthermore, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project.

6.2 Operational Air Quality Emissions Impact

6.2.1 Regional Operational Emissions

The operations-related criteria air quality impacts created by the proposed project have been analyzed through the use of CalEEMod model. The operating emissions were based on year 2023. The summer and winter emissions created by the proposed project's long-term operations were calculated and the highest emissions from either summer or winter are summarized in Table 10.

Table 10: Regional Significance - Unmitigated Operational Emissions (lbs/day)

Activity	Pollutant Emissions (pounds/day)[1]					
	VOC	**NOx**	**CO**	**SO2**	**PM10**	**PM2.5**
Area Sources[2]	6.59	0.00	0.12	0.00	0.00	0.00
Energy Usage[3]	0.26	2.39	2.01	0.01	0.18	0.18
Mobile Sources[4]	9.51	12.39	91.54	0.21	20.56	5.59
Total Emissions	**16.37**	**14.79**	**93.67**	**0.22**	**20.74**	**5.77**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Source: CalEEMod Version 2020.4.0
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of emissions from on-site natural gas usage.
[4] Mobile sources consist of emissions from vehicles and road dust.

Table 10 provides the project's unmitigated operational emissions. Table 10 shows that the project does not exceed the SCAQMD daily emission threshold and regional operational emissions are considered to be less than significant.

6.2.2 Localized Operational Emissions

Table 11 shows the calculated emissions for the proposed operational activities compared with appropriate LSTs. The LST analysis only includes on-site sources; however, the CalEEMod software outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 11 include all on-site project-related stationary sources and 10% of the project-related new mobile sources. This percentage is an estimate of the amount of project-related new vehicle traffic that will occur on-site.

Table 11: Localized Significance – Unmitigated Operational Emissions

	On-Site Pollutant Emissions (pounds/day)[1]			
On-Site Emission Source	**NOx**	**CO**	**PM10**	**PM2.5**
Area Sources[2]	0.00	0.12	0.00	0.00
Energy Usage[3]	2.39	2.01	0.18	0.18
On-Site Vehicle Emissions[4]	1.24	9.15	2.06	0.56
Total Emissions	**3.63**	**11.28**	**2.24**	**0.74**
SCAQMD Threshold for 50 meters (164 feet)[5]	**325.33**	**1,676.67**	**3.33**	**1.67**
Exceeds Threshold?	No	No	No	No

Notes:
[1] Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for four acres, to be conservative, in Lake Elsinore Source Receptor Area (SRA 25).
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of emissions from generation of electricity and on-site natural gas usage.
[4] On-site vehicular emissions based on 1/10 of the gross vehicular emissions and road dust.
[5] The nearest sensitive receptor is located 20 meters southeast; therefore, the 25-meter threshold has been used.

Table 11 indicates that the local operational emission would not exceed the LST thresholds at the nearest sensitive receptors, located adjacent to the project. Therefore, the project will not result in significant Localized Operational emissions.

6.3 CO Hot Spot Emissions

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards which were presented in above in Section 5.0.

To determine if the proposed project could cause emission levels in excess of the CO standards discussed above in Section 5.0, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

Micro-scale air quality emissions have traditionally been analyzed in environmental documents where the air basin was a non-attainment area for CO. However, the SCAQMD has demonstrated in the CO attainment redesignation request to EPA that there are no "hot spots" anywhere in the air basin, even at intersections with much higher volumes, much worse congestion, and much higher background CO levels than anywhere in Riverside County. If the worst-case intersections in the air basin have no "hot spot" potential, any local impacts will be below thresholds.

The traffic impact analysis showed that the project would generate 2,997 trips per day. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. The volume of traffic at project buildout would be well below 100,000 vehicles and below the necessary volume to even get close to causing a violation of the CO standard. Therefore no CO "hot spot" modeling was performed and no significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed project.

6.4 Cumulative Regional Air Quality Impacts

Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for the project's air quality must be generic by nature.

The project area is out of attainment for both ozone and PM10 particulate matter. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the South Coast Air Basin. The greatest cumulative impact on the quality of regional air cell will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. The project does not exceed any of the thresholds of significance and therefore is considered less than significant.

6.5 Air Quality Compliance

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD Air Quality Management Plan (AQMP). Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that

the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP in 2016 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

A. Criterion 1 - Increase in the Frequency or Severity of Violations

Based on the air quality modeling analysis contained in this Air Analysis, short-term construction impacts will not result in significant impacts based on the SCAQMD regional and local thresholds of significance. This Air Analysis also found that, long-term operations impacts will not result in significant impacts based on the SCAQMD local and regional thresholds of significance.

Therefore, the proposed project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

B. Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The 2016-2040 Regional Transportation/Sustainable Communities Strategy, prepared by SCAG, 2016, includes chapters on: the challenges in a changing region, creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this project, the County of Riverside and City of Wildomar Land Use Plans define the assumptions that are represented in the AQMP.

The City of Wildomar Zoning Map identifies the land use designation of the site as Industrial Park. Furthermore, the project site has a current land use classification of Business Park according to the City of Wildomar General Plan Land Use Map.

The proposed project is to develop the site with five industrial buildings with additional retail and office space. Therefore, the proposed project would not result in an inconsistency with the land use designation in the City's General Plan. Therefore, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur.

7.0 Greenhouse Gas Impact Analysis

7.1 Construction Greenhouse Gas Emissions Impact

The greenhouse gas emissions from project construction equipment and worker vehicles are shown in Table 12. The emissions are from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated at 90.69 metric tons of CO_2e per year. Annual CalEEMod output calculations are provided in Appendix B.

Table 12: Construction Greenhouse Gas Emissions

Activity	Emissions ($MTCO_2e$)[1]		
	Onsite	**Offsite**	**Total**
Site Preparation	33.71	1.58	35.29
Grading	123.70	360.92	484.61
Building Construction	513.04	1631.64	2,144.68
Paving	35.33	2.19	37.52
Coating	4.47	14.04	18.52
Total	710.25	2010.37	2,720.61
Averaged over 30 years[2]	23.67	67.01	90.69

Notes:
[1.] $MTCO_2e$=metric tons of carbon dioxide equivalents (includes carbon dioxide, methane and nitrous oxide).
[2.] The emissions are averaged over 30 years because the average is added to the operational emissions, pursuant to SCAQMD.
* CalEEMod output (Appendix B)

7.2 Operational Greenhouse Gas Emissions Impact

Operational emissions occur over the life of the project. The operational emissions for the project are 4,903.35 metric tons of CO_2e per year as shown in Table 13. These emissions do not exceed the SCAQMD screening threshold of 10,000 metric tons of CO_2e per year for industrial uses. Therefore, the project's GHG emissions are considered to be less than significant.

<Table 13 next page>

Table 13: Opening Year Unmitigated Project-Related Greenhouse Gas Emissions

Category	Greenhouse Gas Emissions (Metric Tons/Year)[1]					
	Bio-CO2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Area Sources[2]	0.00	0.03	0.03	0.00	0.00	0.03
Energy Usage[3]	0.00	1,010.70	1,010.70	0.05	0.01	1,016.29
Mobile Sources[4]	0.00	3,315.34	3,315.34	0.17	0.17	3,369.26
Solid Waste[5]	73.11	0.00	73.11	4.32	0.00	181.12
Water[6]	20.92	155.43	176.35	2.16	0.05	245.97
Construction[7]	0.00	88.71	88.71	0.01	0.01	90.69
Total Emissions	94.02	4,570.22	4,664.24	6.72	0.24	**4,903.35**
SCAQMD Draft Screening Threshold						**10,000**
Exceeds Threshold?						**No**

Notes:
[1] Source: CalEEMod Version 2020.4.0
[2] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.
[3] Energy usage consist of GHG emissions from electricity and natural gas usage.
[4] Mobile sources consist of GHG emissions from vehicles.
[5] Solid waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[6] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[7] Construction GHG emissions based on a 30-year amortization rate.

7.3 Greenhouse Gas Plan Consistency

The proposed project would have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The City of Wildomar is participating the Western Riverside Council of Governments (WRCOG) Subregional Climate Action Plan. The WRCOG Subregional CAP establishes a community-wide emissions reduction target of 15% below 2010, following guidance from CARB and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined this approach to be consistent with the state-wide AB 32 goal of reducing emissions to 1990 levels.

As discussed above, the project's emissions are 4,903.35 MTCO2e per year and do not exceed the SCAQMD draft threshold and is in compliance with the reduction goals of AB-32 and SB-32. Therefore, as the WRCOG Subregional CAP's emissions reduction target is consistent with the reduction goals of AB 32, the proposed project would also be anticipated to be consistent with the WRCOG Subregional CAP. Furthermore, as shown in Table 14, the project is consistent with applicable local reduction measures identified in the WRCOG Subregional CAP and would result in a less than significant impact.

CARB Scoping Plan Consistency

The ARB Board approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

This Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman and child in California down to about 10 tons per person by 2020.

In May 2014, CARB released its *First Update to the Climate Change Scoping Plan* (CARB 2014). This *Update* identifies the next steps for California's leadership on climate change. While California continues on its path to meet the near-term 2020 greenhouse gas limit, it must also set a clear path toward long-term, deep GHG emission reductions. This report highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.

In November 2017, CARB release the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. In addition, Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and Trade Program, which constrains and reduces emissions at covered sources.

As the latest, 2017 Scoping Plan builds upon previous versions, project consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in Table 15. As shown in Table 15, the project is consistent with the applicable strategies and would result in a less than significant impact.

Therefore, the project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Furthermore, the project will also comply with applicable Green Building Standards and County of Riverside's policies regarding sustainability (as dictated by the County's General Plan). With incorporation of regulatory compliance and credit for reductions due to CAPCOA location-based efficiency measures, impacts are considered to be less than significant, further analysis is not warranted.

Table 14: Applicable WRCOG Subregional CAP Local Reduction Measure Project Comparison[1]

WRCOG Local Reduction Measure	Measure Description	Project Compliance with Measure
E-1: Energy Action Plan	Improve municipal and community wide energy efficiency and reduce energy consumption through the adoption of local Energy Action Plans (EAP).	Not directly applicable to the project; however, the project will be compliant with the current Title 24 standards.
E-3: Shade Trees	Strategically plant trees to reduce the urban heat island effect.	The proposed project is to include trees per City requirements for new developments.
T-2: Bicycle Parking	Provide additional options for bicycle parking.	The proposed project will follow City requirements for bicycle parking.
T-8: Density	Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.	The proposed project is industrial and located within 0.25 miles of a residential community.
T-10: Design/Site Planning	Design neighborhoods and sites to reduce VMT.	The proposed project is industrial and located within 0.25 miles of a residential community.
T-14: Voluntary Transportation Demand Management	Reduce demand for roadway travel through incentives for alternative modes of transportation and disincentives for driving	The proposed project is industrial and located within 0.25 miles of a residential community.
SW-1: Yard Waste Collection	Provide green waste collection bins community-wide.	The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
SW-2: Food Scrap and Paper Division	Divert food and paper waste from landfills by implementing collection system.	The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.

[1] Source: WRCOG Subregional Climate Action Plan (2014).

Table 15: Project Consistency with CARB Scoping Plan Policies and Measures[1]

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project that are required to comply with the measures will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.

2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions	Project Compliance with Recommended Action
Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	Consistent. The project will be compliant with the current Title 24 standards.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	Consistent. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.

Notes:
1 Source: CARB Scoping Plan (2008 and 2017)

8.0 Health Risk Assessment

The greatest potential for toxic air contaminant emissions during the operation of the project would be related to diesel particulate emissions associated with truck idling at the loading docks throughout the project. The Office of Environmental Health Hazard Assessment (OEHHA) has issued the Air Toxic Hot Spots Program Risk Assessment Guidelines and Guidance Manual for the Preparation of Health Risk Assessments, February 2015 to provide a description of the algorithms, recommended exposure variates, cancer and noncancer health values, and the air modeling protocols needed to perform a health risk assessment (HRA) under the Air Toxics Hot Spots Information and Assessment Act of 1987. Hazard identification includes identifying all substances that are evaluated for cancer risk and/or non-cancer acute, 8-hour, and chronic health impacts. In addition, identifying any multi-pathway substances that present a cancer risk or chronic non-cancer hazard via non-inhalation routes of exposure.

All loading docks are facing away from residential uses and the closest loading dock to a sensitive receptor is 370 feet away; however, the 50 total loading docks onsite will be spread throughout the 26.56-acre site. Additionally, the CARB Airborne Toxic Control Measure idling limit of five minutes shall be enforced to ensure that no excessive idling occurs onsite. With these measures, the proposed project would not result in a substantial source of toxic air containment emissions and corresponding individual cancer risk. Therefore, no significant long-term toxic air contaminant impacts would occur during operation of the proposed project.

9.0 Energy Analysis

Information from the CalEEMod 2020.4.0 Daily and Annual Outputs contained in the air quality and greenhouse gas analyses above was utilized for this analysis. The CalEEMod outputs detail project related construction equipment, transportation energy demands, and facility energy demands.

9.1 Construction Energy Demand

9.1.1 Construction Equipment Electricity Usage Estimates

Electrical service will be provided by Southern California Edison (SCE). Based on the 2017 National Construction Estimator, Richard Pray (2017)[2], the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.32. The project plans to develop the site with 132,800 square feet of new warehouse space over the course of approximately 48 months.[3] Based on Table 16, the total power cost of the on-site electricity usage during the construction of the proposed project is estimated to be approximately $33,759.06. As shown in Table 16, the total electricity usage from Project construction related activities is estimated to be approximately 613,801 kWh.[4]

Table 16: Project Construction Power Cost and Electricity Usage

Power Cost (per 1,000 square foot of building per month of construction)	Total Building Size (1,000 Square Foot)[1]	Construction Duration (months)	Total Project Construction Power Cost
$2.32	285.32	51	$33,759.06

Cost per kWh	Total Project Construction Electricity Usage (kWh)
$0.06	613,801

* Assumes the project will be under the GS-1 General Service rate under SCE.

[2] Pray, Richard. 2017 National Construction Estimator. Carlsbad: Craftsman Book Company, 2017.
[3] As stated in the project description, the project involves the demolition of approximately 70,000 square feet of existing residences.
[4] LADWP's Small Commercial & Multi-Family Service (A-1) is approximately $0.06 per kWh of electricity Southern California Edison (SCE). Rates & Pricing Choices: General Service/Industrial Rates. https://library.sce.com/content/dam/sce-doclib/public/regulatory/historical/electric/2020/schedules/general-service-&-industrial-rates/ELECTRIC_SCHEDULES_GS-1_2020.pdf

9.1.2 Construction Equipment Fuel Estimates

Using the CalEEMod data input, the project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. CARB's 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal.[5] As presented in Table 17 below, project construction activities would consume an estimated 77,250 gallons of diesel fuel.

Table 17: Construction Equipment Fuel Consumption Estimates

Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	HP hrs/ day	Total Fuel Consumption (gal diesel fuel)[1]
Site Preparation	20	Rubber Tired Dozers	3	8	247	0.40	2371	2563
	20	Tractors/Loaders/Backhoes	4	8	97	0.37	1148	1242
Grading	45	Excavators	2	8	158	0.38	961	2,337
	45	Graders	1	8	187	0.41	613	1,492
	45	Rubber Tired Dozers	1	8	247	0.40	790	1,923
	45	Scrapers	2	8	367	0.48	2,819	6,856
Building Construction	45	Tractors/Loaders/Backhoes	2	8	97	0.37	574	1,397
	440	Cranes	1	7	231	0.29	469	11,153
	440	Forklifts	3	8	89	0.20	427	10,160
	440	Generator Sets	1	8	84	0.74	497	11,827
	440	Tractors/Loaders/Backhoes	3	7	97	0.37	754	17,926
Paving	440	Welders	1	8	46	0.45	166	3,939
	35	Pavers	2	8	130	0.42	874	1,653
	35	Paving Equipment	2	8	132	0.36	760	1,438
Architectural Coating	35	Rollers	2	8	80	0.38	486	920
CONSTRUCTION FUEL DEMAND (gallons of diesel fuel)								**77,250**

Notes:
[1]Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp.
(Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)

[5] Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/day (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines: (https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf).

9.1.3 Construction Worker Fuel Estimates

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 3,238,116 VMT. Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analysis using information generated using CARB's EMFAC model (see Appendix C for details). Table 18 shows that an estimated 104,624 gallons of fuel would be consumed for construction worker trips.

Table 18: Construction Worker Fuel Consumption Estimates

Phase	Number of Days	Worker Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Site Preparation	20	18	14.7	5292	30.95	171
Grading	45	20	14.7	13,230	30.95	427
Building Construction	440	486	14.7	3,143,448	30.95	101,565
Paving	35	51	14.7	26,240	30.95	848
Architectural Coating	35	97	14.7	49,907	30.95	1,612
Total Construction Worker Fuel Consumption						**104,624**

Notes:
[1]Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

9.1.4 Construction Vendor/Hauling Fuel Estimates

Tables 19 and 20 show the estimated fuel consumption for vendor and hauling during building construction and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 826,840 VMT. For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles.[6] Tables 19 and 20 show that an estimated 99,656 gallons of fuel would be consumed for vendor and hauling trips.

<Tables 19 and 20, next page>

[6] Vendors delivering construction material or hauling debris from the site during grading would use medium to heavy duty vehicles with an average fuel consumption of 9.22 mpg for medium heavy-duty trucks and 6.74 mpg for heavy heavy-duty trucks (see Appendix C for details).

Table 19: Construction Vendor Fuel Consumption Estimates (MHD Trucks)[1]

Phase	Number of Days	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Site Preparation	20	0	6.9	0	9.22	0
Grading	45	0	6.9	0	9.22	0
Building Construction	440	190	6.9	576,840	9.22	62,564
Paving	35	0	6.9	0	9.22	0
Architectural Coating	35	0	6.9	0	9.22	0
Total Vendor Fuel Consumption						**62,564**

Notes:
[1] Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

Table 20: Construction Hauling Fuel Consumption Estimates (HHD Trucks)[1]

Phase	Number of Days	Hauling Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Site Preparation	20	0	20	0	6.74	0
Grading	45	277.8	20	250,000	6.74	37,092
Building Construction	440	0	20	0	6.74	0
Paving	35	0	20	0	6.74	0
Architectural Coating	35	0	20	0	6.74	0
Total Construction Hauling Fuel Consumption						**37,092**

Notes:
[1]Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2020.40 defaults.

9.1.5 Construction Energy Efficiency/Conservation Measures

Construction equipment used over the approximately 21-month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. In addition, the CARB Airborne Toxic Control Measure limits idling times of construction vehicles to no more than five minutes, thereby minimizing unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Furthermore, the project has been designed in compliance with California's Energy Efficiency Standards and 2019 CALGreen Standards.

Construction of the proposed warehouse development would require the typical use of energy resources. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

9.2 Operational Energy Demand

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

9.2.1 Transportation Fuel Consumption

The largest source of operational energy use would be vehicle operation of customers. The site is located in an urbanized area just in close proximity to transit stops. Using the CalEEMod output, it is assumed that an average trip for autos were assumed to be 16.6 miles, light trucks were assumed to travel an average of 6.9 miles, and 3- 4-axle trucks were assumed to travel an average of 8.4 miles[7]. To show a worst-case analysis, as the proposed project is an office project, it was assumed that vehicles would operate 365 days per year. Table 21 shows the worst-case estimated annual fuel consumption for all classes of vehicles from autos to heavy-heavy trucks.[8] Table 21 shows that an estimated 495,840 gallons of fuel would be consumed per year for the operation of the proposed project.

Table 21: Estimated Vehicle Operations Fuel Consumption

Vehicle Type	Vehicle Mix	Number of Vehicles	Average Trip (miles)[1]	Daily VMT	Average Fuel Economy (mpg)	Total Gallons per Day	Total Annual Fuel Consumption (gallons)
Light Auto	Automobile	1,655	16.6	27,476	31.82	863.48	315,170
Light Truck	Automobile	173	6.9	1,196	27.16	44.04	16,076
Light Truck	Automobile	534	6.9	3,686	25.6	144.00	52,560
Medium Truck	Automobile	436	6.9	3,011	20.81	144.69	52,811
Light Heavy Truck	2-Axle Truck	82	8.4	691	13.81	50.06	18,274
Light Heavy Truck 10,000 lbs +	2-Axle Truck	23	8.4	190	14.18	13.40	4,891
Medium Heavy Truck	3-Axle Truck	35	8.4	294	9.58	30.74	11,218
Heavy Heavy Truck	4-Axle Truck	58	8.4	486	7.14	68.06	24,841
Total		2,997	--	37,031	--	1358.47	--
Total Annual Fuel Consumption							**495,840**

Notes:
[1] The trip generation assessment, the project is to generate 832 total net new trips after reduction of existing uses. Default CalEEMod vehicle fleet mix utilized.
[1]Based on the size of the site and relative location, trips were assumed to be local rather than regional.

Trip generation generated by the proposed project are consistent with other similar industrial uses of similar scale and configuration as reflected in the Trip Generation Assessment (TJW Engineering, 2022). That is, the proposed project does not propose uses or operations that would inherently result in

[7] CalEEMod default distance for H-W (home-work) or C-W (commercial-work) is 16.6 miles; 6.9 miles for H-S (home-shop) or C-C (commercial-customer); and 8.4 miles for H-O (home-other) or C-O (commercial-other).
[8] Average fuel economy based on aggregate mileage calculated in EMFAC 2017 for opening year (2023). See Appendix C for EMFAC output.

excessive and wasteful vehicle trips, nor associated excess and wasteful vehicle energy consumption. Therefore, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

9.2.2 Facility Energy Demands (Electricity and Natural Gas)

The annual natural gas and electricity demands were provided per the CalEEMod output and are provided in Table 22.

Table 22: Project Unmitigated Annual Operational Energy Demand Summary[1]

Natural Gas Demand	kBTU/year
General Heavy Industry	8,023,340
General Light Industry	824,092
General Office Building	36,015
Strip Mall	23,100
Total	8,906,547
Electricity Demand	**kWh/year**
General Heavy Industry	2,461,850
General Light Industry	252,861
General Office Building	96,495
Strip Mall	127,470
Parking Lot	80,360
Total	3,019,036

Notes:
[1]Taken from the CalEEMod 2020.4.0 annual output.

As shown in Table 22, the estimated electricity demand for the proposed project is approximately 276,542 kWh per year. In 2020, the non-residential sector of the County of Riverside consumed approximately 8,015 million kWh of electricity.[9] In addition, the estimated natural gas consumption for the proposed project is approximately 216,666 kBTU per year. In 2020, the non-residential sector of the County of Riverside consumed approximately 135 million therms of gas.[10] Therefore, the increase in both electricity and natural gas demand from the proposed project is insignificant compared to the County's 2020 demand.

9.3 Renewable Energy and Energy Efficiency Plan Consistency

Regarding federal transportation regulations, the project site is located in an already developed area. Access to/from the project site is from existing roads. These roads are already in place so the project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may

[9] California Energy Commission, Electricity Consumption by County. https://ecdms.energy.ca.gov/elecbycounty.aspx
[10] California Energy Commission, Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx

be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by the SCE and Southern California Gas Company.

Regarding the State's Renewable Energy Portfolio Standards, the project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

10.0 References

The following references were used in the preparing this analysis.

California Air Pollution Control Officers Association
2009 Health Risk Assessments for Proposed Land Use Projects

California Air Resources Board
2008 Resolution 08-43

2008 Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act

2008 ARB Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk – Frequently Asked Questions

2008 Climate Change Scoping Plan, a framework for change.

2011 Supplement to the AB 32 Scoping Plan Functional Equivalent Document

2013 Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities

2014 First Update to the Climate Change Scoping Plan, Building on the Framework Pursuant to AB32, the California Global Warming Solutions Act of 2006. May.

2018 Historical Air Quality, Top 4 Summary

City of Wildomar
2018 City of Wildomar Zoning Map. August 15.

2018 City of Wildomar General Plan Land Use Map. August 15.

County of Riverside
2015 County of Riverside General Plan. December 8.

Governor's Office of Planning and Research
2008 CEQA and Climate: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review

2009 CEQA Guideline Sections to be Added or Amended

Office of Environmental Health Hazard Assessment
2015 Air Toxics Hot Spots Program Risk Assessment Guidelines

South Coast Air Quality Management District
1993 CEQA Air Quality Handbook

2005 Rule 403 Fugitive Dust
2007 2007 Air Quality Management Plan

2008 Final Localized Significance Threshold Methodology, Revised

2011 Appendix A Calculation Details for CalEEMod

2012 Final 2012 Air Quality Management Plan

2016 Final 2016 Air Quality Management Plan

TJW Engineering Group
2022 Clinton Keith Corporate Center Trip Generation Analysis, City of Wildomar. September 13.

Appendix A:

CalEEMod Daily Emission Output

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Wildomar Commerce Center

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.49	1000sqft	0.59	25,490.00	0
Strip Mall	10.50	1000sqft	0.24	10,500.00	0
General Office Building	10.50	1000sqft	0.24	10,500.00	0
Parking Lot	574.00	Space	5.17	229,600.00	0
General Heavy Industry	248.17	1000sqft	5.70	248,170.00	0
Other Non-Asphalt Surfaces	261.32	1000sqft	6.00	261,322.00	0
Other Asphalt Surfaces	8.62	Acre	8.62	375,487.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per site plan, 26.56 acre site with 261,820 sqft of industrial space and 21,000 sqft of office/retail space with 261,320 sqft of landscaping and 574 parking spaces.

Construction Phase -

Grading -

Vehicle Trips - Per the Trip Generation Analysis memo from TJW Engineering, Inc., 2,997 trips estimated per day

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of their waste away from landfills by 2020

Architectural Coating - SCAQMD Rule 1113

Area Coating - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblGrading	MaterialExported	0.00	100,000.00
tblLandUse	LandUseSquareFeet	261,320.00	261,322.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	ST_TR	2.21	285.43
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	SU_TR	0.70	285.43
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	4.96	0.00
tblVehicleTrips	WD_TR	9.74	285.43
tblVehicleTrips	WD_TR	44.32	0.00

2.0 Emissions Summary

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.5820	74.3708	37.7279	0.2238	19.8582	2.0484	21.4718	10.1558	1.8996	11.6403	0.0000	23,255.6722	23,255.6722	2.1798	2.6890	24,111.4797
2023	4.0027	62.3007	36.6292	0.2167	14.5702	1.7603	16.3305	5.0885	1.6318	6.7203	0.0000	22,512.5985	22,512.5985	2.1800	2.5731	23,333.8923
2024	46.4169	20.6295	35.3881	0.1059	6.6493	0.6914	7.3406	1.7911	0.6507	2.4418	0.0000	10,793.7527	10,793.7527	0.7426	0.6173	10,996.2772
2025	46.3854	1.3205	4.9144	0.0119	1.0842	0.0561	1.1404	0.2875	0.0558	0.3433	0.0000	1,210.5805	1,210.5805	0.0335	0.0197	1,217.2985
Maximum	**46.4169**	**74.3708**	**37.7279**	**0.2238**	**19.8582**	**2.0484**	**21.4718**	**10.1558**	**1.8996**	**11.6403**	**0.0000**	**23,255.6722**	**23,255.6722**	**2.1800**	**2.6890**	**24,111.4797**

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.5820	74.3708	37.7279	0.2238	8.7845	2.0484	10.8329	3.9933	1.8996	5.4778	0.0000	23,255.6722	23,255.6722	2.1798	2.6890	24,111.4797
2023	4.0027	62.3007	36.6292	0.2167	8.7843	1.7603	10.5447	2.8337	1.6318	4.4655	0.0000	22,512.5985	22,512.5985	2.1800	2.5731	23,333.8923
2024	46.4169	20.6295	35.3881	0.1059	6.6493	0.6914	7.3406	1.7911	0.6507	2.4418	0.0000	10,793.7527	10,793.7527	0.7426	0.6173	10,996.2772
2025	46.3854	1.3205	4.9144	0.0119	1.0842	0.0561	1.1404	0.2875	0.0558	0.3433	0.0000	1,210.5805	1,210.5805	0.0335	0.0197	1,217.2985
Maximum	**46.4169**	**74.3708**	**37.7279**	**0.2238**	**8.7845**	**2.0484**	**10.8329**	**3.9933**	**1.8996**	**5.4778**	**0.0000**	**23,255.6722**	**23,255.6722**	**2.1800**	**2.6890**	**24,111.4797**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**39.99**	**0.00**	**35.49**	**48.59**	**0.00**	**39.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5921	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Energy	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.7632	2,870.7632	0.0550	0.0526	2,887.8227
Mobile	9.5128	12.3936	91.5447	0.2070	20.4018	0.1594	20.5611	5.4433	0.1494	5.5927		21,288.1298	21,288.1298	1.0345	0.9810	21,606.3158
Total	**16.3681**	**14.7870**	**93.6704**	**0.2214**	**20.4018**	**0.3416**	**20.7434**	**5.4433**	**0.3316**	**5.7749**		**24,159.1422**	**24,159.1422**	**1.0901**	**1.0336**	**24,494.4040**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5921	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Energy	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.7632	2,870.7632	0.0550	0.0526	2,887.8227
Mobile	9.5128	12.3936	91.5447	0.2070	20.4018	0.1594	20.5611	5.4433	0.1494	5.5927		21,288.1298	21,288.1298	1.0345	0.9810	21,606.3158
Total	**16.3681**	**14.7870**	**93.6704**	**0.2214**	**20.4018**	**0.3416**	**20.7434**	**5.4433**	**0.3316**	**5.7749**		**24,159.1422**	**24,159.1422**	**1.0901**	**1.0336**	**24,494.4040**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2022	11/28/2022	5	20	
2	Grading	Grading	11/29/2022	1/30/2023	5	45	
3	Building Construction	Building Construction	1/31/2023	10/7/2024	5	440	
4	Paving	Paving	10/8/2024	11/25/2024	5	35	
5	Architectural Coating	Architectural Coating	11/26/2024	1/13/2025	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 19.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 441,990; Non-Residential Outdoor: 147,330; Striped Parking Area: 51,985 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Scrapers	2	8.00	367	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	12,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	486.00	190.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	97.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0709	0.0460	0.7176	1.8300e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		186.0370	186.0370	4.6100e-003	4.5800e-003	187.5158
Total	**0.0709**	**0.0460**	**0.7176**	**1.8300e-003**	**0.2012**	**1.0000e-003**	**0.2022**	**0.0534**	**9.2000e-004**	**0.0543**		**186.0370**	**186.0370**	**4.6100e-003**	**4.5800e-003**	**187.5158**

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**7.6662**	**1.6126**	**9.2788**	**3.9400**	**1.4836**	**5.4235**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0709	0.0460	0.7176	1.8300e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		186.0370	186.0370	4.6100e-003	4.5800e-003	187.5158
Total	**0.0709**	**0.0460**	**0.7176**	**1.8300e-003**	**0.2012**	**1.0000e-003**	**0.2022**	**0.0534**	**9.2000e-004**	**0.0543**		**186.0370**	**186.0370**	**4.6100e-003**	**4.5800e-003**	**187.5158**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.4850	0.0000	9.4850	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.4850**	**1.6349**	**11.1199**	**3.6964**	**1.5041**	**5.2005**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8784	35.4762	7.8891	0.1597	4.8618	0.4124	5.2742	1.3329	0.3945	1.7274		17,037.5539	17,037.5539	0.2305	2.6839	17,843.1130
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0788	0.0511	0.7973	2.0300e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		206.7078	206.7078	5.1200e-003	5.0800e-003	208.3509
Total	**0.9572**	**35.5273**	**8.6864**	**0.1617**	**5.0854**	**0.4135**	**5.4989**	**1.3922**	**0.3955**	**1.7877**		**17,244.2617**	**17,244.2617**	**0.2356**	**2.6890**	**18,051.4638**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6992	0.0000	3.6992	1.4416	0.0000	1.4416			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**3.6992**	**1.6349**	**5.3340**	**1.4416**	**1.5041**	**2.9457**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8784	35.4762	7.8891	0.1597	4.8618	0.4124	5.2742	1.3329	0.3945	1.7274		17,037.5539	17,037.5539	0.2305	2.6839	17,843.1130
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0788	0.0511	0.7973	2.0300e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		206.7078	206.7078	5.1200e-003	5.0800e-003	208.3509
Total	**0.9572**	**35.5273**	**8.6864**	**0.1617**	**5.0854**	**0.4135**	**5.4989**	**1.3922**	**0.3955**	**1.7877**		**17,244.2617**	**17,244.2617**	**0.2356**	**2.6890**	**18,051.4638**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.4850	0.0000	9.4850	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.4850**	**1.4245**	**10.9095**	**3.6964**	**1.3105**	**5.0069**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6079	27.7400	7.6281	0.1526	4.8616	0.3348	5.1964	1.3328	0.3203	1.6532		16,299.8801	16,299.8801	0.2312	2.5684	17,071.0551
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0731	0.0452	0.7337	1.9700e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		201.2406	201.2406	4.5900e-003	4.6900e-003	202.7537
Total	**0.6810**	**27.7851**	**8.3618**	**0.1546**	**5.0852**	**0.3359**	**5.4210**	**1.3921**	**0.3213**	**1.7134**		**16,501.1207**	**16,501.1207**	**0.2358**	**2.5731**	**17,273.8088**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6992	0.0000	3.6992	1.4416	0.0000	1.4416			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**3.6992**	**1.4245**	**5.1236**	**1.4416**	**1.3105**	**2.7521**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6079	27.7400	7.6281	0.1526	4.8616	0.3348	5.1964	1.3328	0.3203	1.6532		16,299.8801	16,299.8801	0.2312	2.5684	17,071.0551
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0731	0.0452	0.7337	1.9700e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		201.2406	201.2406	4.5900e-003	4.6900e-003	202.7537
Total	**0.6810**	**27.7851**	**8.3618**	**0.1546**	**5.0852**	**0.3359**	**5.4210**	**1.3921**	**0.3213**	**1.7134**		**16,501.1207**	**16,501.1207**	**0.2358**	**2.5731**	**17,273.8088**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2142	6.2074	2.5559	0.0332	1.2170	0.0541	1.2710	0.3504	0.0517	0.4021		3,520.1490	3,520.1490	0.0359	0.5202	3,676.0579
Worker	1.7756	1.0972	17.8293	0.0478	5.4323	0.0255	5.4578	1.4407	0.0235	1.4641		4,890.1466	4,890.1466	0.1117	0.1140	4,926.9145
Total	**1.9898**	**7.3046**	**20.3852**	**0.0810**	**6.6493**	**0.0795**	**6.7288**	**1.7911**	**0.0752**	**1.8663**		**8,410.2957**	**8,410.2957**	**0.1476**	**0.6342**	**8,602.9724**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2142	6.2074	2.5559	0.0332	1.2170	0.0541	1.2710	0.3504	0.0517	0.4021		3,520.1490	3,520.1490	0.0359	0.5202	3,676.0579
Worker	1.7756	1.0972	17.8293	0.0478	5.4323	0.0255	5.4578	1.4407	0.0235	1.4641		4,890.1466	4,890.1466	0.1117	0.1140	4,926.9145
Total	**1.9898**	**7.3046**	**20.3852**	**0.0810**	**6.6493**	**0.0795**	**6.7288**	**1.7911**	**0.0752**	**1.8663**		**8,410.2957**	**8,410.2957**	**0.1476**	**0.6342**	**8,602.9724**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2108	6.2079	2.5266	0.0327	1.2169	0.0537	1.2706	0.3504	0.0514	0.4018		3,465.8960	3,465.8960	0.0372	0.5114	3,619.2174
Worker	1.6554	0.9778	16.6946	0.0463	5.4323	0.0244	5.4567	1.4407	0.0224	1.4631		4,772.1578	4,772.1578	0.1011	0.1059	4,806.2521
Total	**1.8662**	**7.1857**	**19.2213**	**0.0789**	**6.6493**	**0.0781**	**6.7273**	**1.7911**	**0.0738**	**1.8649**		**8,238.0538**	**8,238.0538**	**0.1383**	**0.6173**	**8,425.4695**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2108	6.2079	2.5266	0.0327	1.2169	0.0537	1.2706	0.3504	0.0514	0.4018		3,465.8960	3,465.8960	0.0372	0.5114	3,619.2174
Worker	1.6554	0.9778	16.6946	0.0463	5.4323	0.0244	5.4567	1.4407	0.0224	1.4631		4,772.1578	4,772.1578	0.1011	0.1059	4,806.2521
Total	**1.8662**	**7.1857**	**19.2213**	**0.0789**	**6.6493**	**0.0781**	**6.7273**	**1.7911**	**0.0738**	**1.8649**		**8,238.0538**	**8,238.0538**	**0.1383**	**0.6173**	**8,425.4695**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.0323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0204**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0511	0.0302	0.5153	1.4300e-003	0.1677	7.5000e-004	0.1684	0.0445	6.9000e-004	0.0452		147.2888	147.2888	3.1200e-003	3.2700e-003	148.3411
Total	**0.0511**	**0.0302**	**0.5153**	**1.4300e-003**	**0.1677**	**7.5000e-004**	**0.1684**	**0.0445**	**6.9000e-004**	**0.0452**		**147.2888**	**147.2888**	**3.1200e-003**	**3.2700e-003**	**148.3411**

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.0323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0204**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0511	0.0302	0.5153	1.4300e-003	0.1677	7.5000e-004	0.1684	0.0445	6.9000e-004	0.0452		147.2888	147.2888	3.1200e-003	3.2700e-003	148.3411
Total	**0.0511**	**0.0302**	**0.5153**	**1.4300e-003**	**0.1677**	**7.5000e-004**	**0.1684**	**0.0445**	**6.9000e-004**	**0.0452**		**147.2888**	**147.2888**	**3.1200e-003**	**3.2700e-003**	**148.3411**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**46.0865**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3304	0.1952	3.3321	9.2300e-003	1.0842	4.8600e-003	1.0891	0.2875	4.4700e-003	0.2920		952.4677	952.4677	0.0202	0.0211	959.2726
Total	**0.3304**	**0.1952**	**3.3321**	**9.2300e-003**	**1.0842**	**4.8600e-003**	**1.0891**	**0.2875**	**4.4700e-003**	**0.2920**		**952.4677**	**952.4677**	**0.0202**	**0.0211**	**959.2726**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**46.0865**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3304	0.1952	3.3321	9.2300e-003	1.0842	4.8600e-003	1.0891	0.2875	4.4700e-003	0.2920		952.4677	952.4677	0.0202	0.0211	959.2726
Total	**0.3304**	**0.1952**	**3.3321**	**9.2300e-003**	**1.0842**	**4.8600e-003**	**1.0891**	**0.2875**	**4.4700e-003**	**0.2920**		**952.4677**	**952.4677**	**0.0202**	**0.0211**	**959.2726**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**46.0766**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3089	0.1750	3.1052	8.9200e-003	1.0842	4.6200e-003	1.0889	0.2875	4.2600e-003	0.2918		929.1324	929.1324	0.0182	0.0197	935.4667
Total	**0.3089**	**0.1750**	**3.1052**	**8.9200e-003**	**1.0842**	**4.6200e-003**	**1.0889**	**0.2875**	**4.2600e-003**	**0.2918**		**929.1324**	**929.1324**	**0.0182**	**0.0197**	**935.4667**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**46.0766**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3089	0.1750	3.1052	8.9200e-003	1.0842	4.6200e-003	1.0889	0.2875	4.2600e-003	0.2918		929.1324	929.1324	0.0182	0.0197	935.4667
Total	**0.3089**	**0.1750**	**3.1052**	**8.9200e-003**	**1.0842**	**4.6200e-003**	**1.0889**	**0.2875**	**4.2600e-003**	**0.2918**		**929.1324**	**929.1324**	**0.0182**	**0.0197**	**935.4667**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5128	12.3936	91.5447	0.2070	20.4018	0.1594	20.5611	5.4433	0.1494	5.5927		21,288.1298	21,288.1298	1.0345	0.9810	21,606.3158
Unmitigated	9.5128	12.3936	91.5447	0.2070	20.4018	0.1594	20.5611	5.4433	0.1494	5.5927		21,288.1298	21,288.1298	1.0345	0.9810	21,606.3158

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	2,997.02	2,997.02	2997.02	9,654,767	9,654,767
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	2,997.02	2,997.02	2,997.02	9,654,767	9,654,767

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Light Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Office Building	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Strip Mall	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.7632	2,870.7632	0.0550	0.0526	2,887.8227
NaturalGas Unmitigated	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.7632	2,870.7632	0.0550	0.0526	2,887.8227

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	21981.7	0.2371	2.1551	1.8103	0.0129		0.1638	0.1638		0.1638	0.1638		2,586.0874	2,586.0874	0.0496	0.0474	2,601.4552
General Light Industry	2257.79	0.0244	0.2214	0.1859	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.6218	265.6218	5.0900e-003	4.8700e-003	267.2003
General Office Building	98.6712	1.0600e-003	9.6700e-003	8.1300e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6084	11.6084	2.2000e-004	2.1000e-004	11.6774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.2877	6.8000e-004	6.2000e-003	5.2100e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		7.4456	7.4456	1.4000e-004	1.4000e-004	7.4899
Total		**0.2632**	**2.3923**	**2.0095**	**0.0144**		**0.1818**	**0.1818**		**0.1818**	**0.1818**		**2,870.7632**	**2,870.7632**	**0.0550**	**0.0526**	**2,887.8227**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	21.9817	0.2371	2.1551	1.8103	0.0129		0.1638	0.1638		0.1638	0.1638		2,586.0874	2,586.0874	0.0496	0.0474	2,601.4552
General Light Industry	2.25779	0.0244	0.2214	0.1859	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.6218	265.6218	5.0900e-003	4.8700e-003	267.2003
General Office Building	0.0986712	1.0600e-003	9.6700e-003	8.1300e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6084	11.6084	2.2000e-004	2.1000e-004	11.6774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0632877	6.8000e-004	6.2000e-003	5.2100e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		7.4456	7.4456	1.4000e-004	1.4000e-004	7.4899
Total		**0.2632**	**2.3923**	**2.0095**	**0.0144**		**0.1818**	**0.1818**		**0.1818**	**0.1818**		**2,870.7632**	**2,870.7632**	**0.0550**	**0.0526**	**2,887.8227**

6.0 Area Detail

6.1 Mitigation Measures Area

Wildomar Commerce Center - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5921	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Unmitigated	6.5921	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1412					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Total	**6.5921**	**1.0600e-003**	**0.1162**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2492**	**0.2492**	**6.5000e-004**		**0.2655**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1412					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Total	**6.5921**	**1.0600e-003**	**0.1162**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2492**	**0.2492**	**6.5000e-004**		**0.2655**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Wildomar Commerce Center

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.49	1000sqft	0.59	25,490.00	0
Strip Mall	10.50	1000sqft	0.24	10,500.00	0
General Office Building	10.50	1000sqft	0.24	10,500.00	0
Parking Lot	574.00	Space	5.17	229,600.00	0
General Heavy Industry	248.17	1000sqft	5.70	248,170.00	0
Other Non-Asphalt Surfaces	261.32	1000sqft	6.00	261,322.00	0
Other Asphalt Surfaces	8.62	Acre	8.62	375,487.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per site plan, 26.56 acre site with 261,820 sqft of industrial space and 21,000 sqft of office/retail space with 261,320 sqft of landscaping and 574 parking spaces.

Construction Phase -

Grading -

Vehicle Trips - Per the Trip Generation Analysis memo from TJW Engineering, Inc., 2,997 trips estimated per day

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of their waste away from landfills by 2020

Architectural Coating - SCAQMD Rule 1113

Area Coating - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblGrading	MaterialExported	0.00	100,000.00
tblLandUse	LandUseSquareFeet	261,320.00	261,322.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	ST_TR	2.21	285.43
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	SU_TR	0.70	285.43
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	4.96	0.00
tblVehicleTrips	WD_TR	9.74	285.43
tblVehicleTrips	WD_TR	44.32	0.00

2.0 Emissions Summary

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.5350	76.3157	37.7933	0.2238	19.8582	2.0489	21.4718	10.1558	1.9002	11.6403	0.0000	23,249.2059	23,249.2059	2.1777	2.6912	24,105.6146
2023	3.9490	63.9553	36.4357	0.2168	14.5702	1.7608	16.3310	5.0885	1.6323	6.7208	0.0000	22,519.1913	22,519.1913	2.1776	2.5773	23,341.6599
2024	46.3971	21.0419	32.3420	0.1016	6.6493	0.6916	7.3408	1.7911	0.6509	2.4419	0.0000	10,355.0663	10,355.0663	0.7418	0.6215	10,558.8052
2025	46.3678	1.3270	4.3351	0.0111	1.0842	0.0561	1.1404	0.2875	0.0558	0.3433	0.0000	1,123.7016	1,123.7016	0.0336	0.0202	1,130.5553
Maximum	**46.3971**	**76.3157**	**37.7933**	**0.2238**	**19.8582**	**2.0489**	**21.4718**	**10.1558**	**1.9002**	**11.6403**	**0.0000**	**23,249.2059**	**23,249.2059**	**2.1777**	**2.6912**	**24,105.6146**

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.5350	76.3157	37.7933	0.2238	8.7845	2.0489	10.8334	3.9933	1.9002	5.4778	0.0000	23,249.2059	23,249.2059	2.1777	2.6912	24,105.6146
2023	3.9490	63.9553	36.4357	0.2168	8.7843	1.7608	10.5451	2.8337	1.6323	4.4660	0.0000	22,519.1913	22,519.1913	2.1776	2.5773	23,341.6599
2024	46.3971	21.0419	32.3420	0.1016	6.6493	0.6916	7.3408	1.7911	0.6509	2.4419	0.0000	10,355.0663	10,355.0663	0.7418	0.6215	10,558.8052
2025	46.3678	1.3270	4.3351	0.0111	1.0842	0.0561	1.1404	0.2875	0.0558	0.3433	0.0000	1,123.7016	1,123.7016	0.0336	0.0202	1,130.5553
Maximum	**46.3971**	**76.3157**	**37.7933**	**0.2238**	**8.7845**	**2.0489**	**10.8334**	**3.9933**	**1.9002**	**5.4778**	**0.0000**	**23,249.2059**	**23,249.2059**	**2.1777**	**2.6912**	**24,105.6146**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**39.99**	**0.00**	**35.49**	**48.59**	**0.00**	**39.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5921	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Energy	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.7632	2,870.7632	0.0550	0.0526	2,887.8227
Mobile	8.0843	13.1338	80.9539	0.1921	20.4018	0.1595	20.5613	5.4433	0.1495	5.5928		19,766.1875	19,766.1875	1.0600	1.0017	20,091.2023
Total	**14.9395**	**15.5271**	**83.0797**	**0.2065**	**20.4018**	**0.3417**	**20.7435**	**5.4433**	**0.3317**	**5.7750**		**22,637.1999**	**22,637.1999**	**1.1157**	**1.0544**	**22,979.2905**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5921	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Energy	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.7632	2,870.7632	0.0550	0.0526	2,887.8227
Mobile	8.0843	13.1338	80.9539	0.1921	20.4018	0.1595	20.5613	5.4433	0.1495	5.5928		19,766.1875	19,766.1875	1.0600	1.0017	20,091.2023
Total	**14.9395**	**15.5271**	**83.0797**	**0.2065**	**20.4018**	**0.3417**	**20.7435**	**5.4433**	**0.3317**	**5.7750**		**22,637.1999**	**22,637.1999**	**1.1157**	**1.0544**	**22,979.2905**

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2022	11/28/2022	5	20	
2	Grading	Grading	11/29/2022	1/30/2023	5	45	
3	Building Construction	Building Construction	1/31/2023	10/7/2024	5	440	
4	Paving	Paving	10/8/2024	11/25/2024	5	35	
5	Architectural Coating	Architectural Coating	11/26/2024	1/13/2025	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 19.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 441,990; Non-Residential Outdoor: 147,330; Striped Parking Area: 51,985 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Scrapers	2	8.00	367	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	12,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	486.00	190.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	97.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0663	0.0477	0.5816	1.6600e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		168.5113	168.5113	4.5800e-003	4.6800e-003	170.0216
Total	**0.0663**	**0.0477**	**0.5816**	**1.6600e-003**	**0.2012**	**1.0000e-003**	**0.2022**	**0.0534**	**9.2000e-004**	**0.0543**		**168.5113**	**168.5113**	**4.5800e-003**	**4.6800e-003**	**170.0216**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**7.6662**	**1.6126**	**9.2788**	**3.9400**	**1.4836**	**5.4235**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0663	0.0477	0.5816	1.6600e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		168.5113	168.5113	4.5800e-003	4.6800e-003	170.0216
Total	**0.0663**	**0.0477**	**0.5816**	**1.6600e-003**	**0.2012**	**1.0000e-003**	**0.2022**	**0.0534**	**9.2000e-004**	**0.0543**		**168.5113**	**168.5113**	**4.5800e-003**	**4.6800e-003**	**170.0216**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.4850	0.0000	9.4850	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.4850**	**1.6349**	**11.1199**	**3.6964**	**1.5041**	**5.2005**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8366	37.4192	8.1056	0.1598	4.8618	0.4129	5.2747	1.3329	0.3950	1.7280		17,050.5606	17,050.5606	0.2284	2.6860	17,856.6859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0736	0.0530	0.6462	1.8400e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		187.2348	187.2348	5.0800e-003	5.2000e-003	188.9129
Total	**0.9102**	**37.4723**	**8.7518**	**0.1617**	**5.0854**	**0.4140**	**5.4994**	**1.3922**	**0.3961**	**1.7883**		**17,237.7954**	**17,237.7954**	**0.2335**	**2.6912**	**18,045.5987**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6992	0.0000	3.6992	1.4416	0.0000	1.4416			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**3.6992**	**1.6349**	**5.3340**	**1.4416**	**1.5041**	**2.9457**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8366	37.4192	8.1056	0.1598	4.8618	0.4129	5.2747	1.3329	0.3950	1.7280		17,050.5606	17,050.5606	0.2284	2.6860	17,856.6859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0736	0.0530	0.6462	1.8400e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		187.2348	187.2348	5.0800e-003	5.2000e-003	188.9129
Total	**0.9102**	**37.4723**	**8.7518**	**0.1617**	**5.0854**	**0.4140**	**5.4994**	**1.3922**	**0.3961**	**1.7883**		**17,237.7954**	**17,237.7954**	**0.2335**	**2.6912**	**18,045.5987**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.4850	0.0000	9.4850	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.4850**	**1.4245**	**10.9095**	**3.6964**	**1.3105**	**5.0069**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5588	29.3929	7.7888	0.1529	4.8616	0.3353	5.1969	1.3328	0.3208	1.6536		16,325.3716	16,325.3716	0.2288	2.5725	17,097.6888
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0685	0.0469	0.5958	1.7800e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		182.3421	182.3421	4.5800e-003	4.8000e-003	183.8876
Total	**0.6272**	**29.4397**	**8.3845**	**0.1547**	**5.0852**	**0.3363**	**5.4215**	**1.3921**	**0.3217**	**1.7139**		**16,507.7136**	**16,507.7136**	**0.2334**	**2.5773**	**17,281.5763**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6992	0.0000	3.6992	1.4416	0.0000	1.4416			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**3.6992**	**1.4245**	**5.1236**	**1.4416**	**1.3105**	**2.7521**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5588	29.3929	7.7888	0.1529	4.8616	0.3353	5.1969	1.3328	0.3208	1.6536		16,325.3716	16,325.3716	0.2288	2.5725	17,097.6888
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0685	0.0469	0.5958	1.7800e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		182.3421	182.3421	4.5800e-003	4.8000e-003	183.8876
Total	**0.6272**	**29.4397**	**8.3845**	**0.1547**	**5.0852**	**0.3363**	**5.4215**	**1.3921**	**0.3217**	**1.7139**		**16,507.7136**	**16,507.7136**	**0.2334**	**2.5773**	**17,281.5763**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1983	6.5831	2.6420	0.0333	1.2170	0.0543	1.2712	0.3504	0.0519	0.4023		3,528.8852	3,528.8852	0.0352	0.5219	3,685.2925
Worker	1.6643	1.1384	14.4777	0.0433	5.4323	0.0255	5.4578	1.4407	0.0235	1.4641		4,430.9122	4,430.9122	0.1113	0.1167	4,468.4675
Total	**1.8626**	**7.7215**	**17.1197**	**0.0766**	**6.6493**	**0.0797**	**6.7290**	**1.7911**	**0.0754**	**1.8664**		**7,959.7974**	**7,959.7974**	**0.1465**	**0.6386**	**8,153.7600**

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1983	6.5831	2.6420	0.0333	1.2170	0.0543	1.2712	0.3504	0.0519	0.4023		3,528.8852	3,528.8852	0.0352	0.5219	3,685.2925
Worker	1.6643	1.1384	14.4777	0.0433	5.4323	0.0255	5.4578	1.4407	0.0235	1.4641		4,430.9122	4,430.9122	0.1113	0.1167	4,468.4675
Total	**1.8626**	**7.7215**	**17.1197**	**0.0766**	**6.6493**	**0.0797**	**6.7290**	**1.7911**	**0.0754**	**1.8664**		**7,959.7974**	**7,959.7974**	**0.1465**	**0.6386**	**8,153.7600**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1950	6.5840	2.6124	0.0328	1.2169	0.0539	1.2708	0.3504	0.0516	0.4019		3,474.5577	3,474.5577	0.0365	0.5131	3,628.3656
Worker	1.5563	1.0141	13.5628	0.0419	5.4323	0.0244	5.4567	1.4407	0.0224	1.4631		4,324.8097	4,324.8097	0.1010	0.1084	4,359.6320
Total	**1.7513**	**7.5981**	**16.1752**	**0.0747**	**6.6493**	**0.0782**	**6.7275**	**1.7911**	**0.0740**	**1.8650**		**7,799.3674**	**7,799.3674**	**0.1374**	**0.6215**	**7,987.9976**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1950	6.5840	2.6124	0.0328	1.2169	0.0539	1.2708	0.3504	0.0516	0.4019		3,474.5577	3,474.5577	0.0365	0.5131	3,628.3656
Worker	1.5563	1.0141	13.5628	0.0419	5.4323	0.0244	5.4567	1.4407	0.0224	1.4631		4,324.8097	4,324.8097	0.1010	0.1084	4,359.6320
Total	**1.7513**	**7.5981**	**16.1752**	**0.0747**	**6.6493**	**0.0782**	**6.7275**	**1.7911**	**0.0740**	**1.8650**		**7,799.3674**	**7,799.3674**	**0.1374**	**0.6215**	**7,987.9976**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.0323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0204**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0480	0.0313	0.4186	1.2900e-003	0.1677	7.5000e-004	0.1684	0.0445	6.9000e-004	0.0452		133.4818	133.4818	3.1200e-003	3.3500e-003	134.5565
Total	**0.0480**	**0.0313**	**0.4186**	**1.2900e-003**	**0.1677**	**7.5000e-004**	**0.1684**	**0.0445**	**6.9000e-004**	**0.0452**		**133.4818**	**133.4818**	**3.1200e-003**	**3.3500e-003**	**134.5565**

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.0323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0204**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0480	0.0313	0.4186	1.2900e-003	0.1677	7.5000e-004	0.1684	0.0445	6.9000e-004	0.0452		133.4818	133.4818	3.1200e-003	3.3500e-003	134.5565
Total	**0.0480**	**0.0313**	**0.4186**	**1.2900e-003**	**0.1677**	**7.5000e-004**	**0.1684**	**0.0445**	**6.9000e-004**	**0.0452**		**133.4818**	**133.4818**	**3.1200e-003**	**3.3500e-003**	**134.5565**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**46.0865**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3106	0.2024	2.7070	8.3700e-003	1.0842	4.8600e-003	1.0891	0.2875	4.4700e-003	0.2920		863.1822	863.1822	0.0202	0.0216	870.1323
Total	**0.3106**	**0.2024**	**2.7070**	**8.3700e-003**	**1.0842**	**4.8600e-003**	**1.0891**	**0.2875**	**4.4700e-003**	**0.2920**		**863.1822**	**863.1822**	**0.0202**	**0.0216**	**870.1323**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**46.0865**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3106	0.2024	2.7070	8.3700e-003	1.0842	4.8600e-003	1.0891	0.2875	4.4700e-003	0.2920		863.1822	863.1822	0.0202	0.0216	870.1323
Total	**0.3106**	**0.2024**	**2.7070**	**8.3700e-003**	**1.0842**	**4.8600e-003**	**1.0891**	**0.2875**	**4.4700e-003**	**0.2920**		**863.1822**	**863.1822**	**0.0202**	**0.0216**	**870.1323**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**46.0766**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2912	0.1815	2.5259	8.0800e-003	1.0842	4.6200e-003	1.0889	0.2875	4.2600e-003	0.2918		842.2535	842.2535	0.0182	0.0202	848.7235
Total	**0.2912**	**0.1815**	**2.5259**	**8.0800e-003**	**1.0842**	**4.6200e-003**	**1.0889**	**0.2875**	**4.2600e-003**	**0.2918**		**842.2535**	**842.2535**	**0.0182**	**0.0202**	**848.7235**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**46.0766**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2912	0.1815	2.5259	8.0800e-003	1.0842	4.6200e-003	1.0889	0.2875	4.2600e-003	0.2918		842.2535	842.2535	0.0182	0.0202	848.7235
Total	**0.2912**	**0.1815**	**2.5259**	**8.0800e-003**	**1.0842**	**4.6200e-003**	**1.0889**	**0.2875**	**4.2600e-003**	**0.2918**		**842.2535**	**842.2535**	**0.0182**	**0.0202**	**848.7235**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.0843	13.1338	80.9539	0.1921	20.4018	0.1595	20.5613	5.4433	0.1495	5.5928		19,766.1875	19,766.1875	1.0600	1.0017	20,091.2023
Unmitigated	8.0843	13.1338	80.9539	0.1921	20.4018	0.1595	20.5613	5.4433	0.1495	5.5928		19,766.1875	19,766.1875	1.0600	1.0017	20,091.2023

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	2,997.02	2,997.02	2997.02	9,654,767	9,654,767
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	2,997.02	2,997.02	2,997.02	9,654,767	9,654,767

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Light Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Office Building	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Strip Mall	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.7632	2,870.7632	0.0550	0.0526	2,887.8227
NaturalGas Unmitigated	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.7632	2,870.7632	0.0550	0.0526	2,887.8227

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	21981.7	0.2371	2.1551	1.8103	0.0129		0.1638	0.1638		0.1638	0.1638		2,586.0874	2,586.0874	0.0496	0.0474	2,601.4552
General Light Industry	2257.79	0.0244	0.2214	0.1859	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.6218	265.6218	5.0900e-003	4.8700e-003	267.2003
General Office Building	98.6712	1.0600e-003	9.6700e-003	8.1300e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6084	11.6084	2.2000e-004	2.1000e-004	11.6774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.2877	6.8000e-004	6.2000e-003	5.2100e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		7.4456	7.4456	1.4000e-004	1.4000e-004	7.4899
Total		**0.2632**	**2.3923**	**2.0095**	**0.0144**		**0.1818**	**0.1818**		**0.1818**	**0.1818**		**2,870.7632**	**2,870.7632**	**0.0550**	**0.0526**	**2,887.8227**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	21.9817	0.2371	2.1551	1.8103	0.0129		0.1638	0.1638		0.1638	0.1638		2,586.0874	2,586.0874	0.0496	0.0474	2,601.4552
General Light Industry	2.25779	0.0244	0.2214	0.1859	1.3300e-003		0.0168	0.0168		0.0168	0.0168		265.6218	265.6218	5.0900e-003	4.8700e-003	267.2003
General Office Building	0.0986712	1.0600e-003	9.6700e-003	8.1300e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6084	11.6084	2.2000e-004	2.1000e-004	11.6774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0632877	6.8000e-004	6.2000e-003	5.2100e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		7.4456	7.4456	1.4000e-004	1.4000e-004	7.4899
Total		**0.2632**	**2.3923**	**2.0095**	**0.0144**		**0.1818**	**0.1818**		**0.1818**	**0.1818**		**2,870.7632**	**2,870.7632**	**0.0550**	**0.0526**	**2,887.8227**

6.0 Area Detail

6.1 Mitigation Measures Area

Wildomar Commerce Center - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5921	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Unmitigated	6.5921	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1412					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Total	**6.5921**	**1.0600e-003**	**0.1162**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2492**	**0.2492**	**6.5000e-004**		**0.2655**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1412					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e-003	0.1162	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2492	0.2492	6.5000e-004		0.2655
Total	**6.5921**	**1.0600e-003**	**0.1162**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2492**	**0.2492**	**6.5000e-004**		**0.2655**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B:

CalEEMod Annual Emission Output

Wildomar Commerce Center - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Wildomar Commerce Center

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.49	1000sqft	0.59	25,490.00	0
Strip Mall	10.50	1000sqft	0.24	10,500.00	0
General Office Building	10.50	1000sqft	0.24	10,500.00	0
Parking Lot	574.00	Space	5.17	229,600.00	0
General Heavy Industry	248.17	1000sqft	5.70	248,170.00	0
Other Non-Asphalt Surfaces	261.32	1000sqft	6.00	261,322.00	0
Other Asphalt Surfaces	8.62	Acre	8.62	375,487.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per site plan, 26.56 acre site with 261,820 sqft of industrial space and 21,000 sqft of office/retail space with 261,320 sqft of landscaping and 574 parking spaces.

Construction Phase -

Grading -

Vehicle Trips - Per the Trip Generation Analysis memo from TJW Engineering, Inc., 2,997 trips estimated per day

Wildomar Commerce Center - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of their waste away from landfills by 2020

Architectural Coating - SCAQMD Rule 1113

Area Coating - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblGrading	MaterialExported	0.00	100,000.00
tblLandUse	LandUseSquareFeet	261,320.00	261,322.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	ST_TR	2.21	285.43
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	SU_TR	0.70	285.43
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	4.96	0.00
tblVehicleTrips	WD_TR	9.74	285.43
tblVehicleTrips	WD_TR	44.32	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0870	1.2470	0.6555	3.0800e-003	0.4089	0.0407	0.4496	0.1665	0.0376	0.2041	0.0000	288.0652	288.0652	0.0346	0.0293	297.6694
2023	0.4428	3.3073	4.4565	0.0148	0.9755	0.1116	1.0872	0.2688	0.1048	0.3736	0.0000	1,364.9482	1,364.9482	0.1026	0.0939	1,395.4976
2024	0.9554	2.2962	3.6434	0.0109	0.6742	0.0786	0.7528	0.1818	0.0738	0.2556	0.0000	1,003.7535	1,003.7535	0.0795	0.0571	1,022.7520
2025	0.2086	5.9900e-003	0.0201	5.0000e-005	4.8000e-003	2.5000e-004	5.0500e-003	1.2700e-003	2.5000e-004	1.5200e-003	0.0000	4.6670	4.6670	1.4000e-004	8.0000e-005	4.6955
Maximum	**0.9554**	**3.3073**	**4.4565**	**0.0148**	**0.9755**	**0.1116**	**1.0872**	**0.2688**	**0.1048**	**0.3736**	**0.0000**	**1,364.9482**	**1,364.9482**	**0.1026**	**0.0939**	**1,395.4976**

Wildomar Commerce Center - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0870	1.2470	0.6555	3.0800e-003	0.1974	0.0407	0.2381	0.0753	0.0376	0.1129	0.0000	288.0651	288.0651	0.0346	0.0293	297.6692
2023	0.4428	3.3073	4.4565	0.0148	0.8894	0.1116	1.0011	0.2423	0.1048	0.3471	0.0000	1,364.9478	1,364.9478	0.1026	0.0939	1,395.4972
2024	0.9554	2.2962	3.6434	0.0109	0.6742	0.0786	0.7528	0.1818	0.0738	0.2556	0.0000	1,003.7531	1,003.7531	0.0795	0.0571	1,022.7517
2025	0.2086	5.9900e-003	0.0201	5.0000e-005	4.8000e-003	2.5000e-004	5.0500e-003	1.2700e-003	2.5000e-004	1.5200e-003	0.0000	4.6670	4.6670	1.4000e-004	8.0000e-005	4.6955
Maximum	**0.9554**	**3.3073**	**4.4565**	**0.0148**	**0.8894**	**0.1116**	**1.0011**	**0.2423**	**0.1048**	**0.3471**	**0.0000**	**1,364.9478**	**1,364.9478**	**0.1026**	**0.0939**	**1,395.4972**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**14.42**	**0.00**	**12.97**	**19.03**	**0.00**	**14.09**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**11-1-2022**	**1-31-2023**	2.0532	2.0532
2	**2-1-2023**	**4-30-2023**	0.8088	0.8088
3	**5-1-2023**	**7-31-2023**	0.8297	0.8297
4	**8-1-2023**	**10-31-2023**	0.8329	0.8329
5	**11-1-2023**	**1-31-2024**	0.8251	0.8251
6	**2-1-2024**	**4-30-2024**	0.7768	0.7768
7	**5-1-2024**	**7-31-2024**	0.7875	0.7875
8	**8-1-2024**	**10-31-2024**	0.6824	0.6824

Wildomar Commerce Center - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9	**11-1-2024**	**1-31-2025**	0.9400	0.9400
		Highest	2.0532	2.0532

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2024	1.3000e-004	0.0145	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0283	0.0283	7.0000e-005	0.0000	0.0301
Energy	0.0480	0.4366	0.3667	2.6200e-003		0.0332	0.0332		0.0332	0.0332	0.0000	1,010.6990	1,010.6990	0.0543	0.0142	1,016.2855
Mobile	1.4877	2.4055	15.2239	0.0355	3.6519	0.0290	3.6809	0.9757	0.0272	1.0028	0.0000	3,315.3396	3,315.3396	0.1746	0.1663	3,369.2592
Waste						0.0000	0.0000		0.0000	0.0000	73.1052	0.0000	73.1052	4.3204	0.0000	181.1150
Water						0.0000	0.0000		0.0000	0.0000	20.9159	155.4345	176.3504	2.1614	0.0523	245.9748
Total	**2.7382**	**2.8423**	**15.6052**	**0.0381**	**3.6519**	**0.0622**	**3.7141**	**0.9757**	**0.0604**	**1.0361**	**94.0210**	**4,481.5013**	**4,575.5223**	**6.7107**	**0.2328**	**4,812.6645**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2024	1.3000e-004	0.0145	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0283	0.0283	7.0000e-005	0.0000	0.0301
Energy	0.0480	0.4366	0.3667	2.6200e-003		0.0332	0.0332		0.0332	0.0332	0.0000	1,010.6990	1,010.6990	0.0543	0.0142	1,016.2855
Mobile	1.4877	2.4055	15.2239	0.0355	3.6519	0.0290	3.6809	0.9757	0.0272	1.0028	0.0000	3,315.3396	3,315.3396	0.1746	0.1663	3,369.2592
Waste						0.0000	0.0000		0.0000	0.0000	18.2763	0.0000	18.2763	1.0801	0.0000	45.2787
Water						0.0000	0.0000		0.0000	0.0000	20.9159	155.4345	176.3504	2.1614	0.0523	245.9748
Total	**2.7382**	**2.8423**	**15.6052**	**0.0381**	**3.6519**	**0.0622**	**3.7141**	**0.9757**	**0.0604**	**1.0361**	**39.1922**	**4,481.5013**	**4,520.6934**	**3.4704**	**0.2328**	**4,676.8283**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**58.32**	**0.00**	**1.20**	**48.29**	**0.00**	**2.82**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2022	11/28/2022	5	20	
2	Grading	Grading	11/29/2022	1/30/2023	5	45	
3	Building Construction	Building Construction	1/31/2023	10/7/2024	5	440	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	10/8/2024	11/25/2024	5	35	
5	Architectural Coating	Architectural Coating	11/26/2024	1/13/2025	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 19.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 441,990; Non-Residential Outdoor: 147,330; Striped Parking Area: 51,985 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Scrapers	2	8.00	367	0.48

Trips and VMT

Wildomar Commerce Center - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	12,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	486.00	190.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	97.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098
Total	**0.0317**	**0.3308**	**0.1970**	**3.8000e-004**	**0.1966**	**0.0161**	**0.2127**	**0.1010**	**0.0148**	**0.1159**	**0.0000**	**33.4394**	**33.4394**	**0.0108**	**0.0000**	**33.7098**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.9000e-004	6.1300e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.3000e-004	0.0000	1.5644	1.5644	4.0000e-005	4.0000e-005	1.5784
Total	**6.3000e-004**	**4.9000e-004**	**6.1300e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.3000e-004**	**1.0000e-005**	**5.3000e-004**	**0.0000**	**1.5644**	**1.5644**	**4.0000e-005**	**4.0000e-005**	**1.5784**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0767	0.0000	0.0767	0.0394	0.0000	0.0394	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097
Total	**0.0317**	**0.3308**	**0.1970**	**3.8000e-004**	**0.0767**	**0.0161**	**0.0928**	**0.0394**	**0.0148**	**0.0542**	**0.0000**	**33.4394**	**33.4394**	**0.0108**	**0.0000**	**33.7097**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.9000e-004	6.1300e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.3000e-004	0.0000	1.5644	1.5644	4.0000e-005	4.0000e-005	1.5784
Total	**6.3000e-004**	**4.9000e-004**	**6.1300e-003**	**2.0000e-005**	**1.9800e-003**	**1.0000e-005**	**1.9900e-003**	**5.3000e-004**	**1.0000e-005**	**5.3000e-004**	**0.0000**	**1.5644**	**1.5644**	**4.0000e-005**	**4.0000e-005**	**1.5784**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1502	0.0000	0.1502	0.0484	0.0000	0.0484	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0435	0.4661	0.3485	7.4000e-004		0.0196	0.0196		0.0181	0.0181	0.0000	65.4415	65.4415	0.0212	0.0000	65.9707
Total	**0.0435**	**0.4661**	**0.3485**	**7.4000e-004**	**0.1502**	**0.0196**	**0.1698**	**0.0484**	**0.0181**	**0.0665**	**0.0000**	**65.4415**	**65.4415**	**0.0212**	**0.0000**	**65.9707**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0103	0.4489	0.0958	1.9200e-003	0.0575	4.9500e-003	0.0625	0.0158	4.7400e-003	0.0205	0.0000	185.5340	185.5340	2.5000e-003	0.0292	194.3061
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	6.5000e-004	8.1800e-003	2.0000e-005	2.6400e-003	1.0000e-005	2.6500e-003	7.0000e-004	1.0000e-005	7.1000e-004	0.0000	2.0859	2.0859	6.0000e-005	6.0000e-005	2.1045
Total	**0.0112**	**0.4495**	**0.1039**	**1.9400e-003**	**0.0601**	**4.9600e-003**	**0.0651**	**0.0165**	**4.7500e-003**	**0.0212**	**0.0000**	**187.6199**	**187.6199**	**2.5600e-003**	**0.0293**	**196.4106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0586	0.0000	0.0586	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0435	0.4661	0.3485	7.4000e-004		0.0196	0.0196		0.0181	0.0181	0.0000	65.4414	65.4414	0.0212	0.0000	65.9706
Total	**0.0435**	**0.4661**	**0.3485**	**7.4000e-004**	**0.0586**	**0.0196**	**0.0782**	**0.0189**	**0.0181**	**0.0369**	**0.0000**	**65.4414**	**65.4414**	**0.0212**	**0.0000**	**65.9706**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0103	0.4489	0.0958	1.9200e-003	0.0575	4.9500e-003	0.0625	0.0158	4.7400e-003	0.0205	0.0000	185.5340	185.5340	2.5000e-003	0.0292	194.3061
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.4000e-004	6.5000e-004	8.1800e-003	2.0000e-005	2.6400e-003	1.0000e-005	2.6500e-003	7.0000e-004	1.0000e-005	7.1000e-004	0.0000	2.0859	2.0859	6.0000e-005	6.0000e-005	2.1045
Total	**0.0112**	**0.4495**	**0.1039**	**1.9400e-003**	**0.0601**	**4.9600e-003**	**0.0651**	**0.0165**	**4.7500e-003**	**0.0212**	**0.0000**	**187.6199**	**187.6199**	**2.5600e-003**	**0.0293**	**196.4106**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1412	0.0000	0.1412	0.0435	0.0000	0.0435	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3624	0.2945	6.5000e-004		0.0150	0.0150		0.0138	0.0138	0.0000	57.2620	57.2620	0.0185	0.0000	57.7250
Total	**0.0349**	**0.3624**	**0.2945**	**6.5000e-004**	**0.1412**	**0.0150**	**0.1561**	**0.0435**	**0.0138**	**0.0572**	**0.0000**	**57.2620**	**57.2620**	**0.0185**	**0.0000**	**57.7250**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.1700e-003	0.3073	0.0808	1.6000e-003	0.0503	3.5200e-003	0.0538	0.0138	3.3700e-003	0.0172	0.0000	155.3655	155.3655	2.1900e-003	0.0245	162.7159
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	5.0000e-004	6.5900e-003	2.0000e-005	2.3100e-003	1.0000e-005	2.3200e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.7773	1.7773	4.0000e-005	5.0000e-005	1.7923
Total	**6.8500e-003**	**0.3078**	**0.0874**	**1.6200e-003**	**0.0526**	**3.5300e-003**	**0.0561**	**0.0144**	**3.3800e-003**	**0.0178**	**0.0000**	**157.1428**	**157.1428**	**2.2300e-003**	**0.0245**	**164.5082**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0551	0.0000	0.0551	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3624	0.2945	6.5000e-004		0.0150	0.0150		0.0138	0.0138	0.0000	57.2619	57.2619	0.0185	0.0000	57.7249
Total	**0.0349**	**0.3624**	**0.2945**	**6.5000e-004**	**0.0551**	**0.0150**	**0.0700**	**0.0169**	**0.0138**	**0.0307**	**0.0000**	**57.2619**	**57.2619**	**0.0185**	**0.0000**	**57.7249**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.1700e-003	0.3073	0.0808	1.6000e-003	0.0503	3.5200e-003	0.0538	0.0138	3.3700e-003	0.0172	0.0000	155.3655	155.3655	2.1900e-003	0.0245	162.7159
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	5.0000e-004	6.5900e-003	2.0000e-005	2.3100e-003	1.0000e-005	2.3200e-003	6.1000e-004	1.0000e-005	6.2000e-004	0.0000	1.7773	1.7773	4.0000e-005	5.0000e-005	1.7923
Total	**6.8500e-003**	**0.3078**	**0.0874**	**1.6200e-003**	**0.0526**	**3.5300e-003**	**0.0561**	**0.0144**	**3.3800e-003**	**0.0178**	**0.0000**	**157.1428**	**157.1428**	**2.2300e-003**	**0.0245**	**164.5082**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1880	1.7190	1.9412	3.2200e-003		0.0836	0.0836		0.0787	0.0787	0.0000	277.0067	277.0067	0.0659	0.0000	278.6541
Total	**0.1880**	**1.7190**	**1.9412**	**3.2200e-003**		**0.0836**	**0.0836**		**0.0787**	**0.0787**	**0.0000**	**277.0067**	**277.0067**	**0.0659**	**0.0000**	**278.6541**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0246	0.7785	0.3101	3.9700e-003	0.1434	6.4700e-003	0.1499	0.0414	6.1900e-003	0.0476	0.0000	382.0128	382.0128	3.8600e-003	0.0565	398.9423
Worker	0.1885	0.1397	1.8232	5.2900e-003	0.6383	3.0500e-003	0.6414	0.1695	2.8000e-003	0.1723	0.0000	491.5240	491.5240	0.0121	0.0129	495.6681
Total	**0.2131**	**0.9181**	**2.1334**	**9.2600e-003**	**0.7818**	**9.5200e-003**	**0.7913**	**0.2109**	**8.9900e-003**	**0.2199**	**0.0000**	**873.5368**	**873.5368**	**0.0160**	**0.0694**	**894.6104**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1880	1.7190	1.9412	3.2200e-003		0.0836	0.0836		0.0787	0.0787	0.0000	277.0063	277.0063	0.0659	0.0000	278.6537
Total	**0.1880**	**1.7190**	**1.9412**	**3.2200e-003**		**0.0836**	**0.0836**		**0.0787**	**0.0787**	**0.0000**	**277.0063**	**277.0063**	**0.0659**	**0.0000**	**278.6537**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0246	0.7785	0.3101	3.9700e-003	0.1434	6.4700e-003	0.1499	0.0414	6.1900e-003	0.0476	0.0000	382.0128	382.0128	3.8600e-003	0.0565	398.9423
Worker	0.1885	0.1397	1.8232	5.2900e-003	0.6383	3.0500e-003	0.6414	0.1695	2.8000e-003	0.1723	0.0000	491.5240	491.5240	0.0121	0.0129	495.6681
Total	**0.2131**	**0.9181**	**2.1334**	**9.2600e-003**	**0.7818**	**9.5200e-003**	**0.7913**	**0.2109**	**8.9900e-003**	**0.2199**	**0.0000**	**873.5368**	**873.5368**	**0.0160**	**0.0694**	**894.6104**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1479	1.3511	1.6248	2.7100e-003		0.0616	0.0616		0.0580	0.0580	0.0000	233.0084	233.0084	0.0551	0.0000	234.3859
Total	**0.1479**	**1.3511**	**1.6248**	**2.7100e-003**		**0.0616**	**0.0616**		**0.0580**	**0.0580**	**0.0000**	**233.0084**	**233.0084**	**0.0551**	**0.0000**	**234.3859**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0204	0.6548	0.2579	3.2900e-003	0.1206	5.4000e-003	0.1260	0.0348	5.1700e-003	0.0400	0.0000	316.3251	316.3251	3.3600e-003	0.0467	330.3262
Worker	0.1480	0.1046	1.4364	4.3100e-003	0.5369	2.4500e-003	0.5393	0.1426	2.2500e-003	0.1448	0.0000	403.4694	403.4694	9.2400e-003	0.0101	406.7005
Total	**0.1684**	**0.7594**	**1.6943**	**7.6000e-003**	**0.6575**	**7.8500e-003**	**0.6653**	**0.1774**	**7.4200e-003**	**0.1848**	**0.0000**	**719.7945**	**719.7945**	**0.0126**	**0.0568**	**737.0267**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1479	1.3511	1.6248	2.7100e-003		0.0616	0.0616		0.0580	0.0580	0.0000	233.0081	233.0081	0.0551	0.0000	234.3856
Total	**0.1479**	**1.3511**	**1.6248**	**2.7100e-003**		**0.0616**	**0.0616**		**0.0580**	**0.0580**	**0.0000**	**233.0081**	**233.0081**	**0.0551**	**0.0000**	**234.3856**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0204	0.6548	0.2579	3.2900e-003	0.1206	5.4000e-003	0.1260	0.0348	5.1700e-003	0.0400	0.0000	316.3251	316.3251	3.3600e-003	0.0467	330.3262
Worker	0.1480	0.1046	1.4364	4.3100e-003	0.5369	2.4500e-003	0.5393	0.1426	2.2500e-003	0.1448	0.0000	403.4694	403.4694	9.2400e-003	0.0101	406.7005
Total	**0.1684**	**0.7594**	**1.6943**	**7.6000e-003**	**0.6575**	**7.8500e-003**	**0.6653**	**0.1774**	**7.4200e-003**	**0.1848**	**0.0000**	**719.7945**	**719.7945**	**0.0126**	**0.0568**	**737.0267**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0173	0.1667	0.2560	4.0000e-004		8.2000e-003	8.2000e-003		7.5400e-003	7.5400e-003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0354**	**0.1667**	**0.2560**	**4.0000e-004**		**8.2000e-003**	**8.2000e-003**		**7.5400e-003**	**7.5400e-003**	**0.0000**	**35.0464**	**35.0464**	**0.0113**	**0.0000**	**35.3298**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.6000e-004	7.7200e-003	2.0000e-005	2.8900e-003	1.0000e-005	2.9000e-003	7.7000e-004	1.0000e-005	7.8000e-004	0.0000	2.1684	2.1684	5.0000e-005	5.0000e-005	2.1858
Total	**8.0000e-004**	**5.6000e-004**	**7.7200e-003**	**2.0000e-005**	**2.8900e-003**	**1.0000e-005**	**2.9000e-003**	**7.7000e-004**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**2.1684**	**2.1684**	**5.0000e-005**	**5.0000e-005**	**2.1858**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0173	0.1667	0.2560	4.0000e-004		8.2000e-003	8.2000e-003		7.5400e-003	7.5400e-003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0354**	**0.1667**	**0.2560**	**4.0000e-004**		**8.2000e-003**	**8.2000e-003**		**7.5400e-003**	**7.5400e-003**	**0.0000**	**35.0464**	**35.0464**	**0.0113**	**0.0000**	**35.3298**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.6000e-004	7.7200e-003	2.0000e-005	2.8900e-003	1.0000e-005	2.9000e-003	7.7000e-004	1.0000e-005	7.8000e-004	0.0000	2.1684	2.1684	5.0000e-005	5.0000e-005	2.1858
Total	**8.0000e-004**	**5.6000e-004**	**7.7200e-003**	**2.0000e-005**	**2.8900e-003**	**1.0000e-005**	**2.9000e-003**	**7.7000e-004**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**2.1684**	**2.1684**	**5.0000e-005**	**5.0000e-005**	**2.1858**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5968					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0158	0.0235	4.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	3.3192	3.3192	1.9000e-004	0.0000	3.3239
Total	**0.5991**	**0.0158**	**0.0235**	**4.0000e-005**		**7.9000e-004**	**7.9000e-004**		**7.9000e-004**	**7.9000e-004**	**0.0000**	**3.3192**	**3.3192**	**1.9000e-004**	**0.0000**	**3.3239**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8200e-003	2.7000e-003	0.0371	1.1000e-004	0.0139	6.0000e-005	0.0139	3.6800e-003	6.0000e-005	3.7400e-003	0.0000	10.4165	10.4165	2.4000e-004	2.6000e-004	10.5000
Total	**3.8200e-003**	**2.7000e-003**	**0.0371**	**1.1000e-004**	**0.0139**	**6.0000e-005**	**0.0139**	**3.6800e-003**	**6.0000e-005**	**3.7400e-003**	**0.0000**	**10.4165**	**10.4165**	**2.4000e-004**	**2.6000e-004**	**10.5000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5968					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0158	0.0235	4.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	3.3192	3.3192	1.9000e-004	0.0000	3.3239
Total	**0.5991**	**0.0158**	**0.0235**	**4.0000e-005**		**7.9000e-004**	**7.9000e-004**		**7.9000e-004**	**7.9000e-004**	**0.0000**	**3.3192**	**3.3192**	**1.9000e-004**	**0.0000**	**3.3239**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8200e-003	2.7000e-003	0.0371	1.1000e-004	0.0139	6.0000e-005	0.0139	3.6800e-003	6.0000e-005	3.7400e-003	0.0000	10.4165	10.4165	2.4000e-004	2.6000e-004	10.5000
Total	**3.8200e-003**	**2.7000e-003**	**0.0371**	**1.1000e-004**	**0.0139**	**6.0000e-005**	**0.0139**	**3.6800e-003**	**6.0000e-005**	**3.7400e-003**	**0.0000**	**10.4165**	**10.4165**	**2.4000e-004**	**2.6000e-004**	**10.5000**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2066					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e-004	5.1500e-003	8.1400e-003	1.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	1.1490	1.1490	6.0000e-005	0.0000	1.1505
Total	**0.2074**	**5.1500e-003**	**8.1400e-003**	**1.0000e-005**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**	**0.0000**	**1.1490**	**1.1490**	**6.0000e-005**	**0.0000**	**1.1505**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	8.4000e-004	0.0120	4.0000e-005	4.8000e-003	2.0000e-005	4.8200e-003	1.2700e-003	2.0000e-005	1.2900e-003	0.0000	3.5181	3.5181	7.0000e-005	8.0000e-005	3.5449
Total	**1.2400e-003**	**8.4000e-004**	**0.0120**	**4.0000e-005**	**4.8000e-003**	**2.0000e-005**	**4.8200e-003**	**1.2700e-003**	**2.0000e-005**	**1.2900e-003**	**0.0000**	**3.5181**	**3.5181**	**7.0000e-005**	**8.0000e-005**	**3.5449**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2066					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e-004	5.1500e-003	8.1400e-003	1.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	1.1490	1.1490	6.0000e-005	0.0000	1.1505
Total	**0.2074**	**5.1500e-003**	**8.1400e-003**	**1.0000e-005**		**2.3000e-004**	**2.3000e-004**		**2.3000e-004**	**2.3000e-004**	**0.0000**	**1.1490**	**1.1490**	**6.0000e-005**	**0.0000**	**1.1505**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	8.4000e-004	0.0120	4.0000e-005	4.8000e-003	2.0000e-005	4.8200e-003	1.2700e-003	2.0000e-005	1.2900e-003	0.0000	3.5181	3.5181	7.0000e-005	8.0000e-005	3.5449
Total	**1.2400e-003**	**8.4000e-004**	**0.0120**	**4.0000e-005**	**4.8000e-003**	**2.0000e-005**	**4.8200e-003**	**1.2700e-003**	**2.0000e-005**	**1.2900e-003**	**0.0000**	**3.5181**	**3.5181**	**7.0000e-005**	**8.0000e-005**	**3.5449**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4877	2.4055	15.2239	0.0355	3.6519	0.0290	3.6809	0.9757	0.0272	1.0028	0.0000	3,315.3396	3,315.3396	0.1746	0.1663	3,369.2592
Unmitigated	1.4877	2.4055	15.2239	0.0355	3.6519	0.0290	3.6809	0.9757	0.0272	1.0028	0.0000	3,315.3396	3,315.3396	0.1746	0.1663	3,369.2592

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	2,997.02	2,997.02	2997.02	9,654,767	9,654,767
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	2,997.02	2,997.02	2,997.02	9,654,767	9,654,767

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Light Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Office Building	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Strip Mall	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Wildomar Commerce Center - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	535.4119	535.4119	0.0452	5.4800e-003	538.1740
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	535.4119	535.4119	0.0452	5.4800e-003	538.1740
NaturalGas Mitigated	0.0480	0.4366	0.3667	2.6200e-003		0.0332	0.0332		0.0332	0.0332	0.0000	475.2870	475.2870	9.1100e-003	8.7100e-003	478.1114
NaturalGas Unmitigated	0.0480	0.4366	0.3667	2.6200e-003		0.0332	0.0332		0.0332	0.0332	0.0000	475.2870	475.2870	9.1100e-003	8.7100e-003	478.1114

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Heavy Industry	8.02334e+006	0.0433	0.3933	0.3304	2.3600e-003		0.0299	0.0299		0.0299	0.0299	0.0000	428.1558	428.1558	8.2100e-003	7.8500e-003	430.7001
General Light Industry	824092	4.4400e-003	0.0404	0.0339	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9767	43.9767	8.4000e-004	8.1000e-004	44.2380
General Office Building	36015	1.9000e-004	1.7700e-003	1.4800e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.9219	1.9219	4.0000e-005	4.0000e-005	1.9333
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	23100	1.2000e-004	1.1300e-003	9.5000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2327	1.2327	2.0000e-005	2.0000e-005	1.2400
Total		**0.0480**	**0.4366**	**0.3667**	**2.6200e-003**		**0.0332**	**0.0332**		**0.0332**	**0.0332**	**0.0000**	**475.2870**	**475.2870**	**9.1100e-003**	**8.7200e-003**	**478.1114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Heavy Industry	8.02334e+006	0.0433	0.3933	0.3304	2.3600e-003		0.0299	0.0299		0.0299	0.0299	0.0000	428.1558	428.1558	8.2100e-003	7.8500e-003	430.7001
General Light Industry	824092	4.4400e-003	0.0404	0.0339	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003	0.0000	43.9767	43.9767	8.4000e-004	8.1000e-004	44.2380
General Office Building	36015	1.9000e-004	1.7700e-003	1.4800e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.9219	1.9219	4.0000e-005	4.0000e-005	1.9333
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	23100	1.2000e-004	1.1300e-003	9.5000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2327	1.2327	2.0000e-005	2.0000e-005	1.2400
Total		**0.0480**	**0.4366**	**0.3667**	**2.6200e-003**		**0.0332**	**0.0332**		**0.0332**	**0.0332**	**0.0000**	**475.2870**	**475.2870**	**9.1100e-003**	**8.7200e-003**	**478.1114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	2.46185e+006	436.5975	0.0369	4.4700e-003	438.8498
General Light Industry	252861	44.8437	3.7800e-003	4.6000e-004	45.0751
General Office Building	96495	17.1130	1.4400e-003	1.8000e-004	17.2012
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	80360	14.2515	1.2000e-003	1.5000e-004	14.3250
Strip Mall	127470	22.6062	1.9100e-003	2.3000e-004	22.7229
Total		**535.4119**	**0.0452**	**5.4900e-003**	**538.1740**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	2.46185e+006	436.5975	0.0369	4.4700e-003	438.8498
General Light Industry	252861	44.8437	3.7800e-003	4.6000e-004	45.0751
General Office Building	96495	17.1130	1.4400e-003	1.8000e-004	17.2012
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	80360	14.2515	1.2000e-003	1.5000e-004	14.3250
Strip Mall	127470	22.6062	1.9100e-003	2.3000e-004	22.7229
Total		**535.4119**	**0.0452**	**5.4900e-003**	**538.1740**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2024	1.3000e-004	0.0145	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0283	0.0283	7.0000e-005	0.0000	0.0301
Unmitigated	1.2024	1.3000e-004	0.0145	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0283	0.0283	7.0000e-005	0.0000	0.0301

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3500e-003	1.3000e-004	0.0145	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0283	0.0283	7.0000e-005	0.0000	0.0301
Total	**1.2024**	**1.3000e-004**	**0.0145**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0283**	**0.0283**	**7.0000e-005**	**0.0000**	**0.0301**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3500e-003	1.3000e-004	0.0145	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0283	0.0283	7.0000e-005	0.0000	0.0301
Total	**1.2024**	**1.3000e-004**	**0.0145**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0283**	**0.0283**	**7.0000e-005**	**0.0000**	**0.0301**

7.0 Water Detail

7.1 Mitigation Measures Water

Wildomar Commerce Center - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	176.3504	2.1614	0.0523	245.9748
Unmitigated	176.3504	2.1614	0.0523	245.9748

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	57.3893 / 0	150.7313	1.8812	0.0455	211.3241
General Light Industry	5.89456 / 0	15.4819	0.1932	4.6700e-003	21.7055
General Office Building	1.8662 / 1.1438	7.1552	0.0614	1.5000e-003	9.1372
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.777761 / 0.476693	2.9820	0.0256	6.3000e-004	3.8080
Total		**176.3504**	**2.1614**	**0.0523**	**245.9748**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	57.3893 / 0	150.7313	1.8812	0.0455	211.3241
General Light Industry	5.89456 / 0	15.4819	0.1932	4.6700e-003	21.7055
General Office Building	1.8662 / 1.1438	7.1552	0.0614	1.5000e-003	9.1372
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.777761 / 0.476693	2.9820	0.0256	6.3000e-004	3.8080
Total		**176.3504**	**2.1614**	**0.0523**	**245.9748**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Wildomar Commerce Center - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.2763	1.0801	0.0000	45.2787
Unmitigated	73.1052	4.3204	0.0000	181.1150

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	307.73	62.4664	3.6917	0.0000	154.7579
General Light Industry	31.61	6.4165	0.3792	0.0000	15.8967
General Office Building	9.77	1.9832	0.1172	0.0000	4.9134
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	11.03	2.2390	0.1323	0.0000	5.5470
Total		**73.1052**	**4.3204**	**0.0000**	**181.1150**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	76.9325	15.6166	0.9229	0.0000	38.6895
General Light Industry	7.9025	1.6041	0.0948	0.0000	3.9742
General Office Building	2.4425	0.4958	0.0293	0.0000	1.2283
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.7575	0.5598	0.0331	0.0000	1.3868
Total		**18.2763**	**1.0801**	**0.0000**	**45.2787**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix C:

EMFAC2017 Output

Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Ca	Model Year	Speed	Fuel	Population	Trips	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coast AQMD	2022	HHDT	Aggregate	Aggregate	Gasoline	77.82251	1557.073	1.914672095	1914.672095	1984478.157	7970.981	13381402.09	**6.74**	HHD
South Coast AQMD	2022	HHDT	Aggregate	Aggregate	Diesel	108362	1118617	1982.563485	1982563.485		13373431			
South Coast AQMD	2022	LDA	Aggregate	Aggregate	Gasoline	6542832	30915701	8178.144259	8178144.259	8226568.36	2.52E+08	254602375.4	**30.95**	LDA
South Coast AQMD	2022	LDA	Aggregate	Aggregate	Diesel	58937.5	279973.4	48.42410045	48424.10045		2358230			
South Coast AQMD	2022	LDA	Aggregate	Aggregate	Electricity	127532.6	637025.4	0	0		5177709			
South Coast AQMD	2022	LDT1	Aggregate	Aggregate	Gasoline	736905.6	3399512	1031.447408	1031447.408	1031847.287	27300896	27309932.68	**26.47**	LDT1
South Coast AQMD	2022	LDT1	Aggregate	Aggregate	Diesel	387.1571	1348.408	0.39987912	399.8791198		9037.122			
South Coast AQMD	2022	LDT1	Aggregate	Aggregate	Electricity	5339.042	26794.47	0	0		221507.4			
South Coast AQMD	2022	LDT2	Aggregate	Aggregate	Gasoline	2246303	10535910	3436.155557	3436155.557	3453207.618	84740129	85348125.78	**24.72**	LDT2
South Coast AQMD	2022	LDT2	Aggregate	Aggregate	Diesel	14234.59	70193.22	17.05206088	17052.06088		607996.5			
South Coast AQMD	2022	LDT2	Aggregate	Aggregate	Electricity	22589.96	114302.6	0	0		734756.1			
South Coast AQMD	2022	LHDT1	Aggregate	Aggregate	Gasoline	175903.1	2620694	598.0685493	598068.5493	821513.5103	6298251	11115258.37	**13.53**	LHDT1
South Coast AQMD	2022	LHDT1	Aggregate	Aggregate	Diesel	119380.7	1501659	223.444961	223444.961		4817007			
South Coast AQMD	2022	LHDT2	Aggregate	Aggregate	Gasoline	30009.92	447103.1	113.5150695	113515.0695	209067.0531	1040649	2902289.397	**13.88**	LHDT2
South Coast AQMD	2022	LHDT2	Aggregate	Aggregate	Diesel	47335.63	595422.7	95.55198358	95551.98358		1861640			
South Coast AQMD	2022	MCY	Aggregate	Aggregate	Gasoline	295960.1	591920.2	56.92214589	56922.14589	56922.14589	2072370	2072370.126	**36.41**	MCY
South Coast AQMD	2022	MDV	Aggregate	Aggregate	Gasoline	1579640	7302407	2793.799561	2793799.561	2842944.316	55888916	57233722.8	**20.13**	MDV
South Coast AQMD	2022	MDV	Aggregate	Aggregate	Diesel	33348.92	163526.3	49.14475473	49144.75473		1344806			
South Coast AQMD	2022	MDV	Aggregate	Aggregate	Electricity	11658.48	59625.3	0	0		391944.3			
South Coast AQMD	2022	MH	Aggregate	Aggregate	Gasoline	35097.75	3511.179	64.70410395	64704.10395	76270.38211	333282.4	455641.5746	**5.97**	MH
South Coast AQMD	2022	MH	Aggregate	Aggregate	Diesel	12758.81	1275.881	11.56627815	11566.27815		122359.2			
South Coast AQMD	2022	MHDT	Aggregate	Aggregate	Gasoline	25445.41	509111.8	269.2842176	269284.2176	1009568.488	1367743	9307083.084	**9.22**	MHDT
South Coast AQMD	2022	MHDT	Aggregate	Aggregate	Diesel	123310	1231988	740.28427	740284.27		7939340			
South Coast AQMD	2022	OBUS	Aggregate	Aggregate	Gasoline	5959.443	119236.5	49.67589796	49675.89796	88138.04214	250653.5	576603.5972	**6.54**	OBUS
South Coast AQMD	2022	OBUS	Aggregate	Aggregate	Diesel	4274.499	41607.39	38.46214418	38462.14418		325950.1			
South Coast AQMD	2022	SBUS	Aggregate	Aggregate	Gasoline	2630.829	10523.32	11.7605267	11760.5267	39328.1885	107369.8	316915.9173	**8.06**	SBUS
South Coast AQMD	2022	SBUS	Aggregate	Aggregate	Diesel	6631.313	76524.43	27.5676618	27567.6618		209546.1			
South Coast AQMD	2022	UBUS	Aggregate	Aggregate	Gasoline	952.146	3808.584	18.40085629	18400.85629	18647.65249	89256	90734.08386	**4.87**	UBUS
South Coast AQMD	2022	UBUS	Aggregate	Aggregate	Diesel	14.14142	56.56567	0.246796198	246.7961984		1478.086			
South Coast AQMD	2022	UBUS	Aggregate	Aggregate	Electricity	17.11694	68.46776	0			1343.185			

Source: EMFAC2017 (v1.0.3) Emissions Inventory
Region Type: Air District
Region: South Coast AQMD
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coas	2023	HHDT	Aggregate	Aggregate	Gasoline	75.10442936	8265.097	1502.689	1.936286145	1936.286145	1913466.474	8265.097	13656273.03	7.14	**HHD**
South Coas	2023	HHDT	Aggregate	Aggregate	Diesel	109818.6753	13648008	1133618	1911.530188	1911530.188		13648008			
South Coas	2023	LDA	Aggregate	Aggregate	Gasoline	6635002.295	2.53E+08	31352477	7971.24403	7971244.03	8020635.698	2.53E+08	255180358.3	31.82	**LDA**
South Coas	2023	LDA	Aggregate	Aggregate	Diesel	62492.97958	2469816	297086.6	49.3916685	49391.6685		2469816			
South Coas	2023	LDA	Aggregate	Aggregate	Electricity	150700.3971	6237106	751566	0	0		6237106			
South Coas	2023	LDT1	Aggregate	Aggregate	Gasoline	758467.6481	27812996	3504563	1023.913006	1023913.006	1024279.466	27812996	27821405.09	27.16	**LDT1**
South Coas	2023	LDT1	Aggregate	Aggregate	Diesel	360.7799144	8408.618	1256.88	0.366459477	366.4594769		8408.618			
South Coas	2023	LDT1	Aggregate	Aggregate	Electricity	7122.93373	303507.5	35798.19	0	0		303507.5			
South Coas	2023	LDT2	Aggregate	Aggregate	Gasoline	2285150.139	85272416	10723315	3338.798312	3338798.312	3356536.438	85272416	85922778.34	25.60	**LDT2**
South Coas	2023	LDT2	Aggregate	Aggregate	Diesel	15594.68309	650362.8	76635.83	17.73812611	17738.12611		650362.8			
South Coas	2023	LDT2	Aggregate	Aggregate	Electricity	28809.63735	917592.8	145405.4	0	0		917592.8			
South Coas	2023	LHDT1	Aggregate	Aggregate	Gasoline	174910.3847	6216643	2605904	583.3851736	583385.1736	811563.1022	6216643	11211395.79	13.81	**LHDT1**
South Coas	2023	LHDT1	Aggregate	Aggregate	Diesel	125545.0822	4994753	1579199	228.1779285	228177.9285		4994753			
South Coas	2023	LHDT2	Aggregate	Aggregate	Gasoline	30102.75324	1034569	448486.2	111.5753864	111575.3864	209423.5025	1034569	2969599.008	14.18	**LHDT2**
South Coas	2023	LHDT2	Aggregate	Aggregate	Diesel	50003.13116	1935030	628976.5	97.84811618	97848.11618		1935030			
South Coas	2023	MCY	Aggregate	Aggregate	Gasoline	305044.5141	2104624	610089	57.849018	57849.018	57849.018	2104624	2104623.657	36.38	**MCY**
South Coas	2023	MDV	Aggregate	Aggregate	Gasoline	1589862.703	55684188	7354860	2693.883526	2693883.526	2744536.341	55684188	57109879.73	20.81	**MDV**
South Coas	2023	MDV	Aggregate	Aggregate	Diesel	36128.1019	1425691	176566.9	50.65281491	50652.81491		1425691			
South Coas	2023	MDV	Aggregate	Aggregate	Electricity	16376.67653	537591.7	83475.95	0	0		537591.7			
South Coas	2023	MH	Aggregate	Aggregate	Gasoline	34679.50542	330042.9	3469.338	63.26295123	63262.95123	74893.26955	330042.9	454344.9436	6.07	**MH**
South Coas	2023	MH	Aggregate	Aggregate	Diesel	13122.69387	124302	1312.269	11.63031832	11630.31832		124302			
South Coas	2023	MHDT	Aggregate	Aggregate	Gasoline	25624.3151	1363694	512691.3	265.2060557	265206.0557	989975.6425	1363694	9484317.768	9.58	**MHDT**
South Coas	2023	MHDT	Aggregate	Aggregate	Diesel	122124.488	8120623	1221858	724.7695868	724769.5868		8120623			
South Coas	2023	OBUS	Aggregate	Aggregate	Gasoline	5955.291639	245774	119153.5	48.07750689	48077.50689	86265.88761	245774	579743.8353	6.72	**OBUS**
South Coas	2023	OBUS	Aggregate	Aggregate	Diesel	4286.940093	333969.8	41558.29	38.18838072	38188.38072		333969.8			
South Coas	2023	SBUS	Aggregate	Aggregate	Gasoline	2783.643068	112189.6	11134.57	12.19474692	12194.74692	39638.85935	112189.6	323043.5203	8.15	**SBUS**
South Coas	2023	SBUS	Aggregate	Aggregate	Diesel	6671.825716	210853.9	76991.94	27.44411242	27444.11242		210853.9			
South Coas	2023	UBUS	Aggregate	Aggregate	Gasoline	957.7686184	89782.63	3831.074	17.62416327	17624.16327	17863.66378	89782.63	91199.2533	5.11	**UBUS**
South Coas	2023	UBUS	Aggregate	Aggregate	Diesel	13.00046095	1416.622	52.00184	0.239500509	239.5005093		1416.622			
South Coas	2023	UBUS	Aggregate	Aggregate	Electricity	16.11693886	1320.163	64.46776	0			1320.163			

Appendix 3

Wildomar Commerce Center Noise Impact Study, City of Wildomar, CA

Wildomar Commerce Center

Noise Impact Study

City of Wildomar, CA

Prepared for:

Mr. Michael Austin -- President
Bluesky Management Corporation
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Prepared by:

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Samuel Hord, INCE-USA
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Date: 9/30/2022

MD ACOUSTICS
Sound Solutions for Planning and Design

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1.0 Introduction

1.1 Purpose of Analysis and Study Objectives

This noise assessment was prepared to evaluate the potential noise impacts for the project study area and to recommend noise mitigation measures, if necessary, to minimize the potential noise impacts. The assessment was conducted and compared to the noise standards set-forth by the Federal, State and Local agencies. Consistent with the City's Noise Guidelines, the project must demonstrate compliance to the applicable noise criterion as outlined within the City's Noise Element and Municipal Code.

The following is provided in this report:

- A description of the study area and the proposed project
- Information regarding the fundamentals of noise
- A description of the local noise guidelines and standards
- An analysis of traffic noise impacts to and from the project site
- An analysis of stationary noise impacts to and from the project site
- An analysis of construction noise impacts

This study assesses both the traffic noise and stationary noise to and from the project site and compares the results to the applicable City noise limits. The primary source of stationary noise propagates from loading areas and trucks coming and going from parking. The site plan used for this is illustrated in Exhibit B. Construction activities within the Project area will consist of site preparation, grading, building, paving, and architectural coating.

1.2 Site Location and Study Area

The project site is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar, CA, as shown in Exhibit A. The site is zoned as Light Industrial (LI) and is located within the Specific Plan land use according to the City of Wildomar General Plan Zoning Map. Land uses surrounding the site include residences to the northeast and southwest, industrial uses to the east, and vacant land to the north, south, and west. All surrounding land uses are within the Specific Plan district.

1.3 Proposed Project Description

The project consists of five (5) buildings with sub-units within the buildings. Building 1 consists of approximately 14,630 sqft, building 2 consists of approximately 16,860 sqft, building 3 consists of approximately 64,510 sqft, building 4 consists of 99,940 sqft with 22 loading docks and building 5 consists of 98,720 sqft with 28 loading docks. The project site is approximately 26.56 acres and proposes a total of 574 parking spaces.

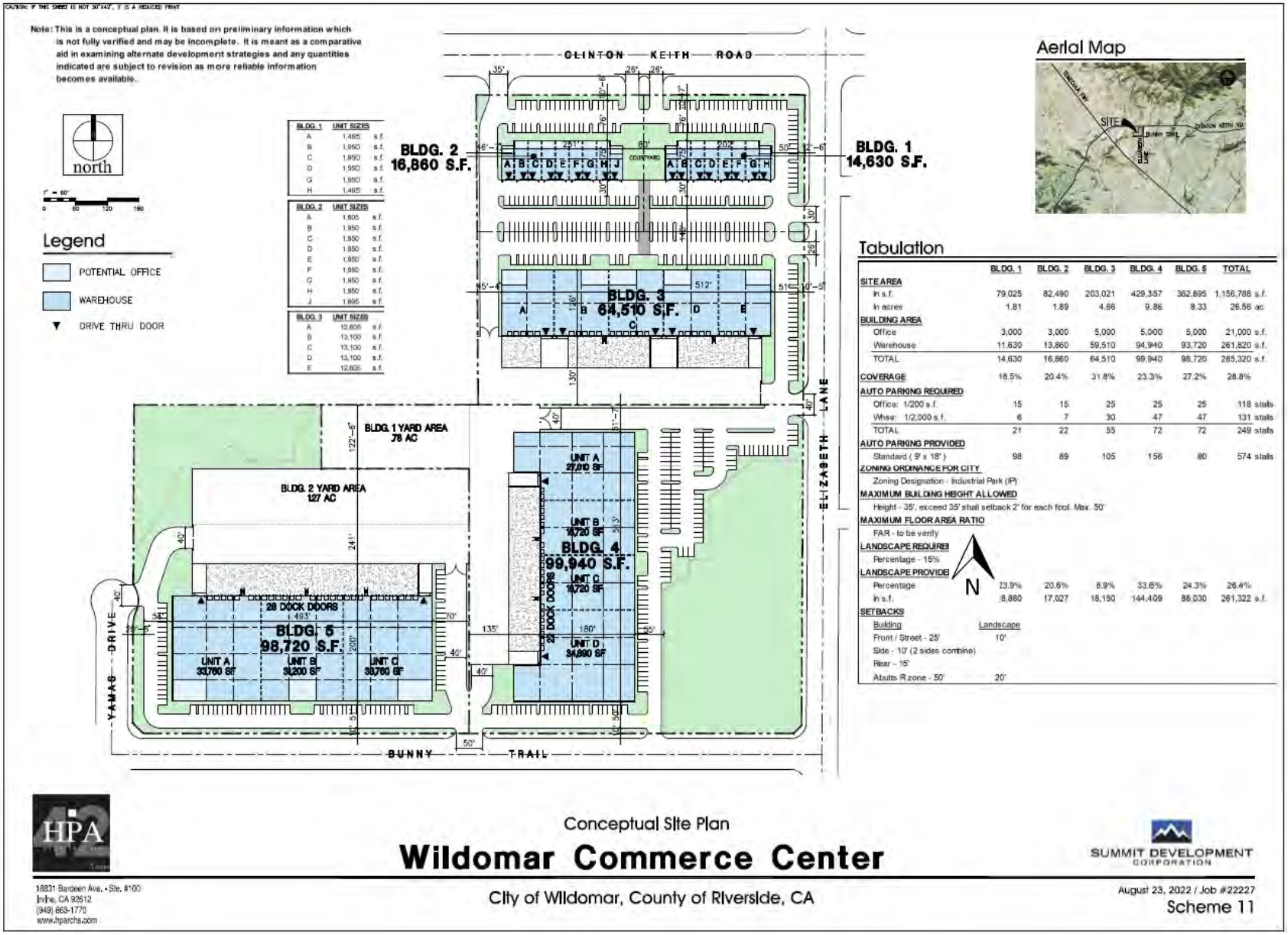
Exhibit A

Location Map



Exhibit B

Site Plan



	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	TOTAL
SITE AREA						
In s.f.	79,025	82,490	203,021	429,357	362,895	1,156,788 s.f.
In acres	1.81	1.89	4.66	9.86	8.33	26.56 ac
BUILDING AREA						
Office	3,000	3,000	5,000	5,000	5,000	21,000 s.f.
Warehouse	11,630	13,860	59,510	94,940	93,720	261,820 s.f.
TOTAL	14,630	16,860	64,510	99,940	98,720	285,320 s.f.
COVERAGE	18.5%	20.4%	31.8%	23.3%	27.2%	28.8%
AUTO PARKING REQUIRED						
Office: 1/200 s.f.	15	15	25	25	25	118 stalls
Whse: 1/2,000 s.f.	6	7	30	47	47	131 stalls
TOTAL	21	22	55	72	72	249 stalls
AUTO PARKING PROVIDED						
Standard (9' x 18')	98	89	105	156	80	574 stalls
ZONING ORDINANCE FOR CITY						
Zoning Designation - Industrial Park (IP)						
MAXIMUM BUILDING HEIGHT ALLOWED						
Height - 35', exceed 35' shall setback 2' for each foot. Max. 50'						
MAXIMUM FLOOR AREA RATIO						
FAR - to be verify						
LANDSCAPE REQUIRED						
Percentage - 15%						
LANDSCAPE PROVIDED						
Percentage	23.9%	20.6%	8.9%	33.6%	24.3%	26.4%
In s.f.	18,860	17,027	18,150	144,409	88,030	261,322 s.f.

SETBACKS	Building	Landscape
Front / Street - 25'		10'
Side - 10' (2 sides combine)		
Rear - 15'		
Abuts R zone - 50'		20'

2.0 Fundamentals of Noise

This section of the report provides basic information about noise and presents some of the terms used within the report.

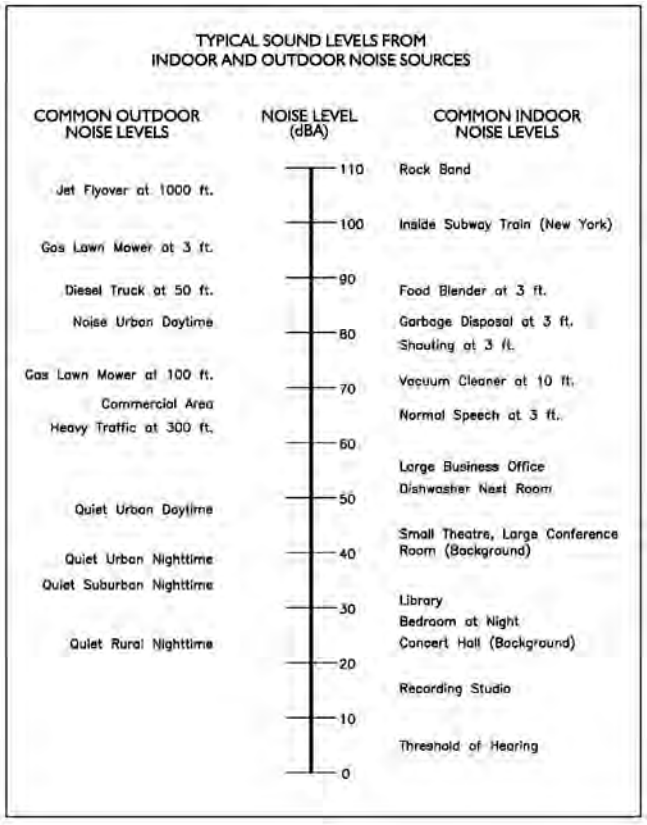
2.1 Sound, Noise and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic, or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted.

2.2 Frequency and Hertz

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting out at 20 Hz all the way to the high pitch of 20,000 Hz.

Exhibit C: Typical A-Weighted Noise Levels



2.3 Sound Pressure Levels and Decibels

The *amplitude* of a sound determines it loudness. The loudness of sound increases or decreases as the amplitude increases or decreases. Sound pressure amplitude is measure in units of micro-Newton per square inch meter (N/m2), also called micro-Pascal (µPa). One µPa is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels abbreviated dB. Exhibit C illustrates references sound levels for different noise sources.

2.4 Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two sounds or equal SPL are combined, they will produce an SPL 3 dB greater than the original single SPL. In other words, sound energy must be doubled to produce a 3 dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound.

2.5 Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, (A-weighted scale) and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, the A-scale weighting is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive the change in noise level of 3 dB. A change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.

2.6 Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels.

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level (see definition above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.

Habitable Room: Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms and similar spaces.

L(n): The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90 and L99, etc.

Noise: *A*ny unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Outdoor Living Area: Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

Percent Noise Levels: See L(n).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL): The dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

2.7 Traffic Noise Prediction

Noise levels associated with traffic depends on a variety of factors: (1) volume of traffic, (2) speed of traffic, (3) auto, medium truck (2–3 axle) and heavy truck percentage (4 axle and greater), and sound propagation. The greater the volume of traffic, higher speeds and truck percentages equate to a louder volume in noise. A doubling of the Average Daily Traffic (ADT) along a roadway will increase noise levels by approximately 3 dB; reasons for this are discussed in the sections above.

2.8 Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading

versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at a rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 4.5 dB per doubling of distance for a line source and 7.5 dB per doubling of distance for a point source.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet from a noise source. Wind, temperature, air humidity and turbulence can further impact have far sound can travel.

3.0 Ground-Bourne Vibration Fundamentals

3.1 Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude.

PPV – Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.

RMS – Known as root mean squared (RMS) can be used to denote vibration amplitude

VdB – A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

3.2 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration. To counter the effects of ground-borne vibration, the Federal Transit Administration (FTA) has published guidance relative to vibration impacts. According to the FTA, fragile buildings can be exposed to ground-borne vibration levels of 0.3 inches per second without experiencing structural damage.

3.3 Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be

effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

4.0 Regulatory Setting

The proposed project is located in the City of Wildomar and noise regulations are addressed through the efforts of various federal, state and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Publicize noise emission standards for interstate commerce
- Assist state and local abatement efforts
- Promote noise education and research

The Federal Office of Noise Abatement and Control (ONAC) originally was tasked with implementing the Noise Control Act. However, it was eventually eliminated leaving other federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows: The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies. The Federal Aviation Agency (FAA) is responsible to regulate noise from aircraft and airports. The Federal Highway Administration (FHWA) is responsible to regulate noise from the interstate highway system. The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers.

The federal government advocates that local jurisdiction use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being constructed adjacent to a highway or, or alternatively that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

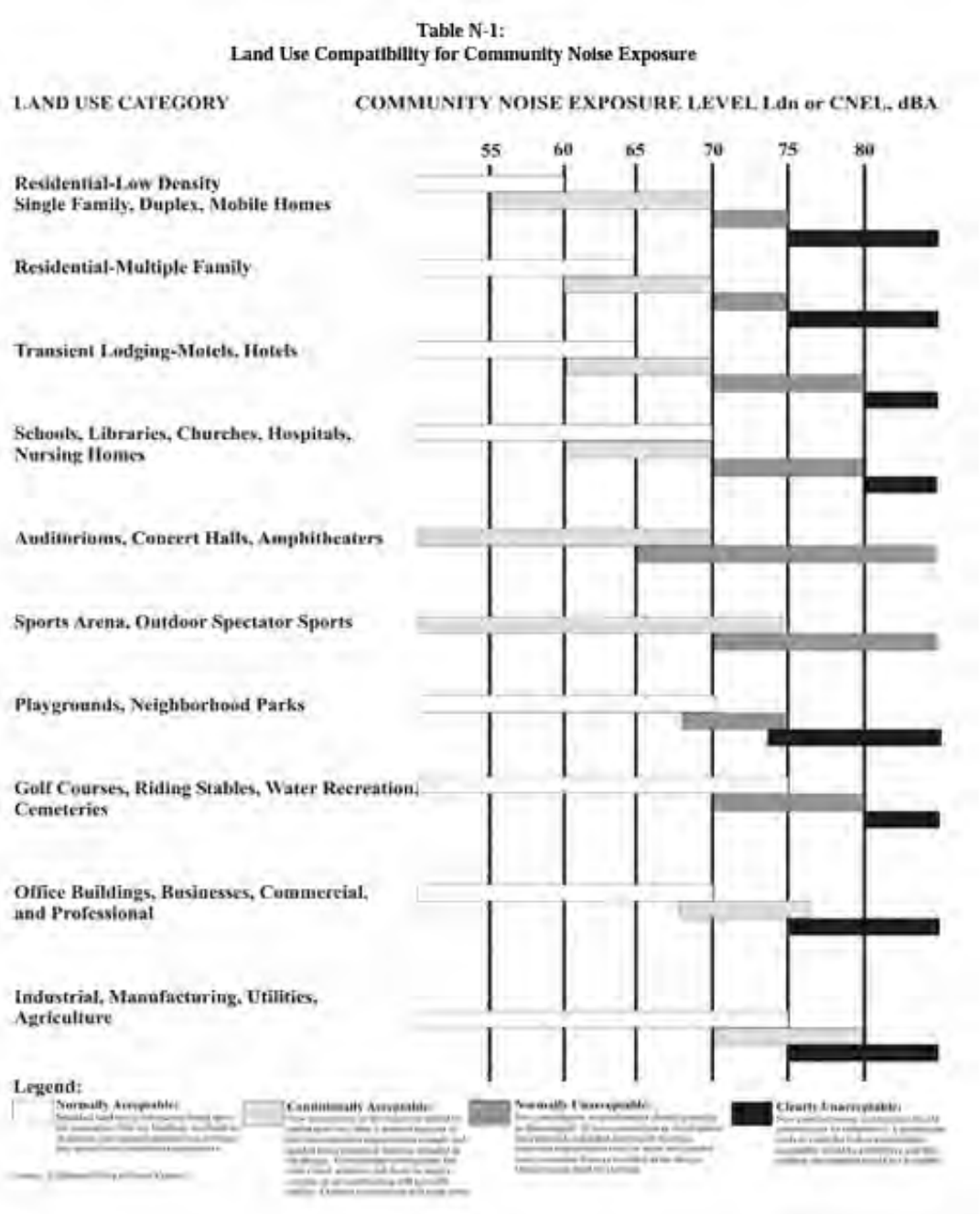
4.2 State Regulations

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the “Land Use Compatibility for Community Noise Environments Matrix.” The matrix allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

The State of California has established noise insulation standards as outlined in Title 24 and the Uniform Building Code (UBC) which in some cases requires acoustical analyses to outline exterior noise levels and to ensure interior noise levels do not exceed the interior threshold. The State mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan.

The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable as illustrated in Exhibit D and can be found in the City's General Plan Noise Element.

Exhibit D: Land Use Compatibility Guidelines



4.3 City of Wildomar Noise Regulations

The City of Wildomar outlines their noise regulations and follows the County of Riverside standards within the Noise Element from the General Plan and the Noise Ordinance from the Municipal Code.

County of Riverside General Plan

- **Goals, Policies, and Implementation Measures**

  Policies, goals and implementation program measures from the Noise Element that would mitigate potential impacts on noise include the following.

  N 1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.

  N 1.2 Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noise-producing, such as transportation corridors or within the projected noise contours of any adjacent airports.

  N 1.4 Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.

  N 1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

  N 1.6 Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise-sensitive uses.

  N 1.7 Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.

  N 2.2 Require a qualified acoustical specialist to prepare acoustical studies for proposed noise-sensitive projects within noise impacted areas to mitigate existing noise.

  N 2.3 Mitigate exterior and interior noises to the levels listed in the table below to the extent feasible, for stationary sources.

Stationary Source Land Use Noise Standards[1]

Land Use	Interior Standards	Exterior Standards
Residential		
10:00 p.m. to 7:00 a.m.	40 L_{eq} (10 minute)	45 L_{eq} (10 minute)
7:00 a.m. to 10:00 p.m.	55 L_{eq} (10 minute)	65 L_{eq} (10 minute)

1 These are only preferred standards; final decision will be made by the Riverside County Planning Department and Office of Public Health.

N 3.2 Require acoustical studies and subsequent approval by the Planning Department and the Office of Industrial Hygiene, to help determine effective noise mitigation strategies in noise-producing areas.

N 3.3 Ensure compatibility between industrial development and adjacent land uses. To achieve compatibility, industrial development projects may be required to include noise mitigation measures to avoid or minimize project impacts on adjacent uses.

N 3.4 Identify point-source noise producers such as manufacturing plants, truck transfer stations, and commercial development by conducting a survey of individual sites.

N 3.5 Require that a noise analysis be conducted by an acoustical specialist for all proposed

projects that are noise producers. Include recommendations for design mitigation if the project is to be located either within proximity of a noise-sensitive land use, or land designated for noise sensitive land uses.

N 3.6 Discourage projects that are incapable of successfully mitigating excessive noise.

N 4.1 Prohibit facility-related noise received by any sensitive use from exceeding the following worstcase noise levels:

a. 45 dBA-10-minute Leq between 10:00 p.m. and 7:00 a.m.
b. 65 dBA-10-minute Leq between 7:00 a.m. and 10:00 p.m.

N 4.2 Develop measures to control non-transportation noise impacts.

N 4.3 Ensure any use determined to be a potential generator of significant stationary noise impacts be properly analyzed and ensure that the recommended mitigation measures are implemented.

N 4.4 Require that detailed and independent acoustical studies be conducted for any new or renovated land uses or structures determined to be potential major stationary noise sources.

N 4.5 Encourage major stationary noise-generating sources throughout the County of Riverside to install additional noise buffering or reduction mechanisms within their facilities to reduce noise generation levels to the lowest extent practicable prior to the renewal of conditional use permits or business licenses or prior to the approval and/or issuance of new conditional use permits for said facilities.

N 4.7 Evaluate noise producers for the possibility of pure-tone producing noises. Mitigate any pure tones that may be emitted from a noise source.

N 4.8 Require that the parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses.

N 6.3 Require commercial or industrial truck delivery hours be limited when adjacent to noise- sensitive land uses unless there is no feasible alternative or there are overriding transportation benefits.

N 9.3 Require development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses to provide for appropriate mitigation measures.

N 9.4 Require that the loading and shipping facilities of commercial and industrial land uses, which abut residential parcels be located and designed to minimize the potential noise impacts upon residential parcels.

N 13.1 Minimize the impacts of construction noise on adjacent uses within acceptable practices. **N 13.2** Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.

N 13.3 Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the County for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as: a. Temporary noise attenuation fences; b. Preferential location of equipment; and c. Use of current noise

suppression technology and equipment.

N 13.4 Require that all construction equipment utilizes noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

N 14.5 Consider the issue of adjacent residential land uses when designing and configuring all new, nonresidential development. Design and configure on-site ingress and egress points that divert traffic away from nearby noise-sensitive land uses to the greatest degree practicable. (AI 106, 107)

N 14.8 Review all development applications for consistency with the standards and policies of the Noise Element of the General Plan.

N 16.2 Consider the following land uses sensitive to vibration:

- Hospitals;
- Residential areas;
- Concert halls;
- Libraries;
- Sensitive research operations;
- Schools; and
- Offices

N 19.5 Require new developments that have the potential to generate significant noise impacts to inform impacted users on the effects of these impacts during the environmental review process

City of Wildomar Municipal Code

Chapter 9.48 of the Wildomar Municipal Code outlines the acceptable maximum noise standards. Table 1 is taken from Section 9.48.040 of the Wildomar Municipal Code and shows that the City has a noise limit of 75 dBA L_{max} for all industrial uses and 55 dBA L_{max} for all residential uses for daytime hours.

Table 1: Sound Level Standards (dB L_{max})

GENERAL PLAN LAND USE DESIGNATION	GENERAL PLAN LAND USE DESIGNATION NAME	MAXIMUM DECIBEL LEVEL	
		7 am - 10 pm	10 pm – 7 am
LI	Light Industrial	75	65
HI	Heavy Industrial	75	75
SP-C	Specific Plan Commercial	65	55
HDR	High Density Residential	55	45

5.0 Study Method and Procedure

The following section describes the noise modeling procedures and assumptions used for this assessment.

5.1 Noise Measurement Procedure and Criteria

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as first row of houses
- Locations that are acoustically representative and equivalent of the area of concern
- Human land usage
- Sites clear of major obstruction and contamination

MD conducted the sound level measurements in accordance to Caltrans technical noise specifications and the City's noise ordinance. All measurements equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA). The following gives a brief description of the Caltrans Technical Noise Supplement procedures for sound level measurements:

- Microphones for sound level meters were placed 5-feet above the ground for all measurements
- Sound level meters were calibrated (Larson Davis CAL 200) before and after each measurement
- Following the calibration of equipment, a wind screen was placed over the microphone
- Frequency weighting was set on "A" and slow response
- Results of the long-term noise measurements were recorded on field data sheets
- During any short-term noise measurements any noise contaminations such as barking dogs, local traffic, lawn mowers, or aircraft fly-overs were noted
- Temperature and sky conditions were observed and documented

5.2 Noise Measurement Location

The primary source of ambient noise is traffic along the existing roadways. Noise monitoring locations were selected to provide a representative picture of the existing noise condition based on proximity to Clinton Keith Road and Elizabeth Lane . Three (3) short-term noise measurements were conducted on the project site and represent ambient levels at the site. Appendix A includes photos, field sheet, and measured noise data. Exhibit E illustrates the location of the measurements.

5.3 Stationary Noise Modeling

SoundPLAN (SP) acoustical modeling software was utilized to model future worst-case stationary noise impacts to the adjacent land uses. SP is capable of evaluating multiple stationary noise source impacts at various receiver locations. SP's software utilizes algorithms (based on the inverse square law and reference equipment noise level data) to calculate noise level projections. The software allows the user to input

specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations.

The future noise level projections were modeled using referenced sound level data for the various stationary on-site sources (parking spaces, loading/unloading bays, etc.). The model assumes that the building facility has a total of fifty (50) dock-high truck doors and five hundred seventy-four (574) auto parking spaces. Table 2 outlines the reference noise levels used for the model.

Table 2: Reference Sound Level Measurements for SoundPlan Model

Source	Source Type	Reference Power Level Lw (dBA)	Descriptor
Parking (Car)	Area (SP Parking Tool)	77	1 car per hr per stall
Idling Truck	Point Source	91	10 min idling per hour
Backing Truck	Point Source	103	1 min sound per hour

The SP model assumes that all loading docks operate 24/7 and that each of these units has several trucks operating simultaneously, when in actuality the noise will be intermittent and lower in noise level. All loading docks were modeled with backup beepers and idling engines, which are typically only operating for a minute or two at a time. Parking lot noise with cars idling and coming and going in the parking spots were modeled at 1 car per hour per stall. The model also assumes an 8' CMU wall along the western property line. Input and output calculations are provided in Appendix C.

5.4 FHWA Traffic Noise Prediction Model

Traffic noise from vehicular traffic was projected using a computer program that replicates the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA model predicts a noise level increment of 3 dB per doubling the traffic volume. Roadway volumes and percentages correspond to the project's trip generation analysis as prepared by TJW Engineering, Inc. (TJW). The model assumes the same distribution for the affected roadways as pre in the Tentative Parcel Map 36492 (July 2013). The traffic data is included in Appendix B.

The traffic noise prediction model considers two (2) scenarios: the existing conditions and the existing plus project conditions. The project would generate 2997 daily trips. The roadway parameters and vehicle distributions prescribed by the County of Riverside for arterial and secondary roadways were utilized for this study.

5.5 FHWA Roadway Construction Noise Model

The construction noise analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM), together with several key construction parameters. Key inputs include distance to the sensitive receiver, equipment usage, % usage factor, and baseline parameters for the project site.

The project was analyzed based on the different construction phases. Construction noise is expected to be loudest during the grading, concrete and building phases of construction. The construction noise calculation

output worksheet is located in Appendix D. The following assumptions relevant to short-term construction noise impacts were used:

- It is estimated that construction will occur over a 6 to 8 month time period. Construction noise is expected to be the loudest during the grading, concrete, and building phases.

Exhibit E

Measurement Locations

= Short-Term Monitoring Location



6.0 Existing Noise Environment

Three (3) 10-minute ambient noise measurements were conducted at the project on 9/16/22. The short-term noise monitoring locations are illustrated in Exhibit E. The 10-minute Leq, Lmin, Lmax and other statistical data (e.g. L2, L8) were measured and are presented in Table 3. The noise measurements were taken to determine the existing baseline noise conditions.

6.1 Short-Term Noise Measurement Results

The results of the short-term noise data taken are presented in Table 3.

Table 3: Short-Term Noise Measurement Data (dBA)

Location[1]	Start Time	Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)	L(90)
NM1	10:01 AM	61.3	84.1	40.4	66.5	57.6	53.8	51.3	45.1
NM2	10:15 AM	58.2	83.2	41.4	59.9	53.5	48.4	46.2	42.6
NM3	10:30 AM	72.5	79.9	48.7	77.9	76.6	74.1	71.2	59.2

Notes:
[1.] See Appendix A for the field sheet.

Noise data indicates the ambient noise level ranged between 58 to 73 dBA Leq during the measuring period. The noise levels were highest along the north property line (close to Clinton Keith Road) and were quietest near the south property line (furthest from Clinton Keith Road). Additional field notes and photographs are provided in Appendix A.

7.0 Future Noise Environment Impacts and Mitigation

This assessment analyzes future noise impacts to and from the project and compares the results to the City's Noise Standards. The analysis details the estimated exterior noise levels associated with traffic from adjacent roadways and from on-site stationary noise sources.

7.1 Future Exterior Noise

The following outlines the exterior noise levels associated with the proposed project.

7.1.1 Noise Impacts to Off-Site Receptors Due to Stationary Sources

Due to the location of the proposed facilities, receptors that may be affected by project operational noise include the existing residential land uses to the southwest and northeast, as well as land zoned residential to the west and south of the project. The stationary noise was modeled using SoundPLAN acoustical modeling software. The model utilizes SoundPLAN's sound level data for the parking specified within Section 5.3 of this report. Loading activity constitutes the project's maximum operational noise levels.

A total of six (6) receptor locations were modeled to evaluate the proposed project's operational noise impact to adjacent noise sensitive land uses. A receptor is denoted by a yellow dot in Exhibit F. The receptors are on the project property lines.

Project Operational Noise Levels

Exhibit F shows the "project only" operational noise levels at the property lines and/or sensitive receptor areas and illustrates how the noise will propagate at the site. Worst-case operational noise levels are anticipated to range between 45 to 60 dBA Leq at the receptors R1 – R4. The noise projections are below the City's noise limits as given in Section 9.48.040 of the Municipal Code.

Project Plus Ambient Operational Noise Levels

Table 4 demonstrates the project plus ambient noise levels. Project plus ambient noise level projections are anticipated to range between 58 to 73 dBA Lmax at the receptors R1 – R6. In addition, Table 4 provides the anticipated change in noise level as a result of the proposed project during continuous operating conditions.

<*Table 4, next page*>

Table 4: Existing + Project Operational Noise Level, dBA CNEL

Receptor[1]	Existing Ambient Noise Level[2] (dBA)	Project Noise Level[3] (dBA)	Total Combined Noise Level (dBA)	Normally Acceptable Industrial Noise Level (dBA)	Change in Noise Level as Result of Project (dB)
1	73	39	73	75	0.0
2	61	60	64		2.5
3	58	42	58		0.1
4	58	40	58		0.1
5	61	44	61		0.1
6	61	54	62		0.8

Notes:
[1.] Receptors 1-6 are located along the property lines. The predominant noise source is traffic along Clinton Keith Road.
[2.] See Table 1 for existing ambient level. The dominant noise source is traffic along Clinton Keith Road to the north.
[3.] See Exhibit F for the operational noise level projections at said receptors.

As shown in Table 4, the project's maximum operational noise levels do not exceed the existing ambient noise levels at the project site. The proposed project would produce a 0-2.5 dB difference from the existing condition. Table 5 provides the characteristics associated with changes in noise levels.

Table 5: Change in Noise Level Characteristics[1]

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm

The change in noise level would fall within the "Not Perceptible" acoustic characteristic depending on location. The change in noise level due to the project would be less than significant.

Project Design Features

In order to reduce the noise impact, the project will feature an 8' tall CMU wall along the west edge of the property, as illustrated in Exhibit F.

7.1.2 Noise Impacts to On/Off-Site Receptors Due to Project Generated Traffic

A worst-case project generated traffic noise level was modeled utilizing the FHWA Traffic Noise Prediction Model - FHWA-RD-77-108. Traffic noise levels were calculated 50 feet from the centerline of the analyzed roadway. The modeling is theoretical and does not take into account any existing barriers, structures, and/or topographical features that may further reduce noise levels. Therefore, the levels are shown for comparative purposes only to show the difference with and without the project. In addition, the noise contours for 60, 65 and 70 dBA CNEL were calculated (see Appendix B). The potential off-site noise impacts caused by an increase of traffic from operation of the proposed project on the nearby roadways were calculated and shown in Table 6.

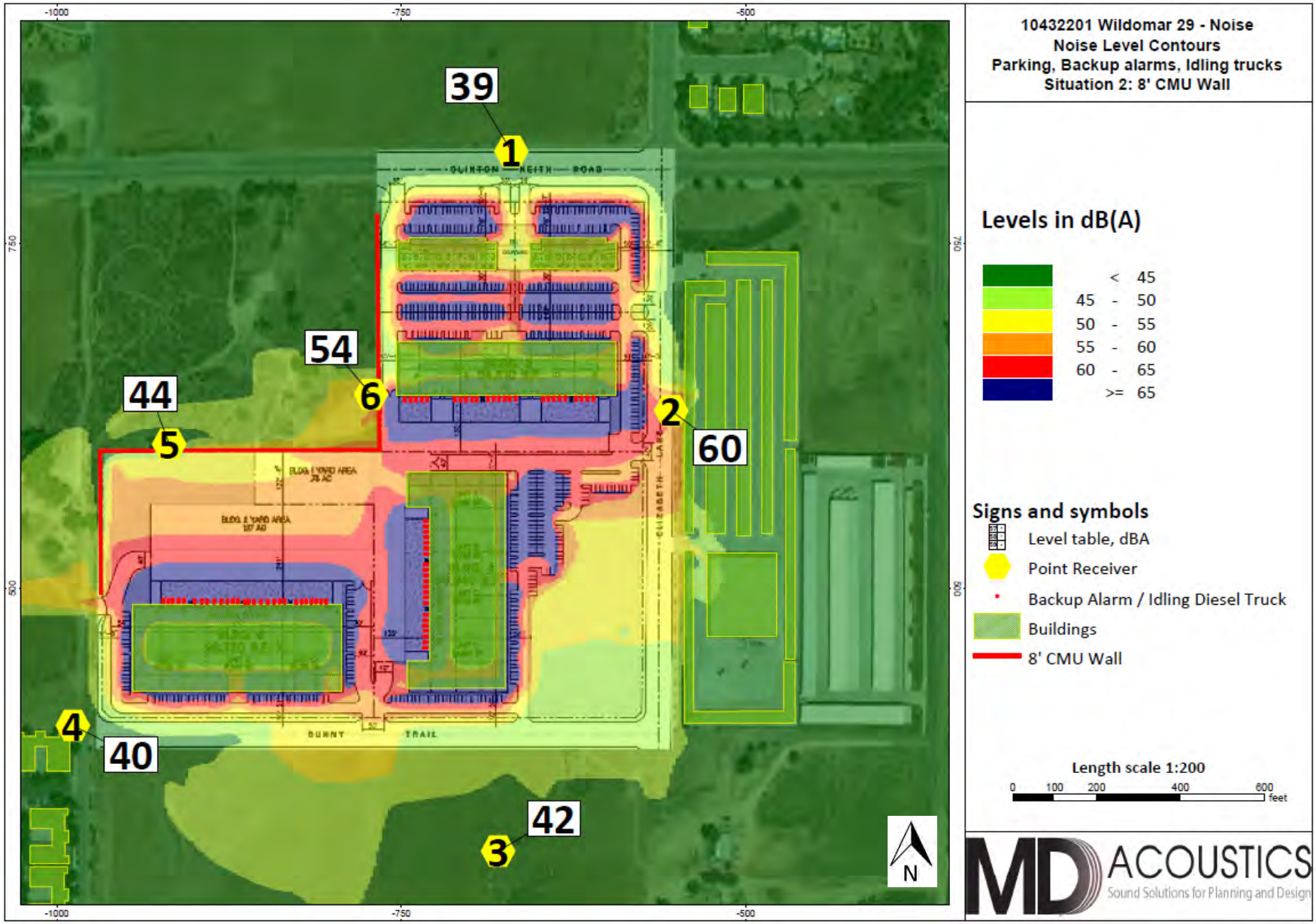
Table 6: Noise Levels Along Roadways (dBA CNEL)

Road Segment	Existing		Existing Plus Project			
	ADT	dB CNEL	ADT	Project Only ADT	Total dB CNEL	Change
N/S Road Segment						
Yamas Dr. s/o Project	987	56.9	1378	391	58.3	1.4
Elizabeth Ln s/o Clinton Keith	213	50.2	2886	2673	61.5	11.3
E/W Road Segment						
Clinton Keith w/o I-15	25264	75.2	26375	1111	75.4	0.2
Clinton Keith e/o I-15	23746	74.9	25916	2170	75.3	0.4
Clinton Keith w/o Inland Valley	22247	74.7	24475	2228	75.1	0.4
Clinton Keith w/o Salida del Sol	15713	73.2	17950	2237	73.7	0.5
Clinton Keith w/o Elizabeth Ln	15560	73.1	17797	2237	73.7	0.6
Clinton Keith w/o Nutmeg	13842	72.6	14551	709	72.8	0.2
Clinton Keith W/o Californa Oaks	19065	74	19459	394	74.1	0.1
Prielipp Rd e/o Yamas	5595	64.4	5986	391	64.7	0.3
Prielipp Rd e/o Elizabeth	6302	64.9	6693	391	65.2	0.3

Table 6 compares the existing and existing plus project scenarios and shows the change in traffic noise levels as a result of the proposed project. It takes a change of 3 dB or more to hear a perceptible difference. As demonstrated in Table 6, the project is anticipated to change the noise by less than 2 decibels along roadways to the north, west, and south of the project. Although there is an increase in traffic noise levels along Elizabeth Lane, the impact is considered to have less than significant impact as the noise levels would be less than 65 dBA, and the change is within the “normally acceptable range” by use type as specified in the general plan (see Exhibit D in Section 4.2 above). The traffic noise impact is less than significant, and the project will comply with the noise limits given in the General Plan.

Exhibit F

Operational Noise Levels



8.0 Construction Noise Impact

The degree of construction noise may vary for different areas of the project site and also vary depending on the construction activities. Noise levels associated with the construction will vary with the different phases of construction.

8.1 Construction Noise

The Environmental Protection Agency (EPA) has compiled data regarding the noise generated characteristics of typical construction activities. The data is presented in Table 7.

Table 7: Typical Construction Equipment Noise Levels[1]

Equipment Powered by Internal Combustion Engines

Type	Noise Levels (dBA) at 50 Feet
Earth Moving	
Compactors (Rollers)	73 - 76
Front Loaders	73 - 84
Backhoes	73 - 92
Tractors	75 - 95
Scrapers, Graders	78 - 92
Pavers	85 - 87
Trucks	81 - 94
Materials Handling	
Concrete Mixers	72 - 87
Concrete Pumps	81 - 83
Cranes (Movable)	72 - 86
Cranes (Derrick)	85 - 87
Stationary	
Pumps	68 - 71
Generators	71 - 83
Compressors	75 - 86

Impact Equipment

Type	Noise Levels (dBA) at 50 Feet
Saws	71 - 82
Vibrators	68 - 82

Notes:
[1] Referenced Noise Levels from the Environmental Protection Agency (EPA)

Construction is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable conditions described in the City's Municipal Code Section 9.48.040. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the project vicinity. Furthermore, noise reduction measures are provided to further reduce construction noise. The impact is considered less than significant however construction noise level projections are provided in Appendix D.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels will be loudest during grading phase. A likely worst-case construction noise scenario during grading assumes the use of 1-grader, 1-dozer, 1-excavator, and 3-backhoes operating at 810 feet from the property boundary.

Assuming a usage factor of 40 percent for each piece of equipment, unmitigated noise levels at 810 feet (center of the site to the nearest southwestern residence) have the potential to reach 57 dBA L_{eq} at the closest residence property during building construction.

8.2 Construction Vibration

Construction activities can produce vibration that may be felt by adjacent land uses. The construction of the proposed project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer. A large bulldozer has a vibration impact of 0.089 inches per second peak particle velocity (PPV) at 25 feet which is likely perceptible but below any risk to architectural damage.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{equipment} = PPV_{ref} (25/D_{rec})^n$$

Where: PPV_{ref} = reference PPV at 25ft.
D_{rec} = distance from equipment to receiver in ft.
n = 1.1 (the value related to the attenuation rate through ground)

The thresholds from the Caltrans Transportation and Construction Induced Vibration Guidance Manual in Table 8 (below) provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

Table 8: Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Table 19, Transportation and Construction Vibration Guidance Manual, Caltrans, Sept. 2013.
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 9 gives approximate vibration levels for particular construction activities. This data provides a reasonable estimate for a wide range of soil conditions.

Table 9: Vibration Source Levels for Construction Equipment[1]

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (dVB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

[1] Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.

At a distance of 810 feet (northern residence façade to the project site PL), a large bulldozer would yield a worst-case 0.002 PPV (in/sec) which below any risk of damage and likely imperceptible. The impact is less than significant, and no mitigation is required.

8.3 Construction Noise Reduction Measures

Construction operations must follow the City's General Plan and the Noise Ordinance, which states that construction in private property needs to be evaluated by the City's authority.

1. During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices.
2. The contractor should locate equipment staging areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction.
3. Idling equipment should be turned off when not in use.
4. Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

9.0 References

State of California General Plan Guidelines: 1998. Governor's Office of Planning and Research

County of Riverside: General Plan Noise Element.

City of Wildomar: Municipal Code Chapter 9.48 Noise.

TJW Engineering, Inc – Clinton Keith Corporate Center Trip Generation Analysis, City of Wildomar. September 13, 2022.

Matthew Fagan Consulting Services – Initial Study for the Rancon Medical Office/Retail Project Plot Plan Tentative Parcel Map No. 36492 (Planning Application No. 12-0053. November 2013.

Federal Highway Administration. Noise Barrier Design Handbook. June 2017.

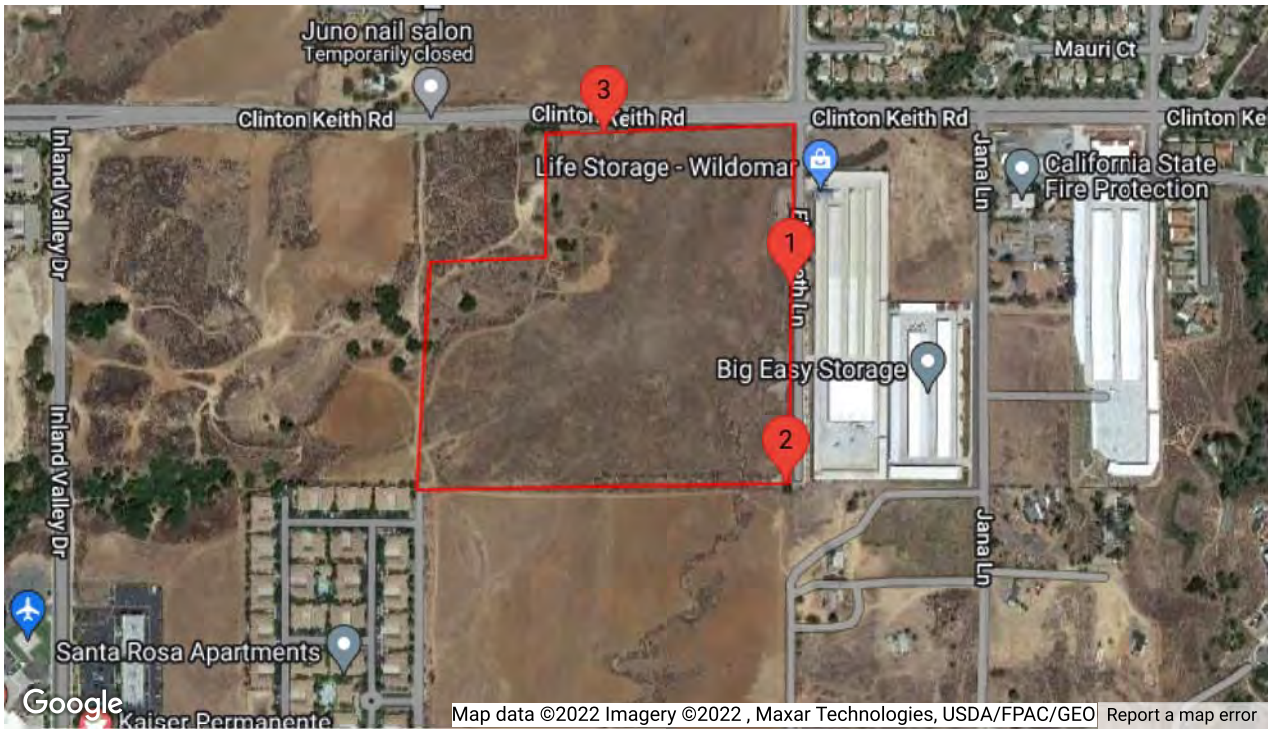
Federal Transit Administration. Transit Noise and Vibration Impact Assessment Manual. September 2018

Appendix A:
Field Measurement Data

10-Minute Continuous Noise Measurement Datasheet

Project Name:	Wildomar Commerce Center	**Site Observations:**
Project: #/Name:	1043-2022-001	
Site Address/Location:	1043 Wildomar Commerce Center, W	
Date:	09/16/2022	
Field Tech/Engineer:	Jason Schuyler/Rachel Edelman/Samuel Hord	

Sound Meter:	XL2, NTI	**SN:**	A2A-08562-E0
Settings:	A-weighted, slow, 1-sec, 10-minute interval		
Site Id:	NM1, NM2, NM3		



10-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name: Wildomar Commerce Center

Site Address/Location: 1043 Wildomar Commerce Center, W

Site Id: NM1, NM2, NM3

Figure 1: NM1



Figure 2: NM2



Figure 3: NM3

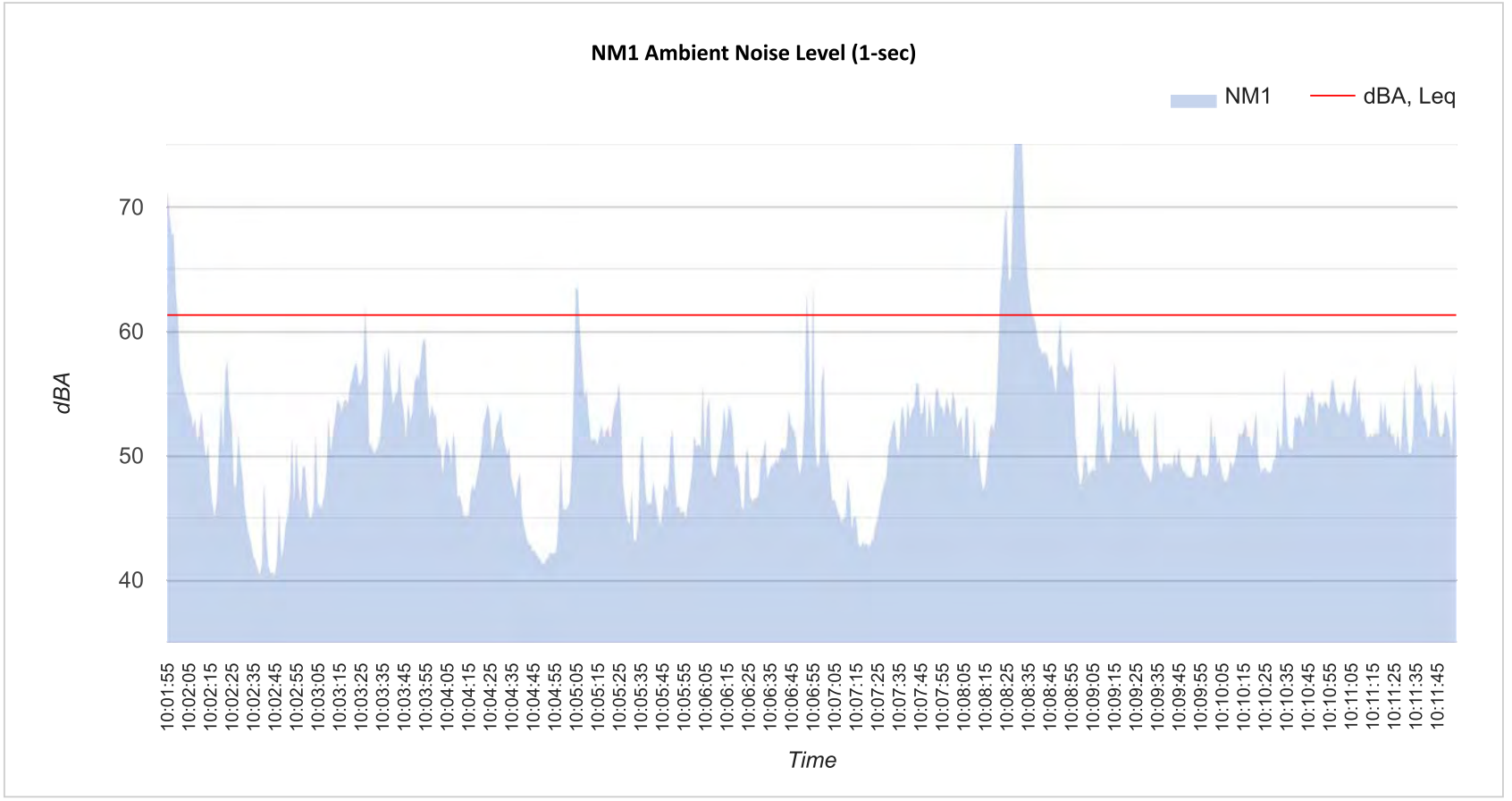


Table 1: Baseline Noise Measurement Summary

Location	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
NM1	10:01 AM	10:11 AM	61.3	84.1	40.4	66.5	57.6	53.8	51.3	45.1
NM2	10:15 AM	10:25 AM	58.2	83.2	41.4	59.9	53.5	48.4	46.2	42.6
NM3	10:30 AM	10:40 AM	72.5	79.9	48.7	77.9	76.6	74.1	71.2	59.2

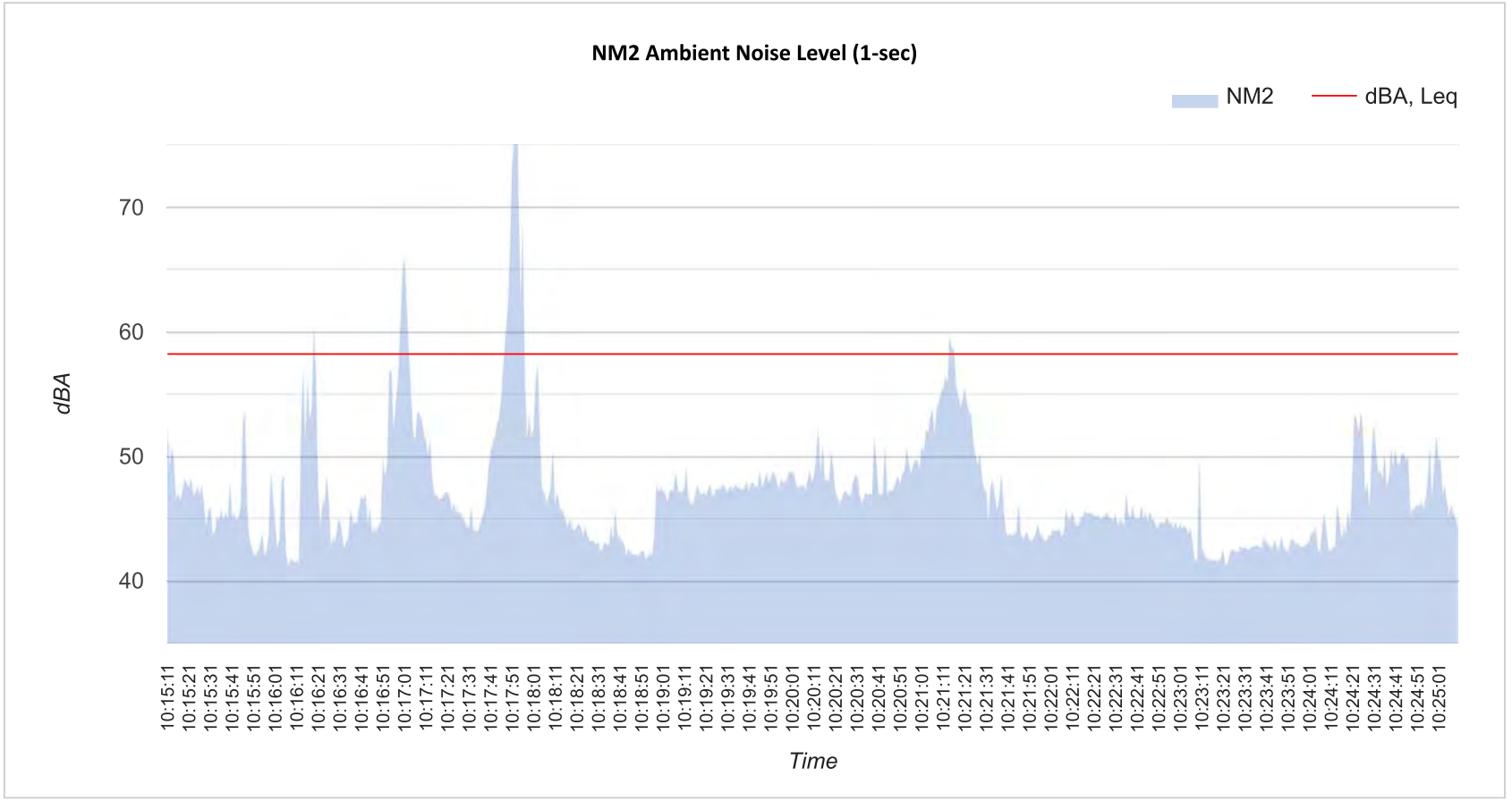
10-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name:	Wildomar Commerce Center	**Site Topo:**	Flat desert-like conditions, los	**Noise Source(s) w/ Distance:**
Site Address/Location:	1043 Wildomar Commerce Center, W	**Meteorological Cond.:**	Cloudy, no wind, 66-70 degrees F	Road Noise
Site Id:	NM1	**Ground Type:**	desert conditions, sandy soil	



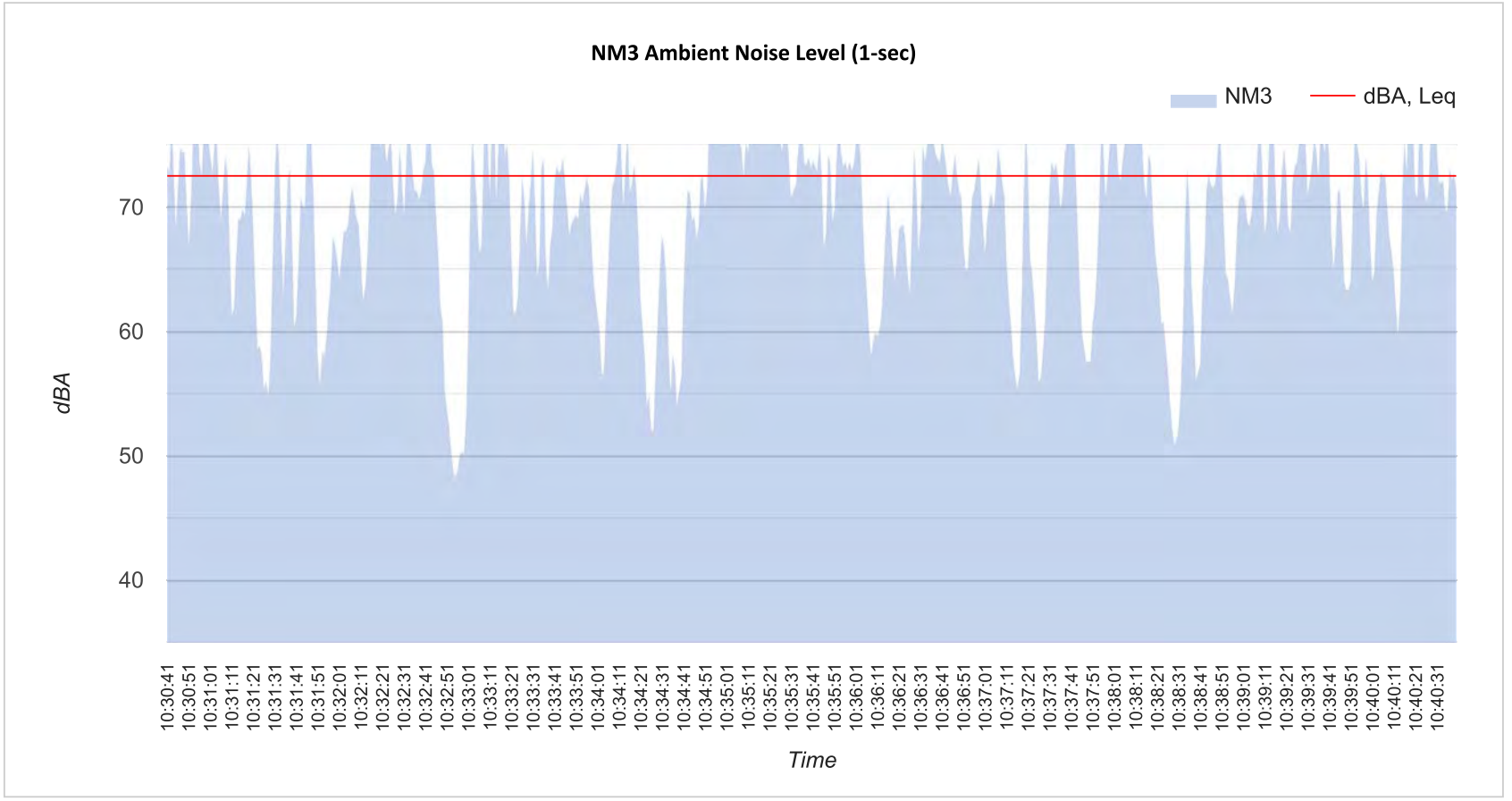
10-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name:	Wildomar Commerce Center	**Site Topo:**	Flat desert-like conditions, los	**Noise Source(s) w/ Distance:**
Site Address/Location:	1043 Wildomar Commerce Center, W	**Meteorological Cond.:**	Cloudy, no wind, 66-70 degrees F	Road Noise
Site Id:	NM2	**Ground Type:**	desert conditions, sandy soil	



10-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name:	Wildomar Commerce Center	**Site Topo:**	Flat desert-like conditions, los	**Noise Source(s) w/ Distance:**
Site Address/Location:	1043 Wildomar Commerce Center, W	**Meteorological Cond.:**	Cloudy, no wind, 66-70 degrees F	Road Noise
Site Id:	NM3	**Ground Type:**	desert conditions, sandy soil	



Appendix B:

Referenced Traffic Data and Calculations

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: YAMAS DR S/O PROJECT
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	987	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	15	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	99	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		10
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.105	0.9742
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184
HEAVY TRUCKS	0.473	0.054	0.473	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	49.53	- -
MEDIUM TRUCKS	4.0	49.44	- -
HEAVY TRUCKS	8.0	49.53	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	54.6	52.6	51.3	45.3	53.7	54.3
MEDIUM TRUCKS	46.3	42.5	35.0	43.7	49.9	49.9
HEAVY TRUCKS	47.2	43.2	39.8	44.4	50.6	50.7
NOISE LEVELS (dBA)	55.9	53.4	51.7	49.3	56.5	56.9

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	54.6	52.6	51.3	45.3	53.7	54.3
MEDIUM TRUCKS	46.3	42.5	35.0	43.7	49.9	49.9
HEAVY TRUCKS	47.2	43.2	39.8	44.4	50.6	50.7
NOISE LEVELS (dBA)	55.9	53.4	51.7	49.3	56.5	56.9

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	7	14	31	67
LDN	6	14	29	63

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: YAMAS DR S/O PROJECT
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	1,378	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	15	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	138	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		50
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.105	0.9742
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184
HEAVY TRUCKS	0.473	0.054	0.473	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	49.53	- -
MEDIUM TRUCKS	4.0	49.44	- -
HEAVY TRUCKS	8.0	49.53	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	56.1	54.1	52.7	46.7	55.2	55.8
MEDIUM TRUCKS	47.8	43.9	36.5	45.1	51.3	51.4
HEAVY TRUCKS	48.7	44.6	41.2	45.9	52.1	52.2
NOISE LEVELS (dBA)	57.3	54.9	53.1	50.7	58.0	58.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	56.1	54.1	52.7	46.7	55.2	55.8
MEDIUM TRUCKS	47.8	43.9	36.5	45.1	51.3	51.4
HEAVY TRUCKS	48.7	44.6	41.2	45.9	52.1	52.2
NOISE LEVELS (dBA)	57.3	54.9	53.1	50.7	58.0	58.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	8	18	39	83
LDN	8	17	37	79

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: ELIZABETH LN S/O CLINTON KEITH
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 213
SPEED = 40
PK HR % = 10
NEAR LANE/FAR LANE DIST = 15
ROAD ELEVATION = 0.0
GRADE = 0.0 %
PK HR VOL = 21

RECEIVER INPUT DATA

RECEIVER DISTANCE = 50
DIST C/L TO WALL = 0
RECEIVER HEIGHT = 5.0
WALL DISTANCE FROM RECEIVER = 10
PAD ELEVATION = 0.0
ROADWAY VIEW: LF ANGLE= -90
RT ANGLE= 90
DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 15
MEDIUM TRUCKS = 15 (10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS = 15

WALL INFORMATION

HTH WALL= 0.0
AMBIENT= 0.0
BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.105	0.9742
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184
HEAVY TRUCKS	0.473	0.054	0.473	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	49.53	- -
MEDIUM TRUCKS	4.0	49.44	- -
HEAVY TRUCKS	8.0	49.53	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	48.0	46.0	44.6	38.6	47.1	47.7
MEDIUM TRUCKS	39.7	35.8	28.3	37.0	43.2	43.3
HEAVY TRUCKS	40.6	36.5	33.1	37.8	44.0	44.1
NOISE LEVELS (dBA)	49.2	46.8	45.0	42.6	49.9	50.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	48.0	46.0	44.6	38.6	47.1	47.7
MEDIUM TRUCKS	39.7	35.8	28.3	37.0	43.2	43.3
HEAVY TRUCKS	40.6	36.5	33.1	37.8	44.0	44.1
NOISE LEVELS (dBA)	49.2	46.8	45.0	42.6	49.9	50.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	2	5	11	24
LDN	2	5	11	23

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: ELIZABETH LN S/O CLINTON KEITH
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	2,886	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	15	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	289	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		50
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.105	0.9742
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184
HEAVY TRUCKS	0.473	0.054	0.473	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	49.53	- -
MEDIUM TRUCKS	4.0	49.44	- -
HEAVY TRUCKS	8.0	49.53	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	59.3	57.3	56.0	49.9	58.4	59.0
MEDIUM TRUCKS	51.0	47.1	39.7	48.4	54.5	54.6
HEAVY TRUCKS	51.9	47.8	44.4	49.1	55.3	55.4
NOISE LEVELS (dBA)	60.5	58.1	56.4	54.0	61.2	61.5

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	59.3	57.3	56.0	49.9	58.4	59.0
MEDIUM TRUCKS	51.0	47.1	39.7	48.4	54.5	54.6
HEAVY TRUCKS	51.9	47.8	44.4	49.1	55.3	55.4
NOISE LEVELS (dBA)	60.5	58.1	56.4	54.0	61.2	61.5

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	14	29	63	136
LDN	13	28	60	129

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: PRIELIPP RD E/O YAMAS
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	5,595	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	15	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	560	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		10
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.105	0.9742
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184
HEAVY TRUCKS	0.473	0.054	0.473	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	49.53	- -
MEDIUM TRUCKS	4.0	49.44	- -
HEAVY TRUCKS	8.0	49.53	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.2	60.1	58.8	52.8	61.2	61.9
MEDIUM TRUCKS	53.9	50.0	42.5	51.2	57.4	57.4
HEAVY TRUCKS	54.8	50.7	47.3	52.0	58.2	58.3
NOISE LEVELS (dBA)	63.4	61.0	59.2	56.8	64.0	64.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.2	60.1	58.8	52.8	61.2	61.9
MEDIUM TRUCKS	53.9	50.0	42.5	51.2	57.4	57.4
HEAVY TRUCKS	54.8	50.7	47.3	52.0	58.2	58.3
NOISE LEVELS (dBA)	63.4	61.0	59.2	56.8	64.0	64.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	21	46	98	212
LDN	20	43	93	200

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: ELIZABETH LN S/O CLINTON KEITH
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 5,986
SPEED = 40
PK HR % = 10
NEAR LANE/FAR LANE DIST = 15
ROAD ELEVATION = 0.0
GRADE = 0.0 %
PK HR VOL = 599

RECEIVER INPUT DATA

RECEIVER DISTANCE = 50
DIST C/L TO WALL = 50
RECEIVER HEIGHT = 5.0
WALL DISTANCE FROM RECEIVER = 0
PAD ELEVATION = 0.0
ROADWAY VIEW: LF ANGLE= -90
RT ANGLE= 90
DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 15
MEDIUM TRUCKS = 15 (10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS = 15

WALL INFORMATION

HTH WALL= 0.0
AMBIENT= 0.0
BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.105	0.9742
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184
HEAVY TRUCKS	0.473	0.054	0.473	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	49.53	- -
MEDIUM TRUCKS	4.0	49.44	- -
HEAVY TRUCKS	8.0	49.53	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.5	60.4	59.1	53.1	61.5	62.2
MEDIUM TRUCKS	54.2	50.3	42.8	51.5	57.7	57.7
HEAVY TRUCKS	55.1	51.0	47.6	52.3	58.5	58.6
NOISE LEVELS (dBA)	63.7	61.3	59.5	57.1	64.3	64.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.5	60.4	59.1	53.1	61.5	62.2
MEDIUM TRUCKS	54.2	50.3	42.8	51.5	57.7	57.7
HEAVY TRUCKS	55.1	51.0	47.6	52.3	58.5	58.6
NOISE LEVELS (dBA)	63.7	61.3	59.5	57.1	64.3	64.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	22	48	103	222
LDN	21	45	97	210

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: PRIELIPP RD E/O ELIZABETH
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 6,302
SPEED = 40
PK HR % = 10
NEAR LANE/FAR LANE DIST = 15
ROAD ELEVATION = 0.0
GRADE = 0.0 %
PK HR VOL = 630

RECEIVER INPUT DATA

RECEIVER DISTANCE = 50
DIST C/L TO WALL = 0
RECEIVER HEIGHT = 5.0
WALL DISTANCE FROM RECEIVER = 10
PAD ELEVATION = 0.0
ROADWAY VIEW: LF ANGLE= -90
RT ANGLE= 90
DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 15
MEDIUM TRUCKS = 15 (10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS = 15

WALL INFORMATION

HTH WALL= 0.0
AMBIENT= 0.0
BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.105	0.9742
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184
HEAVY TRUCKS	0.473	0.054	0.473	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	49.53	- -
MEDIUM TRUCKS	4.0	49.44	- -
HEAVY TRUCKS	8.0	49.53	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.7	60.7	59.4	53.3	61.8	62.4
MEDIUM TRUCKS	54.4	50.5	43.1	51.7	57.9	58.0
HEAVY TRUCKS	55.3	51.2	47.8	52.5	58.7	58.8
NOISE LEVELS (dBA)	63.9	61.5	59.7	57.3	64.6	64.9

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.7	60.7	59.4	53.3	61.8	62.4
MEDIUM TRUCKS	54.4	50.5	43.1	51.7	57.9	58.0
HEAVY TRUCKS	55.3	51.2	47.8	52.5	58.7	58.8
NOISE LEVELS (dBA)	63.9	61.5	59.7	57.3	64.6	64.9

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	23	49	107	230
LDN	22	47	101	217

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: PRIELIPP RD E/O ELIZABETH
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT = 6,693
SPEED = 40
PK HR % = 10
NEAR LANE/FAR LANE DIST = 15
ROAD ELEVATION = 0.0
GRADE = 0.0 %
PK HR VOL = 669

RECEIVER INPUT DATA

RECEIVER DISTANCE = 50
DIST C/L TO WALL = 50
RECEIVER HEIGHT = 5.0
WALL DISTANCE FROM RECEIVER = 0
PAD ELEVATION = 0.0
ROADWAY VIEW: LF ANGLE= -90
RT ANGLE= 90
DF ANGLE= 180

SITE CONDITIONS

AUTOMOBILES = 15
MEDIUM TRUCKS = 15 (10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS = 15

WALL INFORMATION

HTH WALL= 0.0
AMBIENT= 0.0
BARRIER = 0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.105	0.9742
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184
HEAVY TRUCKS	0.473	0.054	0.473	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	49.53	- -
MEDIUM TRUCKS	4.0	49.44	- -
HEAVY TRUCKS	8.0	49.53	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.9	60.9	59.6	53.6	62.0	62.6
MEDIUM TRUCKS	54.7	50.8	43.3	52.0	58.2	58.2
HEAVY TRUCKS	55.5	51.5	48.1	52.7	58.9	59.0
NOISE LEVELS (dBA)	64.2	61.8	60.0	57.6	64.8	65.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	62.9	60.9	59.6	53.6	62.0	62.6
MEDIUM TRUCKS	54.7	50.8	43.3	52.0	58.2	58.2
HEAVY TRUCKS	55.5	51.5	48.1	52.7	58.9	59.0
NOISE LEVELS (dBA)	64.2	61.8	60.0	57.6	64.8	65.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	24	51	111	239
LDN	23	49	105	226

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O I-15
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	25,264	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,526	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.6	66.6	65.3	59.3	67.7	68.3
MEDIUM TRUCKS	62.7	58.8	51.0	60.2	66.3	66.4
HEAVY TRUCKS	69.8	65.8	58.0	67.2	73.4	73.4
NOISE LEVELS (dBA)	72.7	69.6	66.2	68.6	75.1	75.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.6	66.6	65.3	59.3	67.7	68.3
MEDIUM TRUCKS	62.7	58.8	51.0	60.2	66.3	66.4
HEAVY TRUCKS	69.8	65.8	58.0	67.2	73.4	73.4
NOISE LEVELS (dBA)	72.7	69.6	66.2	68.6	75.1	75.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	111	240	517	1113
LDN	109	234	505	1088

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O I-15
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	26,375	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,638	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.8	66.8	65.5	59.5	67.9	68.5
MEDIUM TRUCKS	62.9	59.0	51.2	60.4	66.5	66.6
HEAVY TRUCKS	70.0	66.0	58.2	67.4	73.6	73.6
NOISE LEVELS (dBA)	72.9	69.8	66.4	68.8	75.3	75.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.8	66.8	65.5	59.5	67.9	68.5
MEDIUM TRUCKS	62.9	59.0	51.2	60.4	66.5	66.6
HEAVY TRUCKS	70.0	66.0	58.2	67.4	73.6	73.6
NOISE LEVELS (dBA)	72.9	69.8	66.4	68.8	75.3	75.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	115	247	532	1146
LDN	112	241	520	1119

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH E/O I-15
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	23,746
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST :	28
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	2,375

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0
AMBIENT=	0.0
BARRIER =	0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.4	66.4	65.1	59.0	67.4	68.1
MEDIUM TRUCKS	62.5	58.5	50.7	59.9	66.1	66.1
HEAVY TRUCKS	69.5	65.5	57.8	67.0	73.1	73.2
NOISE LEVELS (dBA)	72.5	69.4	65.9	68.3	74.8	74.9

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.4	66.4	65.1	59.0	67.4	68.1
MEDIUM TRUCKS	62.5	58.5	50.7	59.9	66.1	66.1
HEAVY TRUCKS	69.5	65.5	57.8	67.0	73.1	73.2
NOISE LEVELS (dBA)	72.5	69.4	65.9	68.3	74.8	74.9

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	107	230	496	1068
LDN	104	225	484	1044

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH E/O I-15
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	25,916	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,592	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.8	66.7	65.4	59.4	67.8	68.5
MEDIUM TRUCKS	62.9	58.9	51.1	60.3	66.5	66.5
HEAVY TRUCKS	69.9	65.9	58.1	67.4	73.5	73.5
NOISE LEVELS (dBA)	72.8	69.7	66.3	68.7	75.2	75.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.8	66.7	65.4	59.4	67.8	68.5
MEDIUM TRUCKS	62.9	58.9	51.1	60.3	66.5	66.5
HEAVY TRUCKS	69.9	65.9	58.1	67.4	73.5	73.5
NOISE LEVELS (dBA)	72.8	69.7	66.3	68.7	75.2	75.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	113	244	526	1132
LDN	111	238	514	1106

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O INLAND VALLEY
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	22,247
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST :	28
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	2,225

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0
AMBIENT=	0.0
BARRIER =	0 (0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.1	66.1	64.8	58.7	67.2	67.8
MEDIUM TRUCKS	62.2	58.2	50.4	59.6	65.8	65.8
HEAVY TRUCKS	69.2	65.3	57.5	66.7	72.8	72.9
NOISE LEVELS (dBA)	72.2	69.1	65.7	68.0	74.5	74.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.1	66.1	64.8	58.7	67.2	67.8
MEDIUM TRUCKS	62.2	58.2	50.4	59.6	65.8	65.8
HEAVY TRUCKS	69.2	65.3	57.5	66.7	72.8	72.9
NOISE LEVELS (dBA)	72.2	69.1	65.7	68.0	74.5	74.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	102	220	475	1023
LDN	100	215	464	999

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O INLAND VALLEY
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	24,475	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,447	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.5	66.5	65.2	59.1	67.6	68.2
MEDIUM TRUCKS	62.6	58.6	50.8	60.1	66.2	66.2
HEAVY TRUCKS	69.7	65.7	57.9	67.1	73.3	73.3
NOISE LEVELS (dBA)	72.6	69.5	66.1	68.4	74.9	75.1

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.5	66.5	65.2	59.1	67.6	68.2
MEDIUM TRUCKS	62.6	58.6	50.8	60.1	66.2	66.2
HEAVY TRUCKS	69.7	65.7	57.9	67.1	73.3	73.3
NOISE LEVELS (dBA)	72.6	69.5	66.1	68.4	74.9	75.1

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	109	235	506	1090
LDN	107	229	494	1065

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O SALIDA DEL SOL
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	15,713	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,571	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.6	64.6	63.3	57.2	65.6	66.3
MEDIUM TRUCKS	60.7	56.7	48.9	58.1	64.3	64.3
HEAVY TRUCKS	67.7	63.8	56.0	65.2	71.3	71.4
NOISE LEVELS (dBA)	70.7	67.6	64.1	66.5	73.0	73.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.6	64.6	63.3	57.2	65.6	66.3
MEDIUM TRUCKS	60.7	56.7	48.9	58.1	64.3	64.3
HEAVY TRUCKS	67.7	63.8	56.0	65.2	71.3	71.4
NOISE LEVELS (dBA)	70.7	67.6	64.1	66.5	73.0	73.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	81	175	376	811
LDN	79	171	368	793

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O SALIDA DEL SOL
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	17,950	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,795	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.2	65.1	63.9	57.8	66.2	66.9
MEDIUM TRUCKS	61.3	57.3	49.5	58.7	64.9	64.9
HEAVY TRUCKS	68.3	64.3	56.6	65.8	71.9	71.9
NOISE LEVELS (dBA)	71.2	68.1	64.7	67.1	73.6	73.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.2	65.1	63.9	57.8	66.2	66.9
MEDIUM TRUCKS	61.3	57.3	49.5	58.7	64.9	64.9
HEAVY TRUCKS	68.3	64.3	56.6	65.8	71.9	71.9
NOISE LEVELS (dBA)	71.2	68.1	64.7	67.1	73.6	73.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	89	191	411	886
LDN	87	187	402	866

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O ELIZABETH LN
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	15,560	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,556	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.5	64.5	63.2	57.2	65.6	66.2
MEDIUM TRUCKS	60.6	56.7	48.9	58.1	64.2	64.3
HEAVY TRUCKS	67.7	63.7	55.9	65.1	71.3	71.3
NOISE LEVELS (dBA)	70.6	67.5	64.1	66.5	73.0	73.1

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.5	64.5	63.2	57.2	65.6	66.2
MEDIUM TRUCKS	60.6	56.7	48.9	58.1	64.2	64.3
HEAVY TRUCKS	67.7	63.7	55.9	65.1	71.3	71.3
NOISE LEVELS (dBA)	70.6	67.5	64.1	66.5	73.0	73.1

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	81	174	374	806
LDN	79	170	366	787

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O ELIZABETH LN
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	17,797	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,780	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.1	65.1	63.8	57.8	66.2	66.8
MEDIUM TRUCKS	61.2	57.2	49.5	58.7	64.8	64.9
HEAVY TRUCKS	68.3	64.3	56.5	65.7	71.9	71.9
NOISE LEVELS (dBA)	71.2	68.1	64.7	67.0	73.5	73.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.1	65.1	63.8	57.8	66.2	66.8
MEDIUM TRUCKS	61.2	57.2	49.5	58.7	64.8	64.9
HEAVY TRUCKS	68.3	64.3	56.5	65.7	71.9	71.9
NOISE LEVELS (dBA)	71.2	68.1	64.7	67.0	73.5	73.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	88	190	409	881
LDN	86	186	400	861

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O NUTMEG
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	13,842	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,384	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.0	64.0	62.7	56.7	65.1	65.7
MEDIUM TRUCKS	60.1	56.2	48.4	57.6	63.7	63.8
HEAVY TRUCKS	67.2	63.2	55.4	64.6	70.8	70.8
NOISE LEVELS (dBA)	70.1	67.0	63.6	66.0	72.5	72.6

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.0	64.0	62.7	56.7	65.1	65.7
MEDIUM TRUCKS	60.1	56.2	48.4	57.6	63.7	63.8
HEAVY TRUCKS	67.2	63.2	55.4	64.6	70.8	70.8
NOISE LEVELS (dBA)	70.1	67.0	63.6	66.0	72.5	72.6

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	75	161	346	745
LDN	73	157	338	728

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O NUTMEG
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	14,551	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,455	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.3	64.2	62.9	56.9	65.3	65.9
MEDIUM TRUCKS	60.3	56.4	48.6	57.8	63.9	64.0
HEAVY TRUCKS	67.4	63.4	55.6	64.8	71.0	71.0
NOISE LEVELS (dBA)	70.3	67.2	63.8	66.2	72.7	72.8

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.3	64.2	62.9	56.9	65.3	65.9
MEDIUM TRUCKS	60.3	56.4	48.6	57.8	63.9	64.0
HEAVY TRUCKS	67.4	63.4	55.6	64.8	71.0	71.0
NOISE LEVELS (dBA)	70.3	67.2	63.8	66.2	72.7	72.8

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	77	166	358	771
LDN	75	162	350	753

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O CALIFORNIA OAKS
LOCATION: EXISTING - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	19,065	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,907	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.4	65.4	64.1	58.1	66.5	67.1
MEDIUM TRUCKS	61.5	57.5	49.8	59.0	65.1	65.2
HEAVY TRUCKS	68.6	64.6	56.8	66.0	72.2	72.2
NOISE LEVELS (dBA)	71.5	68.4	65.0	67.3	73.8	74.0

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.4	65.4	64.1	58.1	66.5	67.1
MEDIUM TRUCKS	61.5	57.5	49.8	59.0	65.1	65.2
HEAVY TRUCKS	68.6	64.6	56.8	66.0	72.2	72.2
NOISE LEVELS (dBA)	71.5	68.4	65.0	67.3	73.8	74.0

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	92	199	428	923
LDN	90	194	419	902

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT: WILDOMAR COMMERCE CENTER
ROADWAY: CLINTON KEITH W/O CALIFORNIA OAKS
LOCATION: EXISTING PLUS PROJECT - NOISE CONTOURS

JOB #: 1043-22-01
DATE: 16-Sep-22
ENGINEER: S. HORD

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	19,459	
SPEED =	40	
PK HR % =	10	
NEAR LANE/FAR LANE DIST :	28	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,946	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.755	0.140	0.104	0.9200
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300
HEAVY TRUCKS	0.480	0.020	0.500	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	48.09	- -
MEDIUM TRUCKS	4.0	48.01	- -
HEAVY TRUCKS	8.0	48.09	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.5	65.5	64.2	58.1	66.6	67.2
MEDIUM TRUCKS	61.6	57.6	49.8	59.1	65.2	65.2
HEAVY TRUCKS	68.7	64.7	56.9	66.1	72.3	72.3
NOISE LEVELS (dBA)	71.6	68.5	65.1	67.4	73.9	74.1

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.5	65.5	64.2	58.1	66.6	67.2
MEDIUM TRUCKS	61.6	57.6	49.8	59.1	65.2	65.2
HEAVY TRUCKS	68.7	64.7	56.9	66.1	72.3	72.3
NOISE LEVELS (dBA)	71.6	68.5	65.1	67.4	73.9	74.1

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	94	202	434	935
LDN	91	197	424	914

September 13, 2022

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. Bryan Bentrott
SUMMIT DEVELOPMENT CORPORATION
190 Newport Center Drive, Suite 220
Newport Beach, CA 92660

SUBJECT: Clinton Keith Corporate Center VMT Screening, City of Wildomar

Dear Mr. Bentrott,

*TJW Engineering, Inc. (*TJW*)* is pleased to submit this VMT Screening for the Clinton Keith Corporate Center project located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The proposed project includes 31,490 square feet (SF) of retail land use and 263,170 SF of industrial land use. A site plan is attached for reference. The purpose of this memorandum is to summarize the project's VMT Screening.

Proposed Project

The proposed site is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The project includes a total of 294,660 SF comprised of 31,490 SF of retail land use and 263,170 SF of industrial land use. Site access will be provided along both Clinton Keith Road and Elizabeth Lane.

Vehicle Miles Traveled (VMT) Screening

Senate Bill (SB) 743 was adopted in 2013 requiring the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act (CEQA). For land use projects, OPR has identified Vehicle Miles Traveled (VMT) as the new metric for transportation analysis under CEQA. The regulatory changes to the CEQA guidelines that implement SB 743 were approved on December 28th, 2018 with an implementation date of July 1st, 2020 as the new metric.

As the project falls within the County of Riverside jurisdiction, the County of Riverside Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled (December 2020) was consulted. The document outlines guidelines for CEQA analysis including screening criteria and requirements for VMT assessment of land use projects. The VMT guidelines provide several screening criteria for projects.

The County of Riverside VMT Guidelines (December 2020) indicates projects within a low VMT generating TAZ can be presumed to cause a less-than-significant impact. Per the Western Riverside Council of Governments (WRCOG) VMT screening tool the proposed project is within a low VMT generating TAZ. The county regional VMT per service population is 34.5 and the project falls within a TAZ with a VMT per service population of 34; approximately 1.54% below the county regional average. Therefore, the project is screened from a VMT analysis and is presumed to have a less-than-significant impact.

Summary

This memorandum provides an overview of the trip generation analysis for the proposed project. Based on the County of Riverside Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled (December 2020), the proposed project falls within a low VMT generating TAZ and is presumed to cause a less-than-significant impact. Consistent with the County guidelines, the proposed project does not require additional VMT analysis.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

Thomas Wheat, PE, TE
President

Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*





David Chew, PTP
Transportation Planner

CAUTION: IF THIS SHEET IS NOT 30"X42", IT IS A REDUCED PRINT

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

north

1" = 60'

0 60 120 180

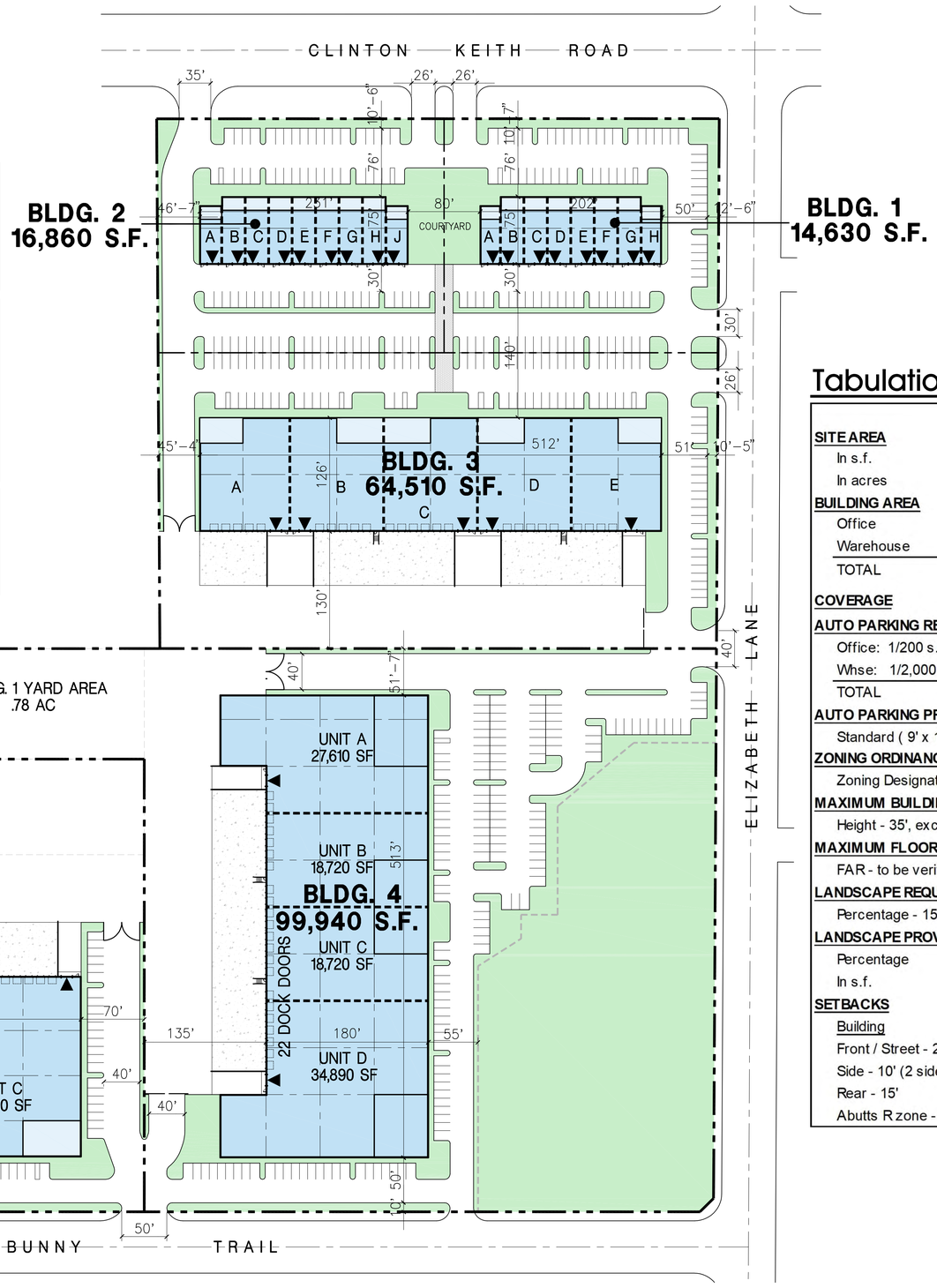
Legend

- POTENTIAL OFFICE
- WAREHOUSE
- ▼ DRIVE THRU DOOR

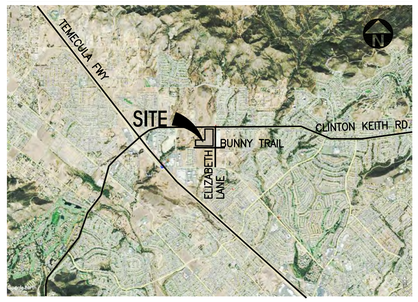
BLDG. 1	UNIT SIZES	
A	1,465	s.f.
B	1,950	s.f.
C	1,950	s.f.
D	1,950	s.f.
G	1,950	s.f.
H	1,465	s.f.

BLDG. 2	UNIT SIZES	
A	1,605	s.f.
B	1,950	s.f.
C	1,950	s.f.
D	1,950	s.f.
E	1,950	s.f.
F	1,950	s.f.
G	1,950	s.f.
H	1,950	s.f.
J	1,605	s.f.

BLDG. 3	UNIT SIZES	
A	12,605	s.f.
B	13,100	s.f.
C	13,100	s.f.
D	13,100	s.f.
E	12,605	s.f.



Aerial Map



Tabulation

	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	TOTAL	
SITE AREA							
In s.f.	79,025	82,490	203,021	429,357	362,895	1,156,788	s.f.
In acres	1.81	1.89	4.66	9.86	8.33	26.56	ac
BUILDING AREA							
Office	3,000	3,000	5,000	5,000	5,000	21,000	s.f.
Warehouse	11,630	13,860	59,510	94,940	93,720	261,820	s.f.
TOTAL	14,630	16,860	64,510	99,940	98,720	285,320	s.f.
COVERAGE	18.5%	20.4%	31.8%	23.3%	27.2%	28.8%	
AUTO PARKING REQUIRED							
Office: 1/200 s.f.	15	15	25	25	25	118	stalls
Whse: 1/2,000 s.f.	6	7	30	47	47	131	stalls
TOTAL	21	22	55	72	72	249	stalls
AUTO PARKING PROVIDED							
Standard (9' x 18')	98	89	105	156	80	574	stalls

ZONING ORDINANCE FOR CITY

Zoning Designation - Industrial Park (IP)

MAXIMUM BUILDING HEIGHT ALLOWED

Height - 35', exceed 35' shall setback 2' for each foot. Max. 50'

MAXIMUM FLOOR AREA RATIO

FAR - to be verify

LANDSCAPE REQUIREMENT

Percentage - 15%

LANDSCAPE PROVIDED							
Percentage	23.9%	20.6%	8.9%	33.6%	24.3%	26.4%	
In s.f.	18,880	17,027	18,150	144,409	88,030	261,322	s.f.

SETBACKS

Building	Landscape
Front / Street - 25'	10'
Side - 10' (2 sides combine)	
Rear - 15'	
Abutts R zone - 50'	20'

HPA architecture 42 Years

18831 Bardeen Ave. - Ste. #100
Irvine, CA 92612
(949) 863-1770
www.hparchs.com

Conceptual Site Plan

Wildomar Commerce Center

City of Wildomar, County of Riverside, CA

SUMMIT DEVELOPMENT CORPORATION

August 23, 2022 / Job #22227

Scheme 11

913

INITIAL STUDY FOR THE

Rancon Medical Office/Retail Project
Plot Plan & Tentative Parcel Map No. 36492
(Planning Application No. 12-0053)

Lead Agency:

CITY OF WILDOMAR
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

Prepared by:

Matthew Fagan Consulting Services
42011 Avenida Vista Ladera
Temecula, CA 92591

NOVEMBER 2013

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Note to Reader: to save natural resources the appendices are contained on a CD-ROM included with the printed copy of this Initial Study. The appendices are also available on the Environmental Documents Center of the City of Wildomar Planning Department website located at:

http://www.cityofwildomar.org/planning.asp

CD copies of the appendices are also available as part of the proposed Project file and can be reviewed at the following location:

Matthew C. Bassi, Planning Director
City of Wildomar, Planning Department
23873 Clinton Keith Rd., Suite 201
Wildomar, CA 92595
Hours: Monday - Thursday 8am - 5pm (closed Fridays)

APPENDICES

(located on the CD in a pocket at the back of this Initial Study)

A Site Photos

B Air Quality and Greenhouse Gas Impact Analysis

C Biological Resources Assessment

D Historical/Archaeological Resources Survey Report

E Paleontological Resources Assessment Report

F Geologic Hazards Evaluation and Updated Preliminary Geotechnical/Fault Investigation

G Phase I Environmental Study

H Preliminary On-Site Hydrology

I Project-Specific Preliminary Water Quality Management Plan (WQMP)

J Preliminary Acoustical Analysis

K Traffic Impact Analysis Report

L EVMWD Will Serve Letter

I. INTRODUCTION

PURPOSE

This document is an Initial Study that evaluates the environmental impacts resulting from the implementation of a proposed Plot Plan and Tentative Parcel Map ("proposed Project") that would subdivide approximately 29.40 acres (gross)/25.99 acres (net) into thirteen (13) parcels for the initial development of approximately 96,240 square feet of proposed commercial, retail, restaurant, office (including medical) and light industrial uses. Ultimate development of the proposed Project will result in 294,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant. These proposed Project components are discussed in greater detail in Section II.B, below.

II. PROJECT DESCRIPTION

A. PROJECT LOCATION AND SETTING

The proposed Project site is generally located at the southwest corner of Clinton Keith Road and Elizabeth Lane,(i.e., west of Elizabeth Lane, north of Bunny Trail and west of Yamas Drive, in City of Wildomar, Riverside County, California. The regional and local vicinity of the proposed Project site are shown in Figure 1, *Regional Vicinity Map* and Figure 2, *Local Vicinity Map*. The Assessor's Parcel Number (APN) for the proposed Project site is 380-250-022. The proposed Project site is located on the U.S. Geological Survey (USGS) 7.5' Murrieta topographic quadrangle map, Section 6, T.7 S., R. 3 W.

Currently, the proposed Project site is vacant. The topography of the proposed Project site is generally flat. The site slopes in a northwest to southwest direction, with the elevations ranging from approximately 1,308 feet above mean sea level (MSL) along the northern boundary, to approximately 1,360 square feet MSL along the southern boundary. The highest elevation is at 1,385 feet above MSL on top of a berm located adjacent to Clinton Keith Road in the northeast corner of the site, and the lowest elevation is at 1,341 feet above MSL within the channel bottom of a drainage located in the southeast corner of the site.

General Plan

The City of Wildomar General Plan land use designation for the proposed Project site is Business Park (BP). According to the General Plan:

> *"The Business Park land use designation allows for employee-intensive uses, including research and development, technology centers, corporate and support office uses, "clean" industry and supporting retail uses. Building intensity ranges from 0.25 to 0.6 floor area ratio (FAR)."*

The General Plan land use designations for the properties immediately adjacent to the proposed Project site are as follows:

- North: Open Space-Recreation (OS-R)
- South: Business Park (BP)
- Southwest: Very High Density Residential (VHDR)
- East: Business Park (BP)
- West: Business Park (BP)

Reference Figure 3, *City of Wildomar General Plan Land Use Plan*

Zoning

The proposed Project site is zoned Industrial Park (IP). According to Section 17.88.010 (Permitted Uses) of the Wildomar Municipal Code, the IP zone district allows for industrial and manufacturing uses, as well as service and commercial uses.

The zoning designations for the properties immediately adjacent to the proposed Project site are as follows:

- North: R-R (Rural Residential)
- South: R-R (Rural Residential) and I-P (Industrial Park)
- Southwest: R-3 (General Residential Zone)
- East: M-SC (Manufacturing-Service Commercial)
- West: R-R (Rural Residential)

Reference Figure 4, *City of Wildomar Zoning Map*

B. PROJECT DESCRIPTION

1. Tentative Parcel Map

Tentative Parcel Map (36492) is a proposal to subdivide one (1) existing parcel, totaling approximately 29.40 acres (gross)/25.99 acres (net), into thirteen (13) parcels for commercial, industrial, and open space purposes. The thirteen (13) new parcels would be numbered Parcels 1 through 13 and would be divided as shown in Table 1-1, *Proposed Parcel Acreage* and Figure 5, *Tentative Parcel Map No. 36492.*



Figure 1 - Regional Vicinity Map

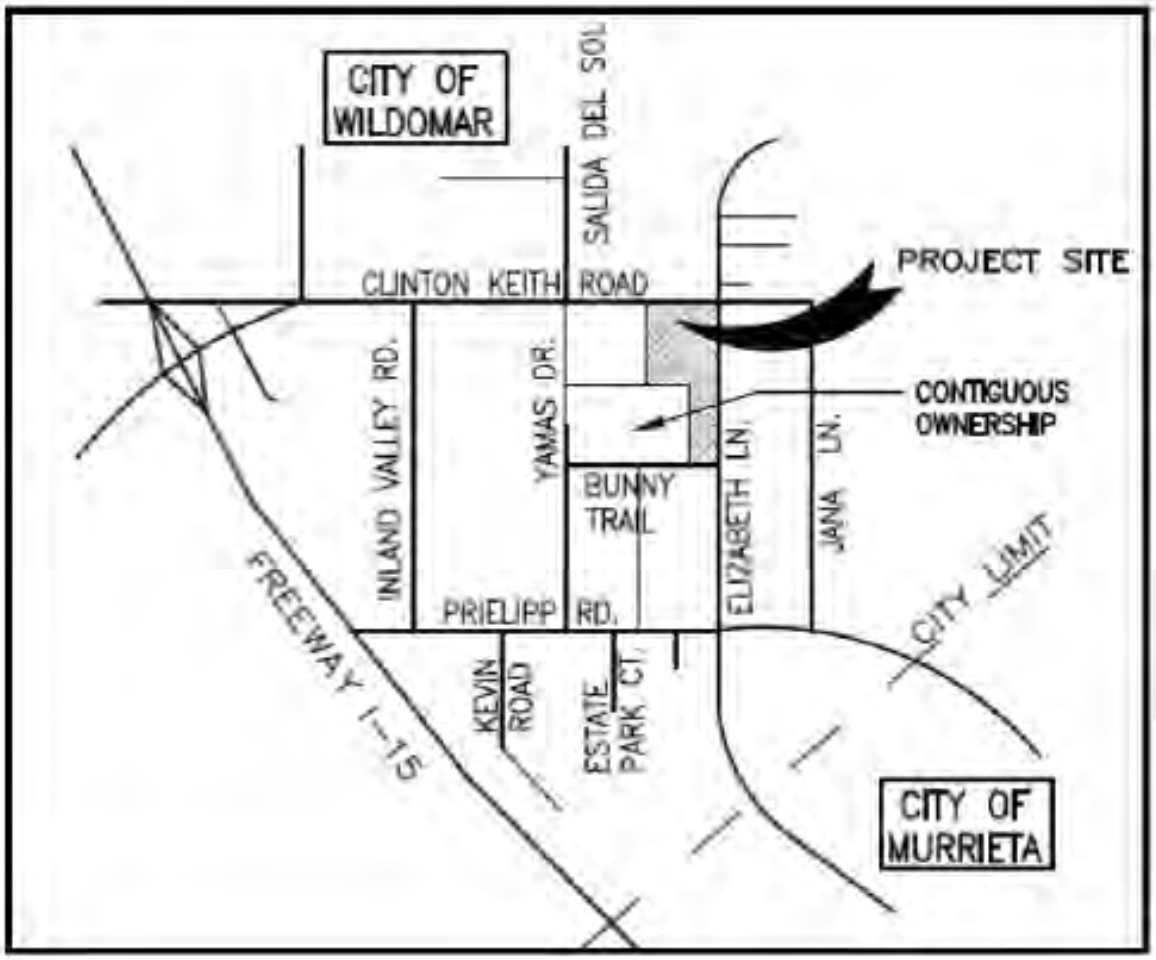
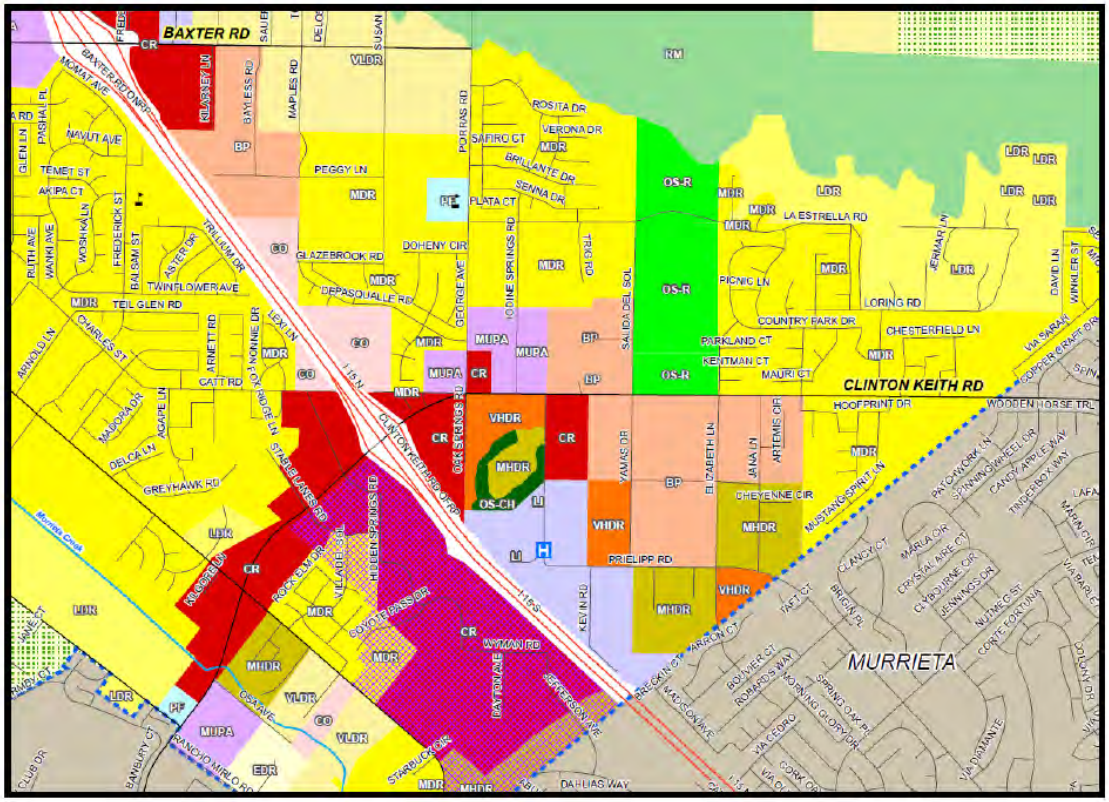


Figure 2 - Local Vicinity Map



GENERAL PLAN LEGEND

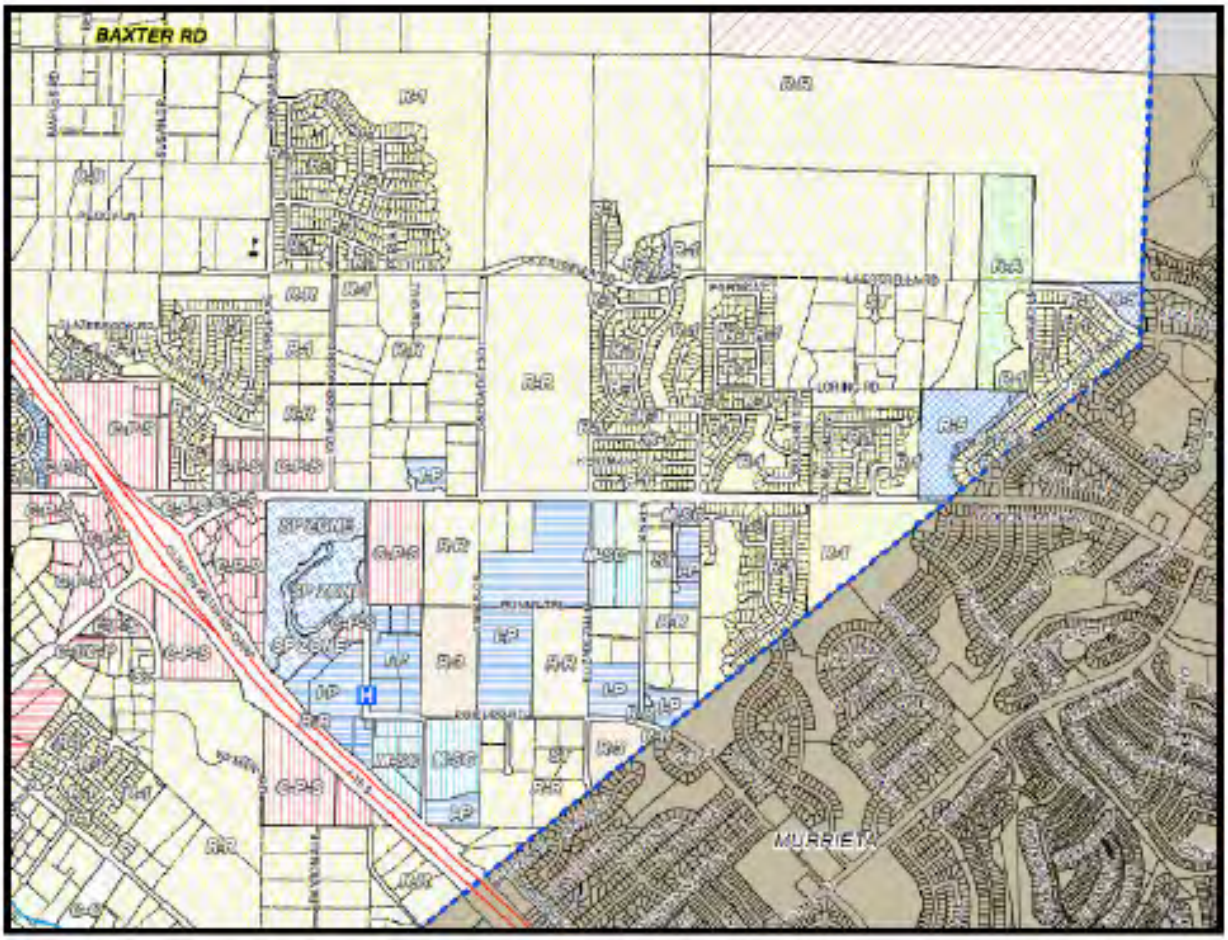
OVERLAY

- COMMUNITY CENTER
- MIXED USE POLICY AREA

LAND USE

- Estate Residential
- EDR-RC
- Very Low Density Residential
- VLDR-RC
- Low Density Residential
- LDR-RC
- Medium Density Residential
- Medium High Density Residential
- High Density Residential
- Highest Density Residential
- Very High Density Residential
- Commercial Retail
- Commercial Tourist
- Commercial Office
- Community Center
- Light Industrial
- High Industrial
- Business Park
- Public Facilities
- Mixed Use Policy Area
- Rural Residential
- Rural Mountainous
- Rural Desert
- Agriculture
- Conservation
- Conservation Habitat
- Open Space Recreation
- Open Space Rural
- Water
- Mineral Resources
- Indian Lands
- Freeway
- WILDOMAR CITY LIMITS

Figure 3 – City of Wildomar General Plan Land Use Map



ZONING LEGEND

ZONING CODE

- C-1/C-P
- C-P-S
- I-P
- M-SC
- R-1
- R-1-1
- R-1-10000
- R-1-15000
- R-3
- R-5
- R-A
- R-A-1
- R-A-1/2
- R-A-10
- R-A-2 1/2
- R-A-20000
- R-A-5
- R-R
- R-T
- SP ZONE
- W-1
- WILDOMAR CITY LIMITS

Figure 4 – City of Wildomar Zoning Map

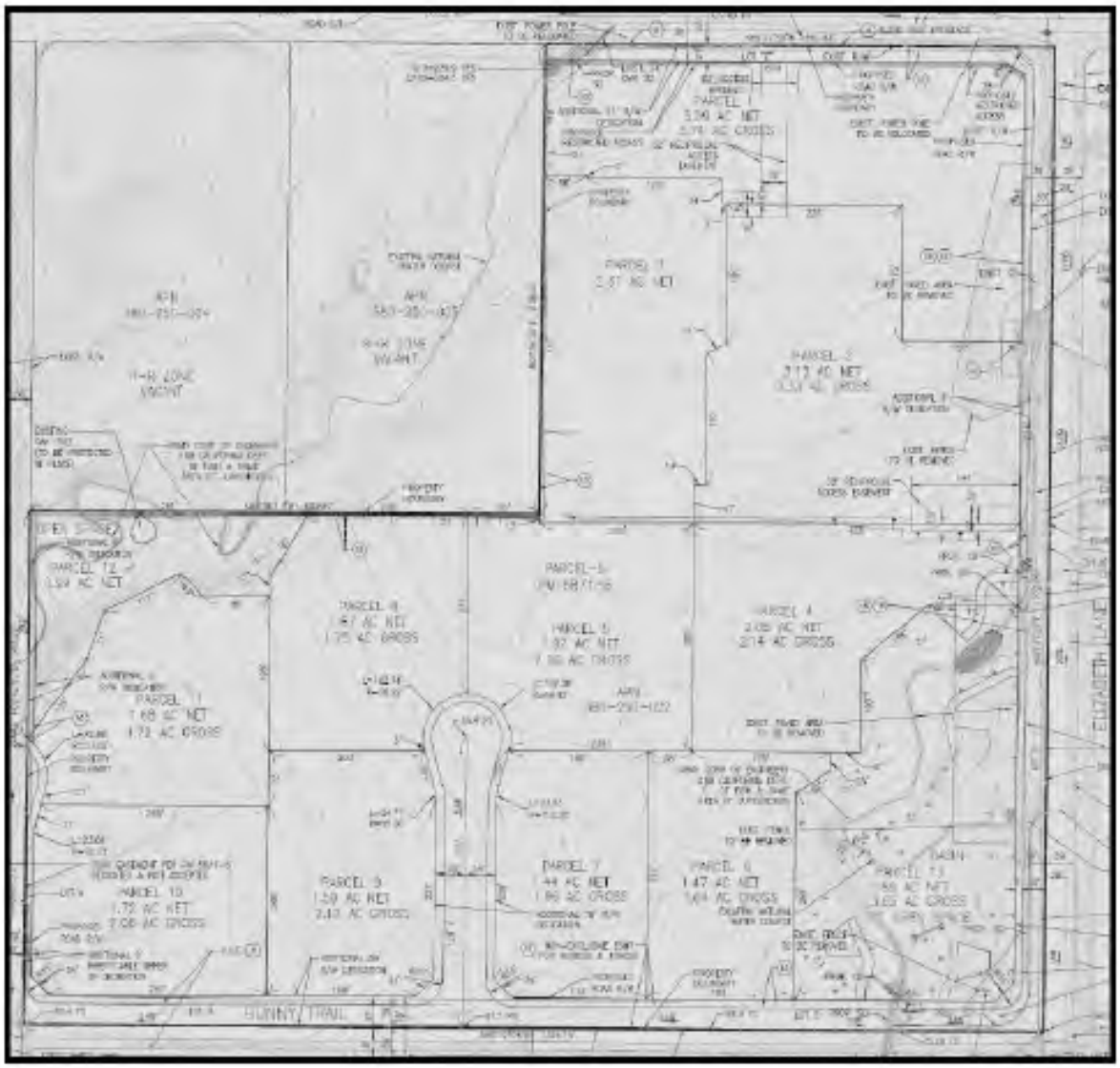


Figure 5 – Tentative Parcel Map No. 36492

Table 1.2-1
Proposed Parcel Acreage

Parcel Number	Project Site Acreage		
	Gross	Net	Dedicated Land
1	3.74	3.09	0.65
2	3.33	3.12	0.21
3	2.31	2.31	-
4	2.14	2.05	0.09
5	2.00	1.92	0.08
6	1.64	1.47	0.17
7	1.96	1.44	0.52
8	1.75	1.67	0.08
9	2.12	1.59	0.53
10	2.06	1.72	0.34
11	1.72	1.68	0.04
12 (Open Space)	0.99	1.05	-
13 (Open Space)	3.65	2.89	0.76
Totals	29.40	25.99	3.41

Source: Figure 3, Tentative Parcel Map No. 36492

As noted in Table 1.2-1, *Proposed Project Acreage*, above, the proposed Project would dedicate approximately 3.41 acres of the proposed Project site to the City of Wildomar for right-of-way purposes for Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and "Lot C" that will provide the necessary Proposed Project circulation and to accommodate access to/from the proposed development.

Anticipated future roadway improvements are discussed below.

Roadway Improvements

Implementation of the Project will result in improvements to several roadways within TPM 36492, as depicted on Figure 5, *Tentative Parcel Map No. 36492.* With the exception of "Lot C", all roadways are General Plan Circulation Element roadways.

Clinton Keith Road

Improvements to Clinton Keith Road are depicted on Figure 6, *Clinton Keith Road (Project frontage on Clinton Keith Road to Elizabeth Lane)*. The ultimate right-of-way for Clinton Keith Road, along the proposed Project's northern frontage is 152**'**. Clinton Keith Road is classified as an Urban Arterial Highway. Currently, there is 58' to 68' of existing pavement on Clinton Keith Road adjacent to the proposed Project's northerly frontage. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 21' additional ROW dedication for a parkway, which will include a 5' meandering sidewalk along the proposed Project's northerly boundary;
- 29' of additional pavement, for a total of 48' feet of pavement within a 55' section; and

- 14’ wide proposed raised median (7’ on the proposed Project’s ROW and 7’ on the adjacent ROW.

These improvements will be constructed with Phase 1 of the proposed Project.

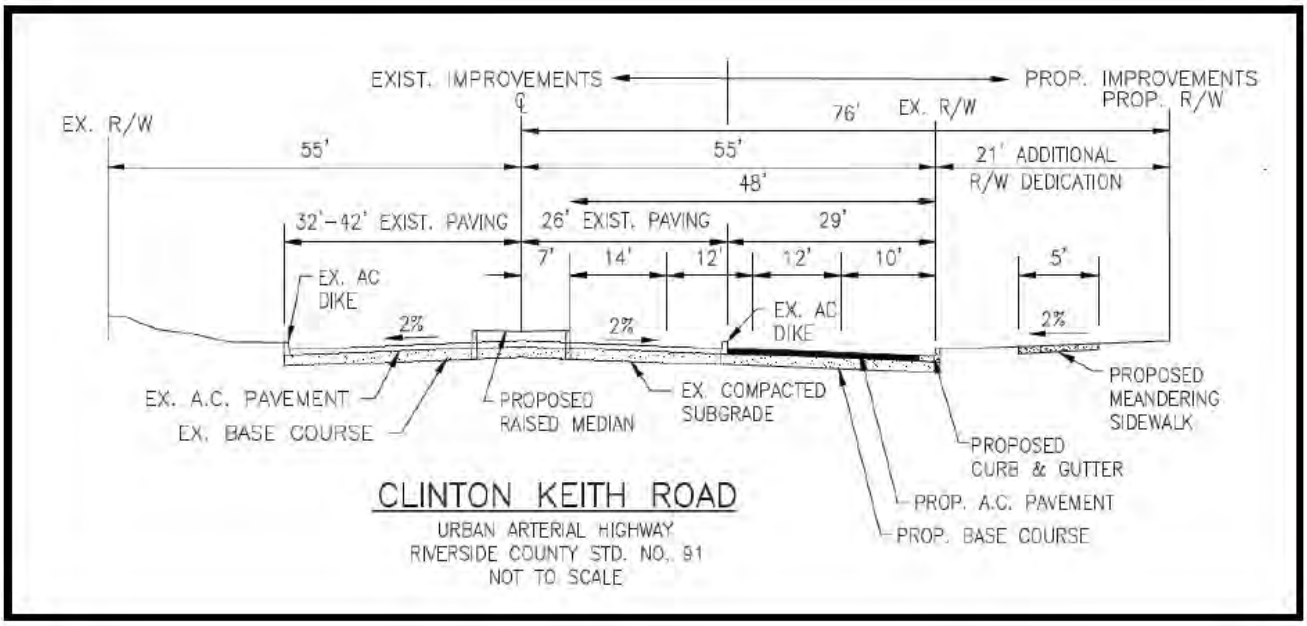


Figure 6 – Clinton Keith Road
(Project Frontage on Clinton Keith Road to Elizabeth Lane)

Elizabeth Lane

Improvements to Elizabeth Lane are depicted on Figure 7, *Elizabeth Lane (from Clinton Keith Road to Bunny Trail)*. The ultimate right-of-way for Elizabeth Lane, along the proposed Project's easterly frontage is 78'. Elizabeth Lane is classified as an Industrial Collector Street. Currently, there is 34' of existing pavement on Elizabeth Lane, which is adjacent to the existing Clinton Keith Self Storage, easterly of the proposed Project site. In addition, an 11' parkway (6' curb adjacent sidewalk and 5' of landscaping) is also installed on the east side of Elizabeth Lane. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 9' additional ROW dedication;
- 22' of additional pavement, for a total of 56' feet of pavement within a 78' section; and
- 11' parkway (6' curb adjacent sidewalk and 5' of landscaping).

These improvements will be constructed with Phase 1 of the proposed Project.

Bunny Trail

Improvements to Bunny Trail are depicted on Figure 8, *Bunny Trail (between Elizabeth Lane and Yamas Drive)*. The ultimate right-of-way for Bunny Trail, along the proposed Project's southerly frontage is 78'. Bunny Trail is classified as an Industrial Collector Street. Bunny Trail, along the southerly Proposed Project boundary, does not currently exist. Proposed roadway improvements include half-width improvements adjacent to the proposed Project's southerly boundary: 11' parkway (5' parkway and 6' curb-adjacent sidewalk), and 28' feet of pavement. An additional 18' of pavement (south of the roadway centerline) and an 8' shoulder. This portion is considered an off-site improvement. In total, 46' of pavement will be developed with the proposed Project.

Bunny Trail improvements will be constructed with Phase 2 of the proposed Project.

Yamas Drive

Improvements to Yamas Drive are depicted on Figure 9, *Yamas Drive (north of Bunny Trail).* The ultimate right-of-way for Yamas Drive, along the proposed Project's easterly frontage is 78'. Yamas Drive is classified as an Industrial Collector Street and will provide access to Parcels 10 and 11. Yamas Drive, along the southerly Proposed Project boundary, does not currently exist. Proposed roadway improvements include half-width improvements adjacent to the proposed Project's southerly boundary: 11' parkway (5' parkway and 6' curb-adjacent sidewalk), and 28' feet of pavement. An additional 18' of pavement (south of the roadway centerline) and an 8' shoulder. This portion is considered an off-site improvement. In total, 46' of pavement will be developed with the proposed Project. An additional 9' of ROW will be dedicated with the proposed Project for the Yamas Drive improvements. Yamas Drive will extend as a cul-de-sac to the existing drainage course (approximately 400' northerly of the existing terminus of Yamas Drive).

Yamas Drive improvements will be constructed with Phase 2 of the proposed Project.

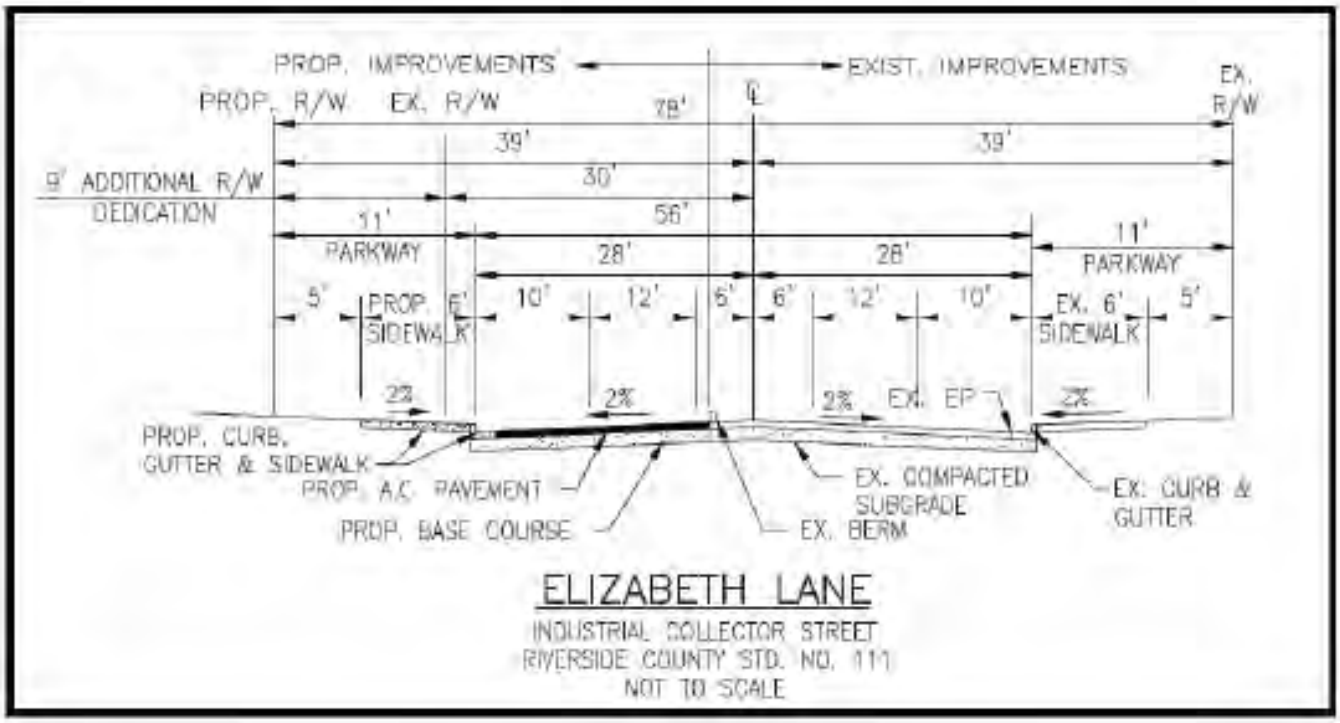


Figure 7 – Elizabeth Lane
(From Clinton Keith Road to Bunny Trail)

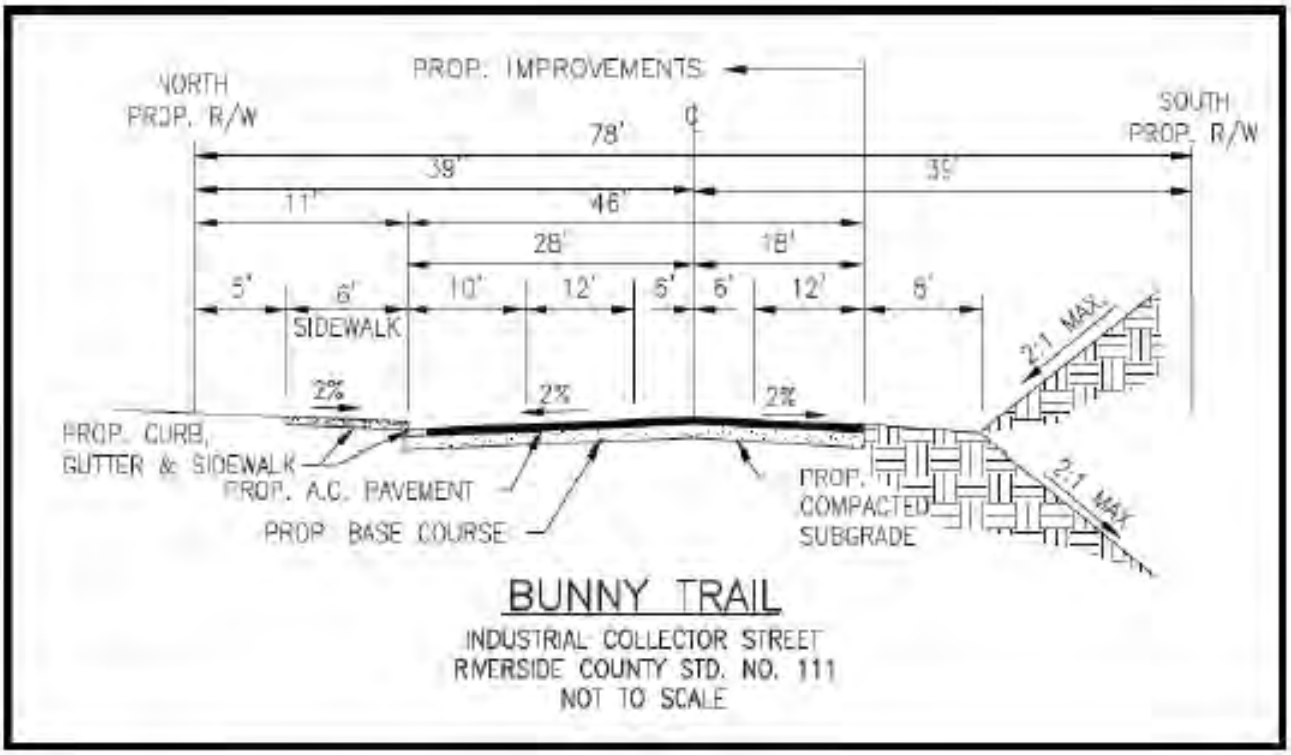


Figure 8 – Bunny Trail
(Between Elizabeth Lane and Yamas Drive)

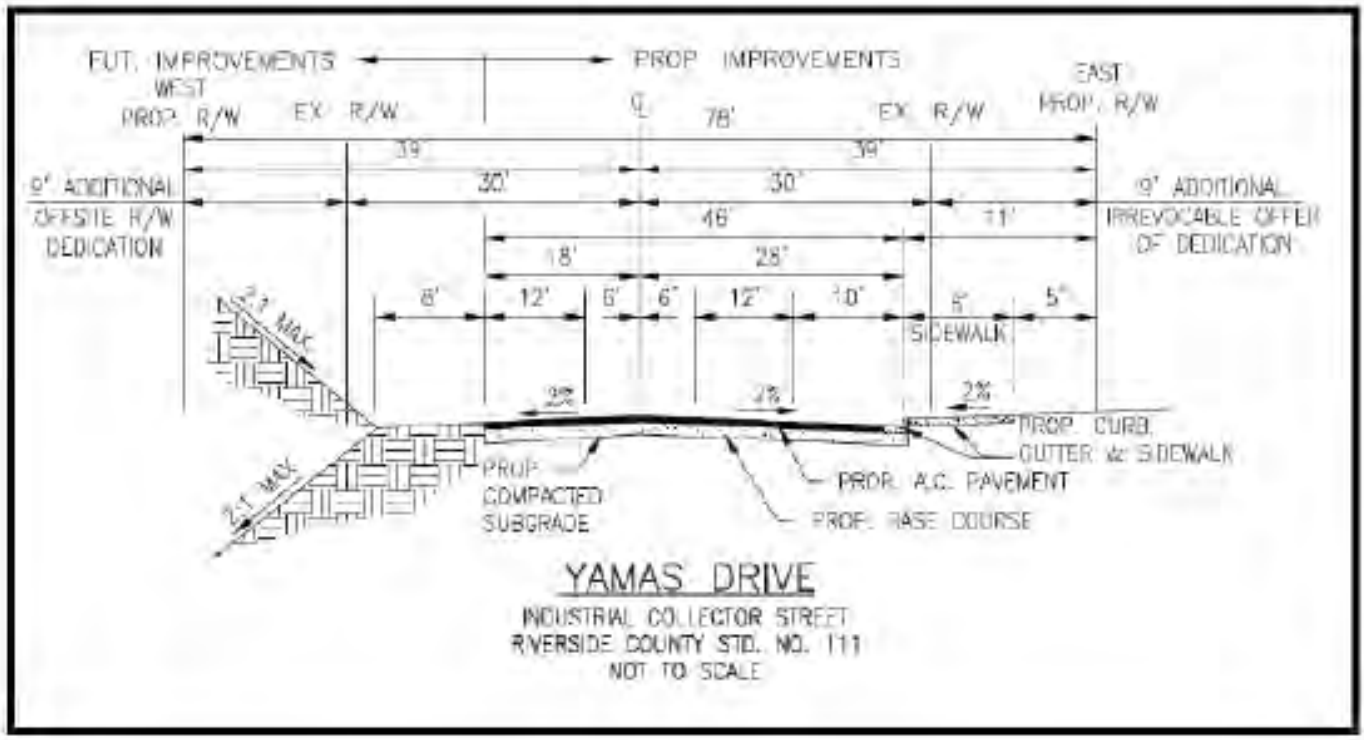


Figure 9 – Yamas Drive
(North of Bunny Trail)

Lot "C"

Improvements to Lot "C" are depicted on Figure 10, *Lot "C" (north of Bunny Trail).* The ultimate right-of-way for Lot "C" is 78'. Lot "C" is classified as an Industrial Collector Street and will allow access to Parcels 5, 7, 8 and 9 off of Bunny Trail. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 78' ROW dedication;
- 56'' of pavement (28' per half-width); and
- 11' parkway (6' curb adjacent sidewalk and 5' of landscaping) on both sides of Lot "C"

Lot "C" improvements will be constructed with Phase 2 of the proposed Project.

2. Plot Plan

The Plot Plan will be developed in two (2) phases. Phase 1 of the proposed Project includes approximately 96,240 square feet of proposed commercial, retail, restaurant, office (including medical) and light industrial uses, as depicted on Figure 11, *Plot Plan*. Ultimate development (Phase 2) of the proposed Project will result in 294,900 square feet of business park uses, 42,400 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant.

Phase 1 of the proposed Project includes six (6) buildings on the site. These buildings range in size from approximately 3,000 square feet to 42,420 square feet for a total of 96,240 square feet (11.8% of the site). Buildings 1 and 2 are located adjacent to Clinton Keith Road. Buildings 3 and 4 are located adjacent to Elizabeth Lane. Buildings 5 and 6 are located internal to the proposed Project. The individual building square footages, maximum heights and proposed uses and are listed in Table 1.2-2, *Plot Plan Square Footage and Proposed Uses*, below:

Table 1.2-2
Plot Plan Square Footage and Proposed Uses

Building	Maximum Height	Square Footage	Proposed Use(s)
1	26'0"	8,200	Commercial Retail
2	26'0"	8,200	Commercial Retail
3	26'0"	3,000	Commercial Retail
4	26'0"	3,000	Drive-thru Fast Food
5	36'0"	31,420	Medical Office
6	36'0"	42,420	Office
Total		**96,240**	

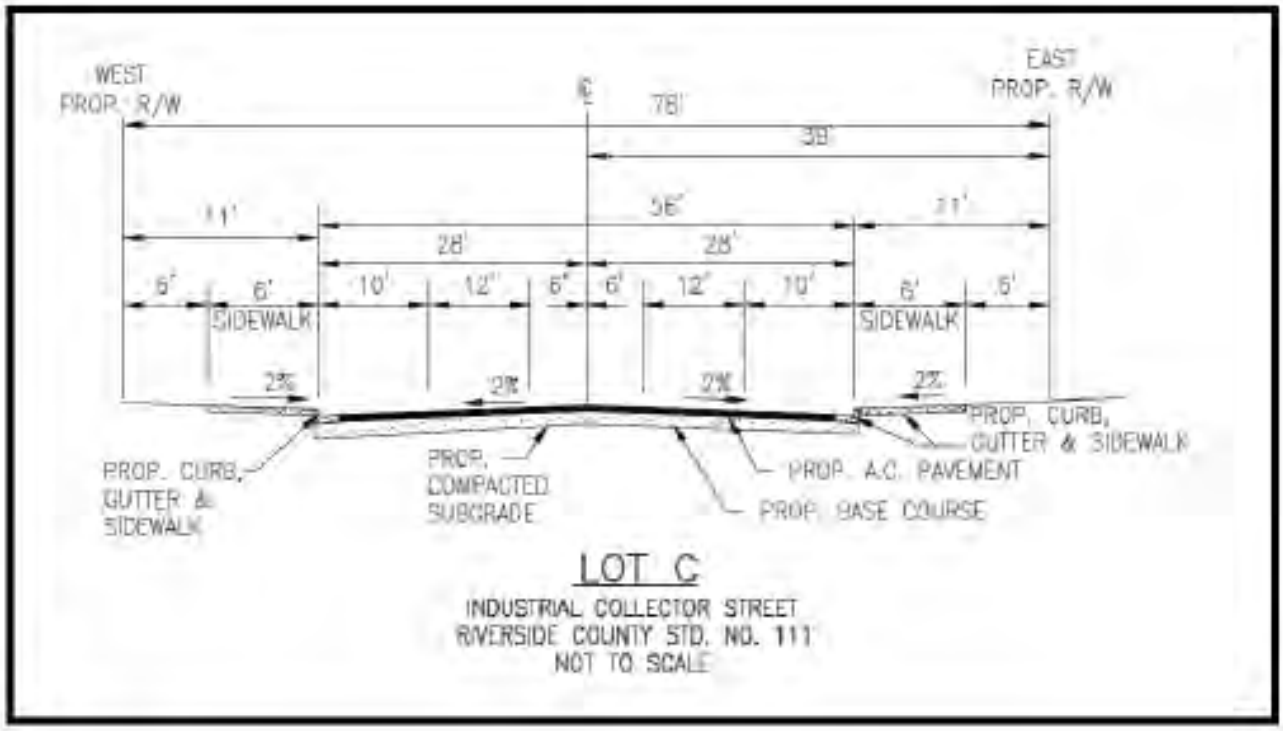


Figure 10 – Lot "C"
(North of Bunny Trail)

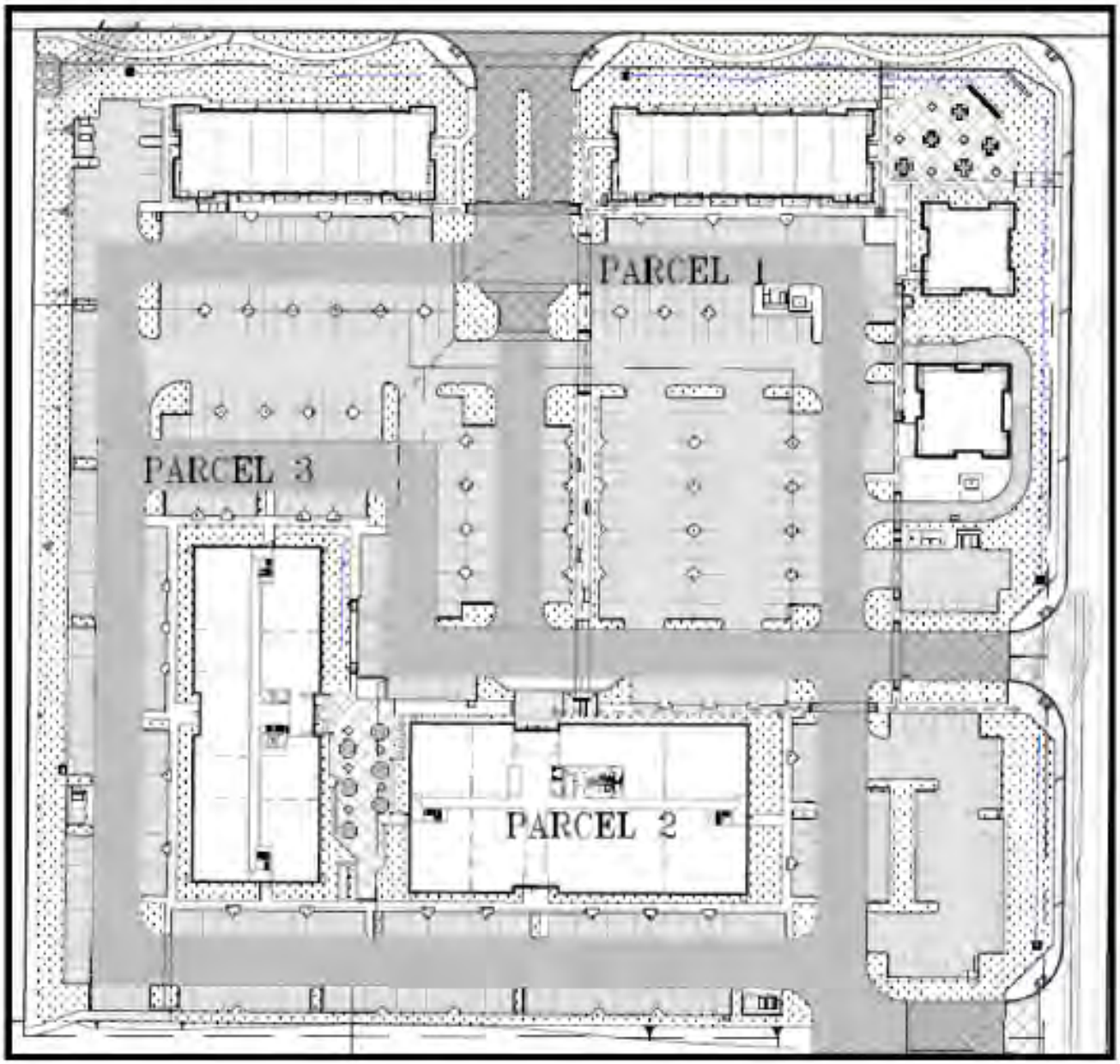


Figure 11 – Plot Plan

No portion of Phase 2 is planned at this time. However, as part of this analysis, the ultimate development of both phases of the proposed Project, which will result in a total of 294,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant has been taken into account in this Initial Study. Therefore, it is anticipated that Phase 2 will include the remaining 198,660 square feet of development on the proposed Project site. Phase 2 development will be in accordance with the BP General Plan designation and the IP Zoning designation.

Two (2) gathering/outdoor spaces have been provided in Phase 1. These are located between Buildings 2 and 3 and 5 and 6 respectively, as shown on Figure 12, *Illustrative Plan*. These gathering areas will include, at a minimum: shade trees, seating areas, seat walls, lighting, decorative paving and potential water features. Reference Figure 13, *Patio Areas*.

Hours of Operation

The tenants and specific businesses for both Phases of development are unknown at this time, therefore, it is difficult to assess operational hours and number of employees. The days and hours of operation will be assumed to be typical of those associated with similar commercial retail office, medical office and, Drive-thru Fast Food restaurant uses of this type and scale.

Building Architecture and Materials

All six (6) buildings in Phase 1 will have a similar design theme and color motif. The architecture could be considered contemporary and consistent with other commercial and light industrial/office developments in the Proposed Project area. Buildings 1-4 will be wood frame construction. These building will be articulated on all sides through the use of a combination of the following items: stucco, glass, aluminum mullions, tile accents, metal canopies, storefront entries and decorative light fixtures. Building entry points have been accented and the building mass has been broken up with the use of colors, materials, pop-outs and roof height variations. Please see Figure 14, *Color Elevations Buildings 1 and 2* and Figure 15, *Color Elevations Buildings 3 and 4*. Buildings 5 and 6 are office buildings and have been designed to be complimentary to Buildings 1-4, yet at the same time provide the simple architecture and design that accompanies office buildings in contrast to commercial retail buildings. Both buildings will be tilt-up construction. These building will be articulated on all sides through the use of a combination of the following items: glass, aluminum mullions, metal canopies, storefront entries, horizontal reveals and decorative light fixtures. Building entry points have been accented and the building mass has been broken up with the use of colors, materials, pop-outs and roof height variations. Please see Figure 16, *Color Elevations Building 5* and Figure 17, *Color Elevations Building 6*.

Phase 2 architecture is not known at this time. I will be assumed that Phase 2 architecture will be complementary in style and massing as Phase 1.



Figure 12 – Illustrative Plan



Figure 13 – Patio Areas

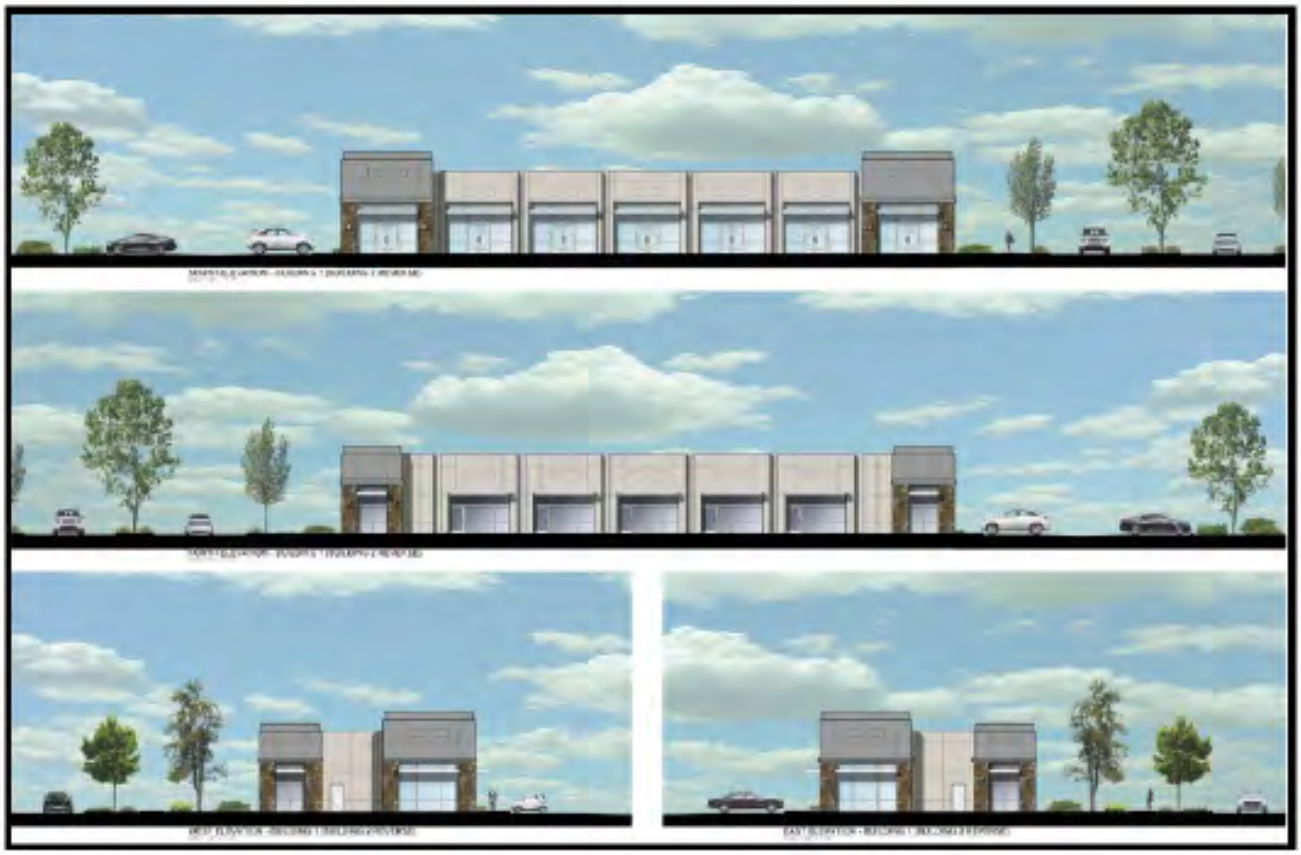


Figure 14 – Color Elevations Buildings 1 and 2



Figure 15 – Color Elevations Buildings 3 and 4



Figure 16 – Color Elevations Building 5



Figure 17 – Color Elevations Building 6

Site Access, Roadway Improvements, Off-Street Parking and Landscaping

Site Access

The Proposed Project proposes three (3) access points in Phase 1. These access points will be from two (2) surrounding publicly maintained streets: Clinton Keith Road and Elizabeth Lane. The Clinton Keith Road access point will be restricted to right-in/right-out turning movements. The northerly Elizabeth Lane access will be restricted to right-in/right-out turning movements. Full-access driveway will be permitted on the more southerly access point on Elizabeth Lane. Phase 2 access points will be from Elizabeth Lane, Bunny Trail, Lot "C" and Yamas Drive. No turning movement restrictions are anticipated. Please reference Figure 11, *Plot Plan*.

Roadway Improvements

A detailed discussion of Roadway improvements has been described above under II.B.1, Tentative Parcel Map (36492).

Off-Street Parking

The City's parking requirement for Phase 1 has been calculated utilizing the following ratios:

Commercial Retail: 1 parking space per 200 square feet;
Drive–thru Fast Food: 1 parking space per 100 square feet;
Medical Office: 1 parking space per 200 square feet; and
Office: 1 parking space per 200 square feet.

This formula results in a requirement for 498 parking spaces for Phase 1. Phase 1 of the proposed Project will provide a total of 502 spaces. These parking spaces include standard, handicap, compact and "clean air" parking spaces. Fifty (50) bike racks are required (25 short-term and 25 long-term spaces). Phase 1 of the proposed Project will provide 60 bicycle spaces. With the exception of the Clinton Keith frontage, parking will be along the proposed Project's perimeter, with a larger parking field centrally located within the proposed Project.

Phase2 parking requirements will be provided in accordance with the City's requirements.

Landscaping

According to the City's Zoning Code, approximately fifteen percent (15%) of the site must be landscaped in the IP Zone. For Phase 1, this minimum area to be landscape would be approximately 75,925 square feet). According to Figure 11, *Plot Plan*, approximately 91,453 square feet, or 18.1% of the site of Phase 1 will be landscaped. Landscaping will be along all of the proposed Project perimeters, with the largest landscaping setback along Clinton Keith Road, to be followed by Elizabeth Lane and then the southerly and westerly proposed Project boundaries.

Grading/Construction

According to the *Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar*, prepared by Albert A. Webb Associates, dated February

13, 2013, Revised July 17, 2013, the following grading/construction scenario for the proposed Project are:

- The Proposed Project site is currently vacant; thus, no demolition is necessary.
- Phase 1 construction will begin with site grading for the commercial and office uses no sooner than October 2013. Grading will last approximately four months. Building construction follows and will last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately six months and begin during building construction.
- Phase 2 construction will begin with site grading for the business park uses no sooner than March 2015. Grading will last approximately six months. Building construction follows and will last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately seven months and begin during building construction.

Phase 1 grading is shown on Figure 18a, *Preliminary Grading Plan – Northern Portion and* Figure 18b, *Preliminary Grading Plan – Southern Portion*. Grading for Phase 1 is proposed on Parcels 1-3 and Parcel 13. Phase 1 grading will result in 44,143 cubic yards of cut and 20,300 cubic yards of fill. Approximately 23,843 cubic yards will be exported to the Phase 2 portion of the proposed Project, and will not need to be further exported off the proposed Project site upon development of Phase 2 Grading in Phase 1 will provide developable areas for the Plot Plan, protection for the drainage course in Parcel 13, as well as grading for the improvements to Clinton Keith Road and Elizabeth Lane.

Phase 2 grading is not known at this time, but will encompass grading for Parcels 5-11, Bunny Trail, Yamas Drive and, Lot "C". It should be noted that default parameters within CalEEMod (Air Quality modeling software) were used for modeling air quality construction emissions for all phases of development of the proposed Project, and these default values reflect a worst-case scenario, which means that Proposed Project emissions are expected to be equal to or less than the estimated construction emissions. This is further elaborated upon in Section V.3 (Air Quality) of this Initial Study.

Hydrology / Water Quality

Hydrology

Proposed on-site storm drain system and drainage design for Phase 1 will maintain these existing flows by the following:

- The existing four 48" RCP culverts in the northwest corner that run under Clinton Keith Road will be extended under the widened southern half of the road, maintaining existing flows with no impact downstream. The site grading proposes that the north-west portion of 0.6 acres drains to Stream 3 in a manner that the proposed conditions flows do not exceed existing conditions flows generated from the 2.1 acres.
- Near the above mentioned culverts, an AC spillway inlet into a 24" CMP will be replaced with a catch basin along with the street improvement widening.
- The existing 60" RCP that carries flows from north side of Clinton Keith Road will be extended approximately 400 lineal feet and outlet back into the natural drainage channel approximately 150' south of the most southerly drive entrance from Elizabeth Lane.

- An existing catch basin at a low point along the east side of Elizabeth Lane that directly discharges into a natural channel will join the above mentioned 60" RCP, as well as a proposed catch basin directly on the west side of Elizabeth Lane.
- The existing 30" RCP that carries flows from the adjacent mini-storage facility will be extended approximately 200 lineal feet and join a culvert that will be built under Bunny Lane.
- A 40' long culvert will be built under Bunny Lane to allow storm water to continue flowing in a southerly direction as it currently does.
- An on-site drainage system is proposed to capture the on-site flows and convey them to the proposed water quality/detention basin.
- Detention basins will be constructed at the outlet locations for each stream subareas to mitigate the increased runoff from the post-developed site conditions and release measured flows into the natural streams with no adverse impact downstream. For preliminary purposes, the basins are sized for the differences between the volumes of the 10-year, 24-hour pre- and post-developed conditions storm events. The 100-year events will bypass through.

A detention basin will be constructed in the southeast corner of Parcel 13 to mitigate the increased runoff from the post-developed parcels 1,2 and 3 proposed Project site and release measured flows into the natural Stream 1 with no adverse impact downstream. The proposed basin will serve dual purpose as being a water quality sand filtration basin and a detention mitigation basin.

Phase 2 drainage improvements are not known at this time. Phase 2 drainage improvements will be installed with the development of that portion of the proposed Project. All drainage facilities in Phase 2 will be consistent with City of Wildomar requirements, and will be subject to the current, or applicable standard conditions at the time of development, plus the proposed Project-specific mitigation measures contained in this Initial Study.

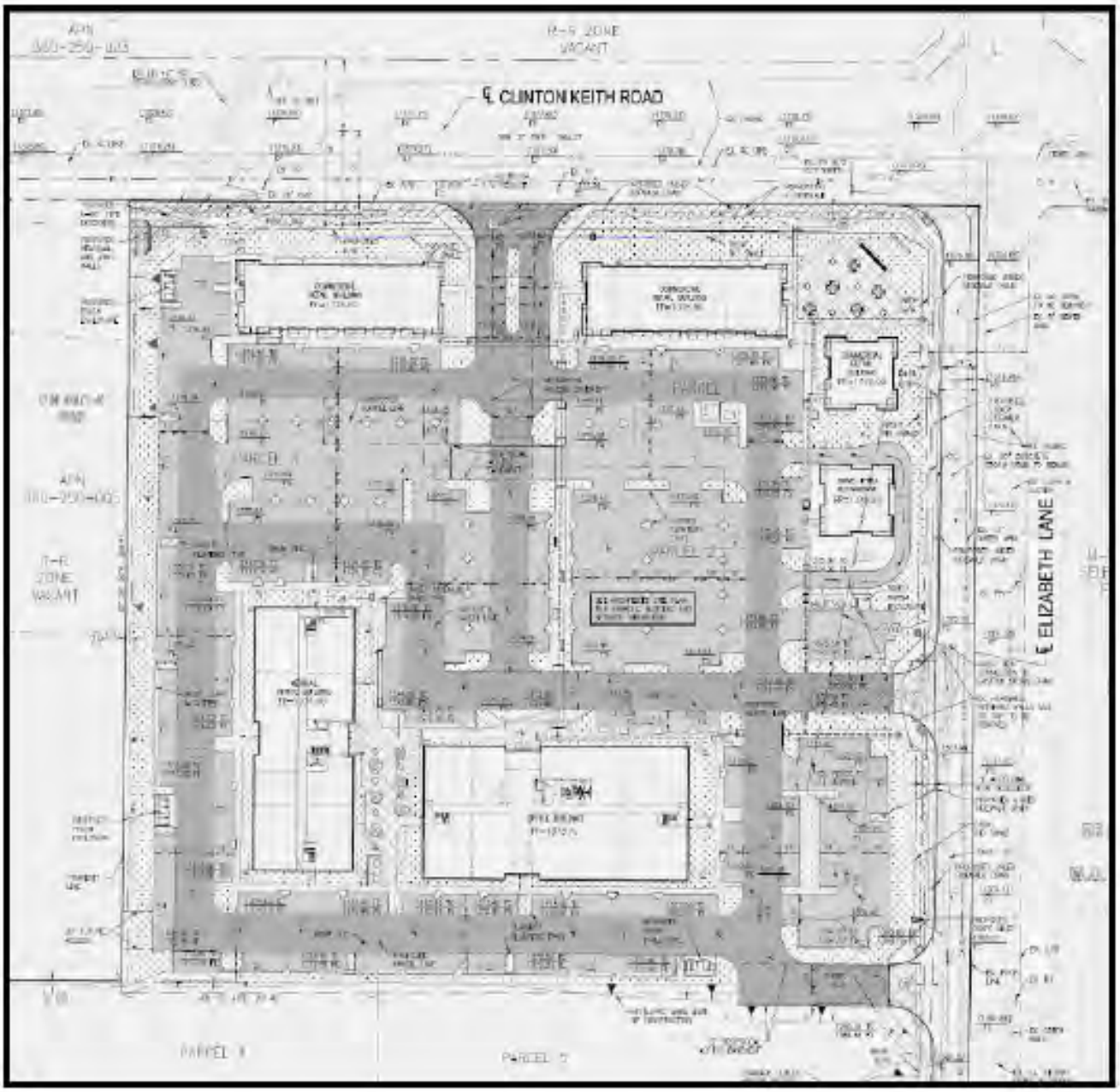


Figure 18a - Preliminary Grading Plan
Northern Portion

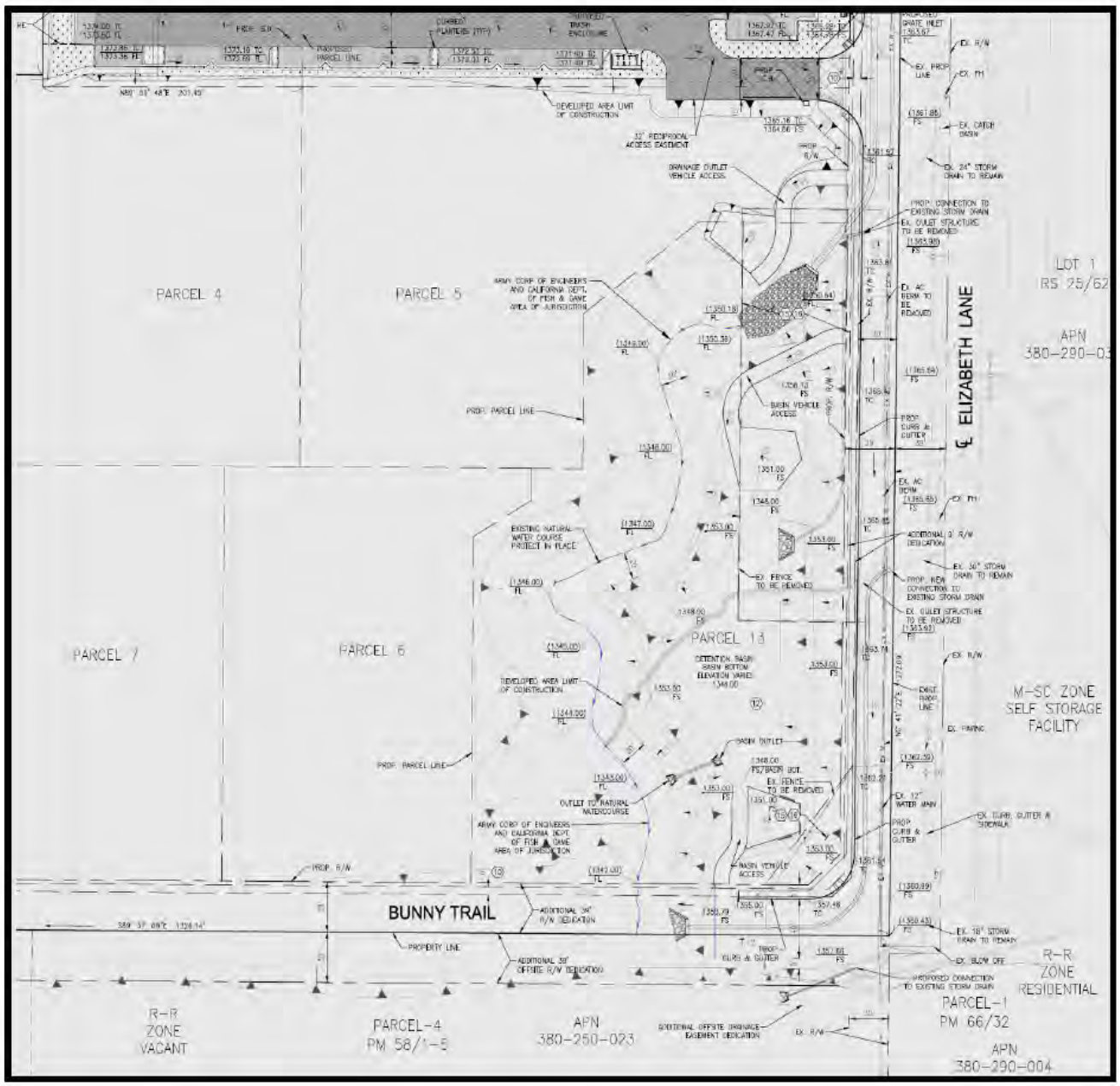


Figure 18b - Preliminary Grading
Southern Portion

Water Quality

Tentative Parcel Map 36492 proposes to create 13 parcels on approximately 29.5 acres of currently vacant, formerly agricultural land. Phase 1 of the proposed Project proposes to currently develop only three of those parcels (Parcel 1, 2, and 3 – 7.7 acres) along with Parcel 13 (open space – 2.88 acres) into an industrial park and a detention/sand filter basin respectively. The net disturbed area as a result of this Phase 1 will be 11.85 acres and will be limited to this partial development that consists of the following activities:

- Conduct grading operations for 7.7 acres and grade to existing topography along the southern boundary of the 3 parcels.
- Construct one medical office building, three commercial office buildings, one office building, one drive-thru restaurant, plus associated parking and landscape areas on Parcels 1 through 3.
- Construct a detention basin/sand filter basin on Parcel 13 (1.1 acres out of 2.88 acres of open space) for increased storm water runoff mitigation and water quality treatment.
- Construct sidewalk under drains along Clinton Keith Road and Elizabeth Lane to convey street tributary runoff to on-site vegetated swales that treat the storm water before entering the existing MS4 storm drain system.
- Conduct selective grading of the immediate surrounding area and modify existing storm drain design to prevent diversion of flows and maintain existing drainage patterns.

Phase 2 WQMP facilities are not known at this time. Phase 2 WQMP facilities will be installed with the development of that portion of the proposed Project. All WQMP facilities in Phase 2 will be consistent with City of Wildomar requirements for implementing water quality, and will be subject to the current, or applicable standard conditions at the time of development, plus the proposed Project-specific mitigation measures contained in this Initial Study.

Sewer and Water Facilities

The proposed Project will tie into an existing 20" water line located in Clinton Keith Road and a 12" water line in Elizabeth Lane, which will create a loop system. The proposed Project will tie into an existing 18" sewer line located in Clinton Keith Road.

Utilities

All utilities and public services are currently available on, or adjacent to, the proposed Project site. Utility and Service providers are as follows:

- Electricity: Southern California Edison
- Water: Elsinore Valley Municipal Water District
- Sewer: Elsinore Valley Municipal Water District
- Cable: Comcast Cablevision
- Gas: Southern California Gas Company
- Telephone: Verizon

Biological Resources

According to the *Biological Resources Assessment, Rancon Medical and Education Center. City of Wildomar, Riverside County, California*, prepared by PCR Services Corporation, dated September, 2012, the proposed Project site consists primarily of non-native grassland, with a smaller component of native vegetation dominated by California buckwheat (*Eriogonum fasciculatum*). The entire site is within the Western Riverside County MSHCP, but is not within any designated United States Fish and Wildlife Service (USFWS) critical habitat.

The proposed Project site supports two (2) drainage features observed to support field indicators associated with USACE, RWQCB, and CDFG (collectively "the resource agencies") jurisdictional waters, including Drainage D1 and Drainage D2. Drainage D1 is located near the eastern boundary of the site adjacent to Elizabeth Lane, and Drainage D2 is located in the northwest corner of the southern portion of the site, with a small portion adjacent to Clinton Keith Road to the north. Please refer to Figure 19, *Jurisdictional Features* (Figure 8 of BRA).

Mapped soils in the proposed Project site are within the Monserate-Arlington-Exeter Association, including eight soil types as follows:

- Arlington and Greenfield fine sandy loams, 2 to 8 percent slopes, eroded
- Handford sandy loam, 2 to 15 percent slopes
- Monserate sandy loam, 0 to 5 percent slopes (co-dominant soil type)
- Monserate sandy loam, shallow, 8 to 15 percent slopes, eroded
- Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded
- Monserate sandy loam, shallow, 15 to 25 percent slopes, severely eroded
- Ramona and Buren loams, 5 to 15 percent slopes, eroded (co-dominant soil type)
- Ramona and Buren loams, 5 to 25 percent slopes, severely eroded

Biological Resources are discussed in greater detail in Section V. 4 (Biological Resources) of this Initial Study.



Figure 19 – Jurisdictional Features

III. EXECUTIVE SUMMARY

A. Summary of Impacts and Mitigation Measures

The following represents a summary of impacts and mitigation measures associated with the proposed Project. Note that the City has standard conditions and ordinances that may also address impacts. All subsequent development will be required to comply with the tentative parcel map and plot plan requirements of the City of Wildomar.

1. Aesthetics

   All impacts are less than significant without mitigation, or no impact.

2. Agricultural Resources

   The proposed Project has no impact on agricultural resources.

3. Air Quality

   The proposed Project has no impact on air quality resources. However, the Project applicant has agreed to the following mitigation measures, which contain methods to further reduce Project impacts from construction and operational emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gasses, of this Initial Study).

   AQ-1 Construction Mitigation

   a. Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.)
   b. Limit fugitive dust sources to 20 percent opacity.
   c. Require a dust control plan for earthmoving operations.
   d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
   e. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.
   f. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.
   g. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.
   h. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.
   i. Require high pressure injectors on diesel construction equipment.*
   j. Utilize only CARB Tier 3 or better certified equipment for construction activities.*
   k. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.*
   l. Suspend use of all construction equipment operations during second stage smog alerts.*

* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during grading activities.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

AQ-2 Operation Mitigation

a. Install EV charging facilities for a minimum of 1% of all parking spaces.*
b. Provide preferential parking locations for EVs and CNG vehicles.*
c. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.*
d. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.*
e. Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment **or** contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.*
f. Provide secure, bicycle parking for employees.*
g. Provide direct safe, direct bicycle access to adjacent bicycle routes.*
h. Provide short-term bicycle parking for retail customers and other non-commute trips.*

* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during site plan review and verified prior to Certificate of Occupancy.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

4. Biological Resources

The following mitigation measure will reduce biological impacts to less than significant:

BIO-1 Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.

Timing/Implementation: Implemented prior to any off-site grading.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-2 The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently $500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.

Timing/Implementation: The fee must be paid prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

BIO-3 Due to the presence of suitable habitat and in compliance with the MSHCP, a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.

Timing/Implementation: Implemented 30 days prior to ground disturbance.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-4 If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the *Staff Report on Burrowing Owl Mitigation*.

Timing/Implementation: Implemented prior to ground any disturbance for Phase 2.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-5 Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

Timing/Implementation: Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-6 Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, *Impacts to Jurisdictional Features*, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFG. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.
2. On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

Timing/Implementation: Implemented prior to ground any disturbance in areas designated as jurisdictional features.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

5. Cultural Resources

The following mitigation measures will reduce impacts to cultural resources to a less than significant level:

CUL-1 Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation:

> If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the appropriate Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Commission and/or City Council. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: *As a condition of project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Building and Planning Departments.*

CUL-2 At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe[1] to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

Timing/Implementation: *Prior to the issuance of a grading permit.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-3 Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation:

> If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-4 The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found on the Project site, to the appropriate Tribe for proper treatment and disposition as defined by the appropriate Tribe.

[1] The appropriate Tribe will be selected from the list of Tribal representatives provided by the Native American Heritage Commission.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-5 All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the appropriate culturally affiliated Native American Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-6 To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified professional shall monitor all construction activities that could potentially impact archaeological and/or paleontological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-7 A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-8 Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-9 Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

6. Geology and Soils

All impacts are less than significant without mitigation. Note that all development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements.*

7. Greenhouse Gas Emissions

The following mitigation measure will reduce impacts to greenhouse gas resources to a less than significant level:

GHG-1 Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.

Timing/Implementation: During Construction Activities and Project Operations.

Enforcement/Monitoring: City of Wildomar Planning and Building Departments.

8. Hazards and Hazardous Materials

The following mitigation measure will reduce impacts to hazards and hazardous materials to a less than significant level. See also *Standard Conditions & Requirements.*

HAZ-1 All spills or leakage of any hazardous products, including petroleum products, during regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan

prepared for the Project development.

Timing/Implementation: Prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Engineering Department.

HAZ-2 Prior to the certificate of occupancy for a medical office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety Department.

HAZ-3 As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety and Fire Departments.

HAZ-4 Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety and Fire Departments.

9. Hydrology and Water Quality

The following mitigation measure will reduce impacts to hydrology and water quality to a less than significant level:

HYD-1 Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated

with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.

Timing/Implementation: Prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Engineering Department.

10. Land Use and Planning

All impacts are less than significant without mitigation, or no impact.

11. Mineral Resources

The proposed Project has no impact on mineral resources.

12. Noise

The following mitigation measure will reduce noise impacts to a less than significant level. See also *Standard Conditions & Requirements.*

NOI-1 To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-2 The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-3 Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-4 Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence.

It is important to note that the barriers' attenuation will be accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.

Timing/Implementation: Prior to the issuance of occupancy permits and during project operations.

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

NOI-5 Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.

Timing/Implementation: Reviewed at building plan check.

Enforcement/Monitoring: City of Wildomar Building Department.

13. Population and Housing

The proposed Project has no impact on population and housing.

14. Public Services

All impacts are less than significant without mitigation. Note that subsequent development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements.*

15. Recreation

The proposed Project has no impact on recreation.

16. Transportation/Traffic

The following mitigation measure will reduce transportation/traffic impacts to a less than significant level. See also *Standard Conditions & Requirements.*

TR-1 The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service of the following recommended improvements are implemented, prior to the respective phase of development:

On-Site Recommendations:

Roadways

- Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line.
- Construct partial width improvements on the westerly side of Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.
- Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.

Intersections (proposed Project's actual improvements necessary are shown in ***bold, italic, underlined***. The items that are not bold, italic, underlined are already existing)

Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics:

Northbound:	***One right-turn lane. Stop controlled.***
Southbound:	Not applicable.
Eastbound:	One through lane. ***One right-turn lane.***
Westbound:	One through lane.

Install a traffic signal at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics:

Northbound:	***One left-turn lane.*** One shared through and right-turn lane.
Southbound:	***One left-turn lane.*** One shared through and right-turn lane.
Eastbound:	One left-turn lane. One through lane. ***One right-turn lane.***

Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.
Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics:
Northbound: One shared left-turn, through and right-turn lane.
Southbound: One shared left-turn, through and right-turn lane.
Eastbound: ***One shared left-turn, through and right-turn lane. Stop controlled.***
Westbound: One shared left-turn, through and right-turn lane. Stop controlled.
Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW) with the following geometrics:
Northbound: One shared left-turn and through lane.
Southbound: One shared through and right-turn lane.
Eastbound: ***One shared left-turn and right-turn lane. Stop controlled.***
Westbound: Not applicable.
Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics:
Northbound: Not applicable.
Southbound: One right-turn lane.
Eastbound: ***One shared left-turn and right-turn lane. Stop controlled***
Westbound: Not applicable.
Construct the intersection of Project Driveway 4 (NS) and Bunny Trail (EW) with the following geometrics:
Northbound: Not Applicable.
Southbound: ***One shared left-turn and right-turn lane. Stop controlled.***
Eastbound: One shared left-turn and through lane.
Westbound: One shared through and right-turn lane.
Construct the intersection of Yamas Drive (NS) and proposed Project Driveway 5(EW) with the following geometrics:
Northbound: ***One shared through and right-turn lane.***
Southbound: ***One shared left-turn and through lane.***
Eastbound: Not applicable.
Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***
Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics:
Northbound: ***One shared through and right-turn lane.***
Southbound: ***One shared left-turn and through lane.***
Eastbound: Not applicable.
Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***

Timing/Implementation: Implemented during the appropriate Phase of proposed Project construction.

Enforcement/Monitoring: City of Wildomar Traffic Engineering Department.

17. Utilities and Service Systems

All impacts are less than significant without mitigation. Note that all development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements.*

B. STANDARD CONDITIONS & REQUIREMENTS

The following represent typical conditions and requirements of development in the City of Wildomar. These standards will be applied to the proposed Project per ordinance, policy, or county, state, or federal law. The standards also address many environmental impacts and as shown below are divided into the respective environmental sections.

Aesthetics

1. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting.

Air Quality

1. The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures.

Geology and Soils

1. All grading shall conform to the California Building Code, Ordinance 457, and all other relevant laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.

2. Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded per the requirements of Ordinance 457 (refer to dept. form 284-47). Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer.

3. Prior to the issuance of a grading permit, the developer shall submit a geotechnical soils reports to the City Engineer for review and approval prior to issuance of grading permit. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by the City of Wildomar.

Hazards and Hazardous Materials

1. As required by existing ordinance, subsequent development on the site will need to comply with the County of Riverside, Department of Environmental Health, Local Enforcement Agency (LEA) for all activities related to potential hazardous materials.

Land Use and Planning

1. Prior to the issuance of a grading permit, the developer shall pay the regional impact mitigation fee established by the Riverside County MSHCP.

Noise

1. The proposed Project shall comply with the development standard of Chapter 9.48 of the City of Wildomar Zoning Code.

Public Services

1. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required development impact fees for police and fire services pursuant to Chapter 4.60 of the Wildomar Municipal Code and in effect at the time of building permit issuance.

2. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required school impact mitigation fees established by the Lake Elsinore Unified School District and in effect at the time of building permit issuance.

Transportation/Traffic

1. Prior to issuance of any building permit on the proposed Project site, the Project applicant(s) shall pay the appropriate Transportation Uniform Mitigation Fee and the City of Wildomar Development Impact Fee (DIF).

2. Sight distance at the proposed Project entrance roadway should be reviewed with respect to standard City of Wildomar sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

3. Participate in the phased construction of off-site traffic signals through payment of proposed Project's fair share of traffic signal mitigation fees.

4. Signing/striping should be implemented in conjunction with detailed construction plans for the proposed Project site.

Utilities and Service Systems

1. The Project applicant(s) for future development on the proposed Project site shall obtain approval from the Riverside County Department of Environmental Health before receiving water and wastewater service from the Elsinore Valley Municipal Water District.

2. Prior to issuance of a building permit, a recycling collection and loading area plan shall be submitted to the City and to Riverside County Waste Management Division.

IV. ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Project Title:

Rancon Medical Office/Retail Project: Plot Plan and Tentative Parcel Map No. 36492 (Planning Application No. 12-0053)

2. Lead Agency Name and Address:

City of Wildomar, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595

3. Contact Person and Phone Number:

Matthew C. Bassi, Planning Director; (951) 677-7751, ext. 213

4. Project Location:

The proposed Project site is generally located at the southwest corner of Clinton Keith Road and Elizabeth Lane,(i.e., west of Elizabeth Lane, north of Bunny Trail and west of Yamas Drive, in City of Wildomar, Riverside County, California. Assessor's Parcel Number: 380-250-022; Section 6, Township 7 South, Range 3 West.

5. Project Sponsor's Name and Address:

Rancon Medical and Educational Center, LLC, 41391 Kalmia Street, Suite 206, Murrieta, CA 92562

6. General Plan Designation:

Business Park (BP)

7. Zoning:

I-P (Industrial Park)

8. Description of Project:

A proposed Parcel Map ("proposed Project") that would subdivide approximately 29.40 acres (gross)/25.99 acres (net) into thirteen (13) parcels. The Plot Plan proposes development in two (2) phases. Phase 1 proposes approximately 96,240 square feet of commercial, retail, restaurant, office (including medical) and light industrial uses on 11.62 (gross acres)/10.07 (net acres). Ultimate development of the proposed Project will result in 295,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant.

9. Surrounding Land Uses and Setting:

- North – Zoning: Rural Residential; Land Use: Vacant
- South – Zoning: Rural Residential and industrial Park; Land Use: Vacant
- Southwest – Zoning: General Residential; Land Use: Multi-Family Residential
- East – Zoning: Manufacturing-Service Commercial; Land Use: Self-Storage
- West – Zoning: Rural Residential; Land Use: Vacant (west), Multi-Family Residential (southwest)

10. Other Public Agencies Whose Approval Is Required:

Riverside County Flood Control and Water Conservation District, United States Army Corps of Engineers, San Diego Regional Water Quality Control Board, California Department of Fish and Game.

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this proposed Project involving at least one impact that is a "Potentially Significant Impact," or "Less Than Significant With Mitigation Incorporation" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Population/Housing
☐ Agricultural Resources	☒ Hazards/Hazardous Materials	☐ Public Services
☐ Air Quality	☒ Hydrology/Water Quality	☐ Recreation
☒ Biological Resources	☐ Land Use/Planning	☒ Transportation/Traffic
☒ Cultural Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☐ Geology and Soils	☒ Noise	☒ Mandatory Findings of Significance

C. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because of the incorporated mitigation measures and revisions in the proposed Project have been made by or agreed to by the Project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

City Representative



11-15-2013

Signature — Date

Matthew C. Bassi — Planning Director

Applicant

Pursuant to Section 15070(b)(1) of the California Environmental Quality Act , as the Project applicant, I agree to revisions of the Project plans or proposals as described in this Initial Study/Mitigated Negative Declaration to avoid or reduce environmental impacts of my Project to a less than significant level.

Signature — Date

Printed Name

V. ENVIRONMENTAL ANALYSIS.

1. AESTHETICS.

Issues, would the proposal:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			✓	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✓	
e) Interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance?			✓	

DISCUSSION

a) Have a substantial adverse effect on a scenic vista? *Less Than Significant Impact*

The proposed Project site is located south of Clinton Keith Road. According to Figure 9, Elsinore Area Plan Scenic Highways, of the Elsinore Area Plan (EAP), Interstate 15 (I-15) and SR-74 are identified as "State Eligible" roadways. The proposed Project site is located approximately 2 ¼ miles east of I-15 and approximately 9 miles south of SR-74. Therefore, the proposed Project site will not be visible from these roadways. The proposed Project site would mostly be visible from the immediate surrounding area. The scenic vistas in the vicinity of the proposed Project site are of the surrounding mountains and their ridgelines. Any Project-level visual impacts for current and future development are/will be addressed through the City's plot plan application process, which ensures compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Therefore, the proposed Project's effect on the scenic vista would be considered a less than significant impact. No additional mitigation is required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? *No Impact*

The proposed Project site does not contain any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings; therefore, implementation of the proposed Project would not affect these resources. In addition, the proposed Project site is not located within a state scenic highway. No impacts are anticipated from the proposed Project. No mitigation is required.

c) Substantially degrade the existing visual character or quality of the site and its surroundings? *Less Than Significant Impact*

The proposed Project site is a vacant lot, located southerly of Clinton Keith Road and westerly of Elizabeth Lane. The proposed Project would subdivide the existing property into thirteen (13) parcels, two (2) of which are open space, for future retail commercial and office development, consistent with the existing land use designations and zoning and most of the existing and proposed surrounding uses. The proposed Project includes building elevations, landscape plans or other specific building development details for Phase 1. It is reasonable to assume that Phase 2 development on the site will be complimentary to Phase 1 and similar to others in the area. For all Phases of the proposed Project's development, the City's plot plan application process will ensure compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Section 17.216 of the Wildomar Municipal Code regulates plot plan submittals and requires CEQA analysis based on the plot submittal. Through compliance with the plot plan process, the proposed Project will have a less than significant impact that would substantially degrade the existing visual character or quality of the site and its surroundings. No additional mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? *Less Than Significant Impact*

All Phases of development of the proposed Project will create new sources of light and glare. The City's plot plan application process ensures compliance with City zoning and design standards regulating lighting, siding, materials, etc. A lighting photometric plan has been reviewed with the Plot Plan for Phase 1, and, a condition of approval requires review and approval of a construction level plan prior to issuance of building permits. Therefore, the proposed Project would not create new sources of light or glare that would adversely affect day or nighttime views in the area, and this would be considered a less than significant impact. This process will also be followed for all development within Phase 2. With compliance with the Wildomar Municipal Code 8.64 (Light Pollution), any impacts will be considered less than significant. No additional mitigation is required.

e) Interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance? *Less Than Significant Impact*

All development within 45 miles of the Mt. Palomar Observatory is subject to Section 8.64, Light Pollution, of the Wildomar Municipal Code. Under this provision, exterior lighting above 4050 lumens is restricted, and all lighting must be fully shielded if feasible and partially shielded in all other cases, and must be focused to minimize spill light into the night sky and onto adjacent

properties (Wildomar Municipal Code 8.64.060). Implementation of all Phases of the proposed Project will not interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting. Compliance with these provisions ensures that impacts will remain less than significant. No additional mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting.

MITIGATION MEASURES

None.

2. AGRICULTURAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?				✓
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				✓
d) Result in the loss of forestland or conversion of forestland to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use?				✓

DISCUSSION

a–e) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use; conflict with existing zoning for agricultural use or a Williamson Act contract; conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)); result in the loss of forestland or conversion of forestland to non-forest use; or Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use? *No Impact*

According to the Riverside County Land Information System (2013), the site is not located within the an agricultural preserve (Williamson Act) or classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program of the California Department of Conservation; therefore, there is no potential to convert farmland to nonagricultural uses. As seen in Appendix B (Site Photos), the site is not forested and there are no agricultural uses on the site. There is no evidence of recent agricultural activity on the site. According to the *Phase 1 Environmental Assessment*, prepared by EnviroSoil, Inc., dated January 5,

2011, the proposed Project site has historically been vacant since at least 1948. It appears to have been rough graded and apparently is/has been used for dry farming. There is no way of knowing the last time the site was used for agriculture. No impacts are anticipated and no mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

None.

3. AIR QUALITY.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✓	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			✓	
d) Expose sensitive receptors to substantial pollutant concentrations?			✓	
e) Create objectionable odors affecting a substantial number of people?			✓	

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar,* prepared by Albert A. Webb Associates, dated February 13, 2013, Revised July 17, 2013, Revised October 18, 2013 (AQ/GHG Analysis), and is contained Appendix B, of the enclosed CD. Please refer to the AQ/GHG Analysis in Appendix B for a detailed discussion of the background and physical setting as well as the regulatory setting for federal and California ambient air quality standards. The discussion below will center on the short- and long-term emissions as they relate to regional significance thresholds and localized significance thresholds; as well as a CO hot spot analysis. Even though the following analysis, below, concludes that the Project has less than significant air quality impacts and no mitigation is required, the Project applicant has agreed to implement certain measures to further reduce the Project's air quality impacts. Therefore, mitigation measures **AQ-1** and **AQ-2**, though not legally required, have been incorporated into this document. These "mitigation measures" are voluntary and not legally required since the analysis shows that proposed Project's impacts, described below, have no significant impacts.

a) Conflict with or obstruct implementation of the applicable air quality plan? *Less Than Significant Impact*

The proposed Project site is located within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the basin is in nonattainment (i.e., ozone [O3], particulate matter equal to or less than 10 microns and less

than 2.5 microns in diameter [PM-10 and PM-2.5, respectively]), nitrogen oxide (NOx), and lead. These are considered criteria pollutants because they are four of several prevalent air pollutants known to be hazardous to human health. It should be noted that the proposed Project is not anticipated to generate a quantifiable amount of lead emissions.

The federal and California ambient air quality standards (AAQS) establish the context for the local air quality management plans and for determination of the significance of a project's contribution to local or regional pollutant concentrations. The AAQS represent the level of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness, and persons engaged in strenuous work or exercise, all referred to as “sensitive receptors.” SCAQMD defines a "sensitive receptor" as a land use or facility such as residences, schools, child care centers, athletic facilities, playgrounds, retirement homes, and convalescent homes.

Both federal and state Clean Air Acts require that each non-attainment area prepare a plan to reduce air pollution to healthful levels. The 1988 California Clean Air Act and the 1990 amendments to the federal Clean Air Act (CAA) established new planning requirements and deadlines for attainment of the air quality standards within specified time frames which are contained in the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised, and approved over the past decade. The currently adopted clean air plan for the basin is the 1999 SIP Amendment, approved by the U.S. Environmental Protection Agency (EPA) in 2000.

The Air Quality Management Plan (AQMP) for the Basin establishes a program of rules and regulations directed at attainment of the state and national air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections. The SCAQMD adopted an updated AQMP in December 2012, which outlines the air pollution measures needed to meet federal health-based standards for particulates (PM-2.5) in 2014 and also includes specific measures to further implement the ozone strategy in the 2007 AQMP to assist in attaining the ozone standard in 2023 (SCAQMD 2012). The 2012 AQMP was submitted to CARB and EPA for review and to be included as a revision to California’s SIP.

The CARB maintains records as to the attainment status of air basins throughout the state, under both state and federal criteria. The portion of the Basin within which the proposed Project is located is designated as a non-attainment area for NO_x under state standards, and for ozone, PM-10, and PM-2.5 under both state and federal standards.

According to the Wildomar General Plan Environmental Impact Report (SCH No. 2002051143), the expected population growth resulting from buildout of the Wildomar General Plan is not expected to exceed the population growth projections of the SCAQMD's Air Quality Management Plan. In addition, the vehicle miles traveled growth rate under the County General Plan is consistent with the projected population growth utilized by the AQMP. Policies of the Wildomar General Plan are intended to reduce the air quality impact resulting from buildout of the General Plan; the air quality impact was found to be less than significant with respect to consistency with the AQMP.

The proposed Project's emissions from short-term construction of the proposed Project will not exceed SCAQMD regional thresholds for any criteria pollutant. The long-term operation will not exceed the regional daily threshold for NO_X during summer and winter as a result of the vehicle trips traveling to and from the site. Localized significance thresholds will also not be exceeded at sensitive receptor locations within the proposed Project vicinity during construction. In addition, the proposed Project will not result in CO hot spots.

Based on the regional significance threshold analysis for the proposed Project, the short-term construction emissions will not exceed the daily regional thresholds set by SCAQMD and the long-term operational emissions will also not exceed the daily regional thresholds set by SCAQMD during summer and winter.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? *Less Than Significant Impact*

Regional Significance Threshold Analysis

The thresholds contained in the SCAQMD CEQA Air Quality Handbook are considered regional thresholds and are shown in Table 5.2-1, *SCAQMD CEQA Regional Significance Thresholds*. These regional thresholds were developed based on the SCAQMD's treatment of a major stationary source.

Table 5.2-1
SCAQMD CEQA Regional Significance Thresholds

Emission Threshold	Units	VOC	NO_X	CO	SO_X	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operations	lbs/day	55	55	550	150	150	55

Short-Term Analysis

Short-term emissions consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Short-term impacts will also include emissions generated during construction as a result of operation of personal vehicles by construction workers, asphalt degassing, and architectural coating (painting) operations.

The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. This is a standard condition for the proposed Project. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 miles per hour and establishing a permanent, and stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the proposed Project (approximately 25 acres) a Fugitive Dust Control Plan or Large Operation Notification would not be required.

Short-term emissions were evaluated using the CalEEMod version 2011.1.1 computer program. The model evaluated emissions resulting from construction of the proposed Project. The proposed Project will be developed in two Phases. Construction of Phase 1 is expected to last for approximately 17 months starting no sooner than October 2013. Construction of Phase 2 is expected to last for approximately 20 months starting no sooner than March 2015. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that proposed Project emissions are expected to be equal to or less than the estimated construction emissions. In addition to the default values used, several assumptions relevant to model inputs for short-term construction are:

- The proposed Project site is currently vacant; thus, no demolition is necessary.
- Phase 1 construction will begin with site grading for the commercial and office uses no sooner than October 2013. Grading will last approximately four months. Building construction follow and last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately six months and begin during building construction.
- Phase 2 construction will begin with site grading for the business park uses no sooner than March 2015. Grading will last approximately six months. Building construction follow and last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately seven months and begin during building construction.

The construction equipment estimated to be used for each analyzed activity and detailed construction timing is shown in Appendix A of the AQ/GHG Analysis. Table 5.2-2, *Phase 1 Estimated Daily Construction Emissions*, and Table 5.2-3, *Phase 2 Estimated Daily Construction Emissions*, summarize the maximum estimated construction emissions from each Phase.

Table 5.2-2
Phase 1 Estimated Daily Construction Emissions

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
2013						
Grading						
Fugitive Dust	0.00	0.00	0.00	0.00	7.06	3.31
Off-Road Emissions	11.85	97.47	52.85	0.10	4.59	4.59
Worker/Vendor Trips	0.13	0.46	1.49	0.00	0.30	0.03
Total	11.98	97.93	54.34	0.10	11.95	7.93
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
2014						
Grading						
Fugitive Dust	0.00	0.00	0.00	0.00	7.06	3.31
Off-Road Emissions	11.22	90.65	50.83	0.10	4.18	4.18
Worker/Vendor Trips	0.11	0.41	1.37	0.00	0.30	0.03
Total	11.33	91.06	52.20	0.10	11.54	7.52
Building Construction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.74	32.06	23.20	0.04	2.02	2.02
Worker/Vendor Trips	1.34	10.37	12.00	0.03	2.58	0.47
Total	6.08	42.43	35.20	0.07	4.60	2.49
Architectural Coating						
Architectural Coating	67.09	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	0.45	2.77	1.92	0.00	0.24	0.24
Worker/Vendor Trips	0.11	0.13	1.53	0.00	0.34	0.02
Total	67.65	2.90	3.45	0.00	0.58	0.26
2014 Maximum[1]	**73.73**	**91.06**	**52.20**	**0.10**	**11.54**	**7.52**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
2015						
Building Construction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.34	29.16	22.98	0.04	1.80	1.80
Worker/Vendor Trips	1.22	9.43	11.29	0.03	2.55	0.44

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Total	5.56	38.59	34.27	0.07	4,35	2.24
Paving						
Paving	2.07	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.89	30.10	20.54	0.03	2.54	2.54
Worker/Vendor Trips	0.08	0.35	0.97	0.00	0.23	0.02
Total	7.04	30.45	21.51	0.03	2.77	2.56
Architectural Coating						
Architectural Coating	67.09	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	0.41	2.57	1.90	0.00	0.22	0.22
Worker/Vendor Trips	0.10	0.13	1.39	0.00	0.34	0.02
Total	67.60	2.70	3.29	0.00	0.56	0.24
2015 Maximum[2]	**74.64**	**41.29**	**37.56**	**0.07**	**4.91**	**2.80**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: See Appendix A of the AQ/HGH Analysis for model output report. Numbers may not match due to rounding within the model.

[1] Maximum emissions are the greater of grading alone or building construction and architectural coatings since those activities overlap.

[2] Maximum emissions are the greater of building construction and architectural coatings or architectural coatings and paving since those activities overlap.

Table 5.2-3
Phase 2 Estimated Daily Construction Emissions

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
2015						
Grading						
Fugitive Dust	0.00	0.00	0.00	0.00	8.67	3.31
Off-Road Emissions	10.57	83.24	49.03	0.10	3.80	3.80
Worker/Vendor Trips	0.10	0.37	1.25	0.00	0.30	0.03
Total	10.67	83.61	50.28	0.10	12.77	7.14
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Building Construction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.34	29.16	22.98	0.04	1.80	1.80
Worker/Vendor Trips	1.15	8.84	10.57	0.03	2.39	0.41
Total	5.49	38.00	33.55	0.07	4.19	2.21
2015 Maximum[1]	**10.67**	**83.61**	**50.28**	**0.10**	**12.77**	**7.14**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
2016						
Building Construction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	3.99	26.52	22.80	0.04	1.58	1.58
Worker/Vendor Trips	1.14	8.57	10.56	0.03	2.52	0.41
Total	5.13	35.09	33.36	0.07	4.10	1.99
Paving						
Paving	2.07	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	4.58	28.21	20.38	0.03	2.35	2.35
Worker/Vendor Trips	0.08	0.32	0.91	0.00	0.23	0.02
Total	6.73	28.53	21.29	0.03	2.58	2.37
Architectural Coating						
Architectural Coating	63.78	0.00	0.00	0.00	0.00	0.00
Off-Road Emissions	0.37	2.37	1.88	0.00	0.20	0.20
Worker/Vendor Trips	0.10	0.12	1.31	0.00	0.34	0.02
Total	64.25	2.49	3.19	0.00	0.54	0.22

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	75	100	550	150	150	55
2016 Maximum[2]	70.98	37.58	36.55	0.07	4.64	2.59
Exceeds Threshold?	No	No	No	No	No	No

Notes: See Appendix A of the AQ/HGH Analysis for model output report. Numbers may not match due to rounding within the model.

[1] Maximum emissions are the greater of grading alone or building construction alone since those activities don't overlap.

[2] Maximum emissions are the greater of building construction and architectural coatings or architectural coatings and paving since those activities overlap.

Evaluation of Tables 5.2-2 and 5.2-3, above indicates that the maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Therefore. these impacts are considered less than significant.

Even though these impacts are considered less than significant, the Project applicant has agreed to Mitigation Measure **AQ-1**, which contains methods to further reduce Project impacts from construction emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gasses, of this Initial Study).

Long-Term Analysis

Long-term air quality impacts will occur once the proposed Project is in operation. The proposed Project is assumed to be operational in 2016. Mobile source emissions refer to on-road motor vehicle emissions generated from the proposed Project's traffic. These emissions are estimated by using the information provided in the proposed Project-specific Traffic Study (reference Appendix L). Area source emissions include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as natural gas), yard and landscape maintenance (assumed to occur throughout the year in Southern California), consumer use of solvents and personal care products, and an average building square footage to be repainted each year. CalEEMod computes area source emissions based upon default factors and land use assumptions.

Separate emissions were computed for both summer and winter as seen in Table 5.2-4, *Estimated Daily Project Operation Emissions (Summer)*, and Table 5.2-5, *Estimated Daily Project Operation Emissions (Winter)*.

Table 5.2-4
Estimated Daily Project Operation Emissions (Summer)

Source	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Mobile	24.97	52.65	206.75	0.32	34.29	4.03
Natural Gas	0.06	0.55	0.46	0.00	0.04	0.04
Area	10.23	0.00	0.00	0.00	0.00	0.00
Total	**35.26**	**53.20**	**207.21**	**0.32**	**34.33**	**3.08**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Table 5.2-5
Estimated Daily Project Operation Emissions (Winter)

Source	Peak Daily Emissions (lb/day)					
	VOC	NO_X	CO	SO_2	PM-10	PM-2.5
SCAQMD Daily Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Mobile	23.18	53.94	207.53	0.29	34.33	3.09
Natural Gas	0.06	0.55	0.46	0.00	0.04	0.04
Area	10.23	0.00	0.00	0.00	0.00	0.00
Total	**33.47**	**54.49**	**207.99**	**0.29**	**34.37**	**3.13**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Evaluation of the data presented in Tables 5.2-4 and 5.2-5, above, indicates that criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter. Impacts are considered less than significant and no mitigation is required.

Even though these impacts are considered less than significant, the Project applicant has agreed to Mitigation Measure **AQ-2** through which contains methods to further reduce Project impacts from operational emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gasses, of this Initial Study).

Localized Significance Threshold Analysis

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology (SCAQMD 2008) that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short-term and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to

an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The proposed Project is located on the edge of SRA 25/26.

Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with hauling, vendor trips, and worker trips are mobile source emissions that occur off-site and need not be considered. SCAQMD has provided LST lookup tables and sample construction scenarios to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. Although the proposed Project site is larger than five acres, it is anticipated that an area no larger than five acres would be disturbed per day during construction. Therefore, the sample construction scenario for the five-acre site was modified using Project-specific information such as the construction equipment usage information from the CalEEMod data found in Appendix A of the AQ/GHG Analysis.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of a project to the nearest sensitive receptors (in meters). Sensitive receptors in the proposed Project vicinity include existing residences northeast and southwest of the proposed Project site. The closest receptor distance on the LST look-up tables is 25 meters. According to SCAQMD Methodology, projects with boundaries closer than 25 meters to the nearest receptor should use LST's for receptors located at 25 meters. Therefore, a receptor distance of 25 meters was chosen. The results are summarized in Table 5.2-6, *LST Results for Construction Estimates*.

Table 5.2-6
LST Results for Construction Emissions

	Peak Daily Emissions (lb/day)			
Activity	**NO_X**	**CO**	**PM-10**	**PM-2.5**
25 meter LST for 5-acres	**371**	**1,965**	**13**	**8**
Grading	95.0	46.6	8.7	5.0
Building Construction	35.1	19.6	2.0	1.8
Paving	41.8	24.5	2.9	2.7
Exceeds Threshold?	**No**	**No**	**No**	**No**

According to Table 5.2-6, short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant.

Long-Term Analysis

According the LST methodology, LST's would only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site; such as warehouse/transfer facilities. The proposed Project is a mixed-use commercial/office and business park and does not include such uses. Therefore, no long-term LST analysis is needed.

Based on the LST analysis, the short-term construction of the proposed Project will not result in localized air quality impacts to sensitive receptors within the proposed Project vicinity. Due to lack of stationary source emissions, no long-term analysis is needed. No impacts are anticipated and no mitigation is required.

CO Hot Spots Analysis

A carbon monoxide (CO) "hot spot" is a localized concentration of CO that is above the state or federal 1-hour or 8-hour ambient air quality standards (AAQS). Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles.

Based on the information presented below, a CO "hot spot" analysis is not needed to determine whether the addition of the proposed Project related traffic will contribute to an exceedance of either the state or federal AAQS for CO emissions in the proposed Project area.

Considering proposed Project-related traffic as well as existing conditions, ambient growth, and cumulative project traffic, the highest average daily trips would be 31,434 on Clinton Keith Road between the Interstate 15 northbound ramps and George Avenue, which is lower than the values studied by SCAQMD. Therefore, none of the intersections in the vicinity of the proposed Project site would have peak hourly traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. No impacts are anticipated and no mitigation is required.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? *Less Than Significant Impact*

Please reference the discussions in Responses 3.a and 3.b, above. Evaluation of Tables 5.2-2 and 5.2-3, above indicates that the maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter. According to Table 5.2-6, short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant. Compliance with the SCAQMD standards deems the impacts not cumulatively considerable. Any impacts are considered less than significant and no mitigation is required.

d) Expose sensitive receptors to substantial pollutant concentrations? *Less Than Significant Impact*

Please reference the discussions in Responses 3.a, 3.b, and 3.c, above. The maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Therefore these impacts are considered less than significant.

Criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter.

Short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant.

Based on the LST analysis, the short-term construction of the proposed Project will not result in localized air quality impacts to sensitive receptors within the proposed Project vicinity. Due to lack of stationary source emissions, no long-term analysis is needed. No impacts are anticipated and no mitigation is required.

None of the intersections in the vicinity of the proposed Project site would have peak hourly traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail.

e) Create objectionable odors affecting a substantial number of people? *Less Than Significant Impact*

During construction, the proposed Project will include operations that will have diesel combustion and other odors associated with equipment and materials. Diesel fuel odors from construction equipment and new asphalt paving fall into this category. None of these odors are permanent, nor are they normally considered so offensive as to cause sensitive receptors to complain. These impacts will be of short duration and are considered less than significant.

The SCAQMD CEQA Air Quality Handbook (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed Project does not anticipate including any of these land uses that have been identified by the SCAQMD as odor sources. Therefore, there would be no odor impacts from the operational phase of the proposed Project.

STANDARD CONDITIONS & REQUIREMENTS

1. The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures.

MITIGATION MEASURES

AQ-1 Construction Mitigation

m. Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.)

n. Limit fugitive dust sources to 20 percent opacity.
o. Require a dust control plan for earthmoving operations.
p. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
q. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.
r. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.
s. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.
t. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.
u. Require high pressure injectors on diesel construction equipment.*
v. Utilize only CARB Tier 3 or better certified equipment for construction activities.*
w. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.*
x. Suspend use of all construction equipment operations during second stage smog alerts.*

* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during grading activities.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

AQ-2 Operation Mitigation

i. Install EV charging facilities for a minimum of 1% of all parking spaces.*
j. Provide preferential parking locations for EVs and CNG vehicles.*
k. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.*
l. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.*
m. Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment **or** contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.*
n. Provide secure, bicycle parking for employees.*
o. Provide direct safe, direct bicycle access to adjacent bicycle routes.*
p. Provide short-term bicycle parking for retail customers and other non-commute trips.*

* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during site plan review and verified prior to Certificate of Occupancy.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

4. BIOLOGICAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?		✓		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		✓		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan?			✓	

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Biological Resources Assessment*, prepared by PCR Services Corporation, dated September 2012 (BRA), and is contained Appendix C, of the enclosed CD. Please refer to the BRA in Appendix C for a detailed discussion of the background, project description, methods of study, existing setting, regulatory framework and thresholds of significance. The discussion below will center on potential impacts from the proposed Project to sensitive plant species, sensitive wildlife species, riparian habitat or other sensitive natural communities, wetlands, wildlife movement, and consistency with local, regional and state habitat conservation plans.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? *Less Than Significant with Mitigation Incorporated*

Sensitive Plant Species

Development of the proposed Project site would result in the direct removal of numerous common plant species; a list of plant species observed within the proposed Project site. Common plant species present within the proposed Project site occur in large numbers throughout the region and their removal does not meet any the significance thresholds for biological resources (see Section 6.0, *Thresholds of Significance* of the BRA). Therefore, impacts to common plant species would be considered a less than significant impact and no mitigation measures would be required.

Only one listed species was observed on the proposed Project site, paniculate tarplant (Section 4.8.3, *Sensitive Plant Species*, of the BRA). The majority of the occupied areas on-site supported low densities of the species, with a few scattered high density patches. The majority of the paniculate tarplant would be permanently impacted as a result of the proposed Project, with the exception of an unimpacted open space area associated with the preserved portion of Drainage D1 in the southeastern portion of the site (see Figure 11, *Impacts to Distribution of Paniculate Tarplant* of the BRA). Permanent on-site impacts to paniculate tarplant total approximately 20.02 acres, including approximately 1.80 acres of densely distributed areas and approximately 18.22 acres of sparsely distributed areas. A total of approximately 0.09 acre of densely distributed areas and approximately 0.50 acre of sparsely distributed areas will be avoided. This species is widely distributed in Riverside County. This species is a Covered Species under the MSHCP; therefore, with payment of the MSHCP Local Development Mitigation Fee, impacts will remain less than significant. Therefore, impacts to paniculate tarplant would be considered a less than significant impact and no mitigation measures would be required.

No other sensitive plant species were observed on-site. If off-site impacts are proposed within potentially suitable habitat for sensitive plant species, additional surveys may be warranted. Mitigation Measure **BIO-1** has been added to reduce any potential impacts to a less than significant level. No additional mitigation is required.

Sensitive Wildlife Species

Development of the proposed Project would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species. A list of wildlife species observed within the proposed Project site is included in Appendix A, *Floral and Faunal Compendium* of the BRA. Due to the limited amount of native habitat to be removed and the high level of existing disturbance from human activity, these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds (see Section 6.0, *Thresholds of Significance* of the BRA). Therefore, impacts to common wildlife species would be considered less than significant impact and no mitigation measures would be required.

Several of the sensitive wildlife species are not expected to occur within the proposed Project site due to the lack of suitable habitat, including but not limited to federally threatened species such as vernal pool fairy shrimp (*Branchinecta lynchi*) and coastal California gnatcatcher

(*Polioptila californica californica*), and federally endangered species such as San Diego fairy shrimp (*Branchinecta sandiegonensis*), and Riverside fairy shrimp (*Streptocephalus woottoni*). Suitable habitat is also absent on-site for the federally and state endangered least Bell's vireo (*Vireo bellii pusillus*), and the federally endangered and state threatened Stephen's kangaroo rat (*Dipodomys stephensi*). Mitigation Measure **BIO-2** has been added, requiring payment of Stephen's kangaroo rat, per acre of disturbed area. After mitigation is incorporated impacts will be considered less than significant.

Focused surveys for burrowing owl (Species of Special Concern) also determined that this species does not occupy the proposed Project site. Therefore, no impacts to these sensitive wildlife species would occur and no mitigation measures would be required with the exception of the burrowing owl. Due to the presence of suitable habitat and in compliance with the MSHCP, Mitigation Measure **BIO-3**, requiring a pre-construction survey for burrowing owl be required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future has been added to the proposed Project. In addition, Mitigation Measure **BIO-4**, pertaining to the burrowing owl, has been added to the proposed Project, since there will be a potential lag between development of Phases 1 and 2 of the proposed Project, requiring subsequent focused studies. With the implementation of these two (2) mitigation measures, proposed Project impacts will be reduced to a less than significant level. No additional mitigation is required.

One Species of Special Concern Species, the San Diego black-tailed jackrabbit, was observed on the proposed Project site. This species is a Covered Species under the MSHCP; therefore, with payment of the MSHCP Local Development Mitigation Fee, impacts will remain less than significant. No additional mitigation is required for this species.

The site supports potential nesting and foraging habitat for migratory birds, in addition to potential foraging habitat for raptors. Based on the disturbed nature and the presence of development surrounding the proposed Project site, the quality of foraging habitat is considered to be low. The loss of foraging habitat as a result of the proposed Project would not expect to impact the foraging of these species. Direct impacts to these species would be avoided through compliance with the Migratory Bird Treaty Act (MBTA). The proposed Project is required by law to comply with the MBTA and perform site work to avoid impacts to birds as described above. Mitigation Measure **BIO-5** has been included to reduce any potential impacts to nesting and foraging habitat. With the implementation of this mitigation measure, impacts to foraging habitat would be considered adverse but less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? *Less than Significant with Mitigation Incorporated*

The proposed Project supports two native habitats on-site totaling 1.2 acres, including California buckwheat scrub (0.97 acre) and chamise chaparral (0.23 acre). The remainder of the proposed Project site supports non-native communities including non-native grassland and non-native grassland/California buckwheat scrub. None of the plant communities on-site are considered sensitive pursuant to CDFG, USFWS, or the MSHCP. Furthermore, the native communities within the proposed Project site are small, scattered, and are of low quality for sensitive plant and

wildlife species. The majority of the on-site plant communities would be impacted by the proposed Project, excluding the open space areas proposed in the northwestern corner of the southern portion of the site (adjacent to Yamas Road), and associated with Drainage D1 in the southeastern corner. Impacts to natural plant communities are summarized in Table 5.4-1, *Permanent Impacts to Natural Plant Communities and Developed Areas*, below. Since none of these habitats are sensitive, impacts would be considered less than significant. No mitigation measures would be required.

Table 5.4-1
Permanent Impacts to Natural Plant Communities and Developed Areas

	On-site (acres)	Off-site (acres)	Total (acres)
Non-native Grassland	20.57	1.35	**21.92**
Non-native Grassland/California Buckwheat Scrub	6.01	0.16	**6.17**
California Buckwheat Scrub	0.94	0.67	**1.61**
Chamise Chaparral	0.18	0.02	**0.20**
Developed	0.55	0.03	**0.58**
Total	**28.25**	**2.23**	**30.48**

Source: PCR Services Corporation, 2012

The proposed Project site does not support any riparian habitat, but does support drainages that are considered jurisdictional pursuant to CDFG. Impacts are proposed to a portion of these jurisdictional drainages. Impact acreages are summarized below in Table 5.4-2, *Permanent Impacts to CDFG Jurisdictional Drainages*. Impacts, in all, total 0.062 acre of permanent on-site impacts (881.65 linear feet) and 0.012 acre of permanent off-site impacts (106.97 linear feet permanent impacts). Impacts to these jurisdictional areas would be required to comply with Section 1602 of the California Fish and Game Code, including applying for a permit and mitigation subject to approval by CDFG. Mitigation Measure BIO-6 has been added to ensure compliance with this regulation. After mitigation is incorporated, proposed Project impacts would be reduced to a less than significant level. It should be noted that the drainages have been avoided to the greatest extent feasible including the central portion of Drainage D1, and the majority of Drainage D2 (see Figure 13 of the BRA).

Table 5.4-2
Permanent Impacts to CDFG Jurisdictional Drainages

	On-Site (acres)	Off-site (acres)	Total (acres)
D1	0.042	0.012	0.054
D1T1	0.017	-	0.017
D2	0.003	-	0.003
Total	**0.062**	**0.012**	**0.074**

Source: PCR Services Corporation, 2012

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? *Less than Significant with Mitigation Incorporated*

No federally protected wetlands occur on the proposed Project site. The proposed Project site does, however, support non-wetland, ephemeral USACE/RWQCB "waters of the U.S." that are regulated pursuant to Section 404 and 401 of the Clean Water Act. Impact acreages are summarized in Table 5.4-3, *Permanent Impacts to USACE/RWQCB Jurisdictional Drainages*. Impacts, in all, total 0.025 acre of permanent on-site impacts (881.65 linear feet) and 0.007 acre of permanent off-site impacts (106.97 linear feet). Impacts to these jurisdictional areas would be required to comply with Sections 404 and 401 of the Clean Water Act, including applying for a permit and mitigation subject to approval by USACE and RWQCB, respectively. Mitigation Measure **BIO-6** has been added requiring compliance with these regulations. After mitigation is implemented, proposed Project impacts would be reduced to a less than significant level. The drainages have been avoided to the greatest extent feasible including the central portion of Drainage D1, and the majority of Drainage D2 (see Figure 13 of the BRA).

Table 5.4-3
Permanent Impacts to USACE/RWQCB Jurisdictional Drainages

	On-Site (acres)	Off-site (acres)	Total (acres)
D1	0.016	0.007	0.023
D1T1	0.006	-	0.006
D2	0.003	-	0.003
Total	**0.025**	**0.007**	**0.032**

Source: PCR Services Corporation, 2012

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? *Less than Significant with Mitigation Incorporated/No Impact*

Wildlife Movement

The proposed Project site supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and at least marginal movement habitat for reptile, bird, and mammal species), but it likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale, and is not identified as a regionally important dispersal or seasonal migration corridor. Movement on a local scale likely occurs with species adapted to urban environments due to the high level of development in the vicinity of the proposed Project site. Although implementation of the proposed Project would result in disturbances to local wildlife movement within the proposed Project site, those species adapted to urban areas would be expected to persist on-site following construction, particularly within the open space areas. As such, impacts would be less than significant and no mitigation measures would be required.

Since the proposed Project site does not function as a regional wildlife corridor and is not known to support wildlife nursery area(s), no impacts would occur and no mitigation measures would be required.

Migratory Species

The proposed Project site has the potential to support songbird nests due to the presence of limited shrubs and ground cover on-site, and trees off-site. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact as defined by the thresholds of significance. Any potential impacts to raptor and songbird nests would be considered potentially significant. The proposed Project is required by law to comply with the MBTA and perform site work to avoid impacts to birds as described above. Mitigation Measure **BIO-5** has been included to reduce any potential impacts to nesting and foraging habitat. With the implementation of this mitigation measure, impacts to foraging habitat would be considered adverse but less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? *No Impacts*

The proposed Project site supports limited trees, including one coast live oak tree that is proposed for preservation within an open space area along the western boundary, and the canopy of another smaller oak tree along the western boundary (the trunk of this oak tree is off-site; the canopy that extends on-site will not be impacted). Since no impacts are proposed to trees, no conflicts would occur with any local ordinances.

f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan? *Less than Significant Impact*

The proposed Project site is within the Western Riverside County MSHCP and requires compliance with the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP), and the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP). The proposed Project site is not within a cell, a designated cell group, or a subunit within the Elsinore Area Plan; therefore, conservation of land on the proposed Project site is not required pursuant to the MSHCP. The proposed Project site is also not within the survey overlays for Narrow Endemic Plant Species (Section 6.1.3 of the MSHCP), Criteria Area Species, Amphibian Species, or Mammal Species (Section 6.3.2 of the MSHCP). The proposed Project site will not result in edge effects that will adversely affect biological resources within the MSHCP Conservation Area and, as such, will not be subject to the Guidelines Pertaining to the Urban/Wildlands Interface for the treatment and management of edge factors such as lighting, urban runoff, toxics, and domestic predators (Section 6.1.3 of the MSHCP). Compliance with the Burrowing Owl and Riparian/Riverine requirements of the MSHCP are summarized below:

- Focused burrowing owl surveys were conducted and were negative; a 30-day pre-construction survey will be conducted;

- The two ephemeral drainages on the proposed Project site meet the definition of Riverine Areas pursuant to the MSHCP ("*areas with fresh water flow during all or a portion of the year*"). Apart from the one coast live oak tree along the western ephemeral drainage, the biological functions and values of Riparian/Riverine Areas do not exist on-site. As such, the protection of associated species of amphibians, birds, fish, invertebrate-crustacean, and plant species is not required. A portion of the western ephemeral drainage has been placed in an open space lot for 100 percent avoidance, including the coast live oak tree. The proposed Project will result in temporary impacts to Riverine Areas. As required by the City of Wildomar, a site-specific storm drain system will be designed and engineered for the proposed Project that will adequately mitigate this impact. Temporary impacts will only occur until the on-site storm drain system is constructed, and will improve existing conditions by carrying flows consistent with local and regional storm flow requirements. In addition, the storm water runoff captured by the on-site storm drain system will be treated in water quality basins and/or biological swales before being discharged off-site. With this drain system, the proposed Project will have no impact on existing water quality downstream and off-site.

  Other kinds of aquatic features that could provide suitable habitat for Riparian/Riverine species, such as fairy shrimp, are not present on-site (i.e. vernal pools, swales, vernal pool-like ephemeral ponds, stock ponds, or other human-modified depressions such as tire ruts, etc.).

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

BIO-1 Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.

Timing/Implementation: Implemented prior to any off-site grading.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-2 The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently $500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.

Timing/Implementation: The fee must be paid prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

BIO-3 Due to the presence of suitable habitat and in compliance with the MSHCP, a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.

Timing/Implementation: Implemented 30 days prior to ground disturbance.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-4 If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the *Staff Report on Burrowing Owl Mitigation*.

Timing/Implementation: Implemented prior to ground any disturbance for Phase 2.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-5 Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the proposed Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

Timing/Implementation: Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

BIO-6 Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, *Impacts to Jurisdictional Features*, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFG. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

2. On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

Timing/Implementation: Implemented prior to ground any disturbance in areas designated as jurisdictional features.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

5. CULTURAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		✓		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		✓		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
d) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Historical/Archaeological Resources Survey Report, Assessor's Parcel No. 380-350-022, City of Wildomar, Riverside County, California*, prepared by CRM TECH, dated August 1, 2012 (Archaeo Report), and the *Paleontologic Resources Assessment Report, Assessor's Parcel No. 380-350-022, City of Wildomar, Riverside County, California*, prepared by CRM TECH, dated August 3, 2012 (Paleo Report). The Archaeo Report is contained Appendix D, and the Paleo Report is contained Appendix E, of the enclosed CD.

a,b) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5; or, cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? *Less Than Significant Impact with Mitigation Incorporated*

Records Search

On July 6, 2012, CRM TECH (Project Archaeologist) conducted the historical/archaeological resources records search at the Eastern Information Center (EIC), University of California, Riverside. During the records search, maps and records on file at the EIC were examined for previously identified cultural resources in or near the proposed Project area and existing cultural resources reports pertaining to the proposed Project vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside County Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

1. Historical Research

Historical background research for this study was conducted by CRM TECH on the basis of published literature in local and regional history and historic maps of the region. Among maps

consulted for the Archaeo Report were U.S. General Land Office (GLO) land survey plat maps dated 1857-1899 and U.S. Geological Survey (USGS) topographic maps dated 1901-1953. These maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, located in Moreno Valley.

2. Native American Participation

On June 28, 2012, CRM TECH submitted a written request to the State of California's Native American Heritage Commission for a records search in the commission's sacred lands file. Following the Native American Heritage Commission's recommendations, CRM TECH contacted 19 Native American representatives in the region in writing on July 17,2012 to solicit local Native American input regarding potential cultural resources concerns associated with the proposed Project. The correspondences between CRM TECH and the Native American representatives are included as Appendix 2 of the Archaeo Report. In addition, representatives of the City of Wildomar, Matthew Bassi, City Planner, and Matthew Fagan, City CEQA Consultant met with the Pechanga Band on January 3, 2013 for consultation pursuant to SB 18. At that time, a General Plan Amendment was included within the scope of the proposed Project to amend the City's Circulation Element. Since that meeting, it was determined by the City Staff that a GPA is not required as part of the proposed Project. Still, it should be noted that this consultation occurred.

3. Field Survey

On July 5, 2012, CRM TECH carried out the intensive-level, on-foot field survey of the proposed Project area. During the survey, the Project Archaeologist walked parallel east-west transects spaced 15 meters (approx. 50 feet) apart. The areas enclosed by fences were inspected from the perimeter. In this way, the ground surface in the proposed Project area was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic periods (i.e., 50 years ago or older). Due to recent disking, ground visibility in the proposed Project area was good (50%-80%) except along the drainages where the vegetation was densest. The areas covered by pavement offered no visibility of the natural ground surface, as would be expected.

Results and Findings

1. Records Search

According to EIC records, the proposed Project area was included in a 2008 study, but no cultural resources were recorded within or adjacent to the proposed Project area as a result of that or any other previous study (Goodman 2008). Outside the proposed Project boundaries, but within a one-mile radius, EIC records show some 67 additional studies covering various tracts of land or linear features, in all covering approximately 50% of the area within the scope of the records search (reference Figure 4 of the Archaeo Report).

Despite the substantial number of studies in the vicinity, only 12 historical/archaeological sites and 5 isolates—i.e., localities with fewer than three artifacts—have been previously recorded within the one-mile radius, as listed in Table 1 of the Archaeo Report. Seven of the sites, and all of the isolates were prehistoric—i.e., Native American—in origin, consisting of lithic scatters, flakes, and bedrock milling features. The closest of these to the proposed Project location was a stone flake isolate (33-011436) that was recorded approximately ¼-mile to the southeast. The other five sites dated to the historic period, and included three buildings, trash scatters, and the remains of an

olive orchard. None of these previously recorded sites or isolates was located in the immediate vicinity of the proposed Project area, and thus none of them requires further consideration.

2. Historical Research

Historic maps consulted for the Archaeo Report (Figures 5-8 of the Archaeo Report) indicate that the proposed Project area is low in sensitivity for cultural resources from the historic period. In the mid-1850s, when the U.S. government conducted the first systematic land surveys in southern California, no man-made features were found anywhere in the vicinity of the proposed Project area (Figure 5 of the Archaeo Report). Around the turn of the century, a few scattered buildings, likely farmsteads, and meandering roads were observed nearby, but none of them within or adjacent to the proposed Project area (Figure 6 of the Archaeo Report). The forerunner of today's Clinton Keith Road was in place along the northern proposed Project boundary by the late 1930s, and a building with a windmill had appeared just to the northwest by the 1950s, but the proposed Project area evidently remained undeveloped throughout the historic period, except perhaps as farmland (Figures 7, 8 of the Archaeo Report).

3. Native American Participation

In response to CRM TECH's inquiry, the Native American Heritage Commission reports in a letter dated June 29, 2012, that the sacred lands record search identified no Native American cultural resources within the proposed Project area, but recommends that local Native American groups be contacted for further information. For that purpose, the commission provided a list of potential contacts in the region (see Appendix 2 of the Archaeo Report).

Upon receiving the commission's response, CRM TECH initiated correspondence with all 15 individuals on the referral list and the organizations they represent. In addition, Yvonne Markle, Environmental Office Manager for the Cahuilla Band of Indians, John Gomez, Jr., Cultural Resources Coordinator for the Ramona Band of Cahuilla Indians, Steve Estrada, Environmental Director for the Santa Rosa Band of Cahuilla Indians, and Rob Roy, Environmental Director for the La Jolla Band of Mission Indians, were also contacted. As of this time, four of the tribal representatives have responded in writing (see Appendix 2 of the Archaeo Report).

Shasta Gaughen, Tribal Historic Preservation Officer for the Pala Band of Mission Indians, states in a letter that her tribe has no concerns and wishes to defer to other tribes located closer to the proposed Project area. On behalf of the Santa Rosa Band of Cahuilla Indians, Tribal Council member Gabriella Rubalcava responded via e-mail, stating that the Santa Rosa Band also has no specific concerns and would defer further consultations specifically to the Soboba Band of Luiseño Indians.

Joseph Ontiveros, Cultural Resources Director for the Soboba Band of Luiseño Indians, identifies the proposed Project area as a part the tribe's Traditional Use Area and finds it to be in close proximity to known village sites in an area of shared use by both the Luiseño and the Cahuilla. He requests further consultation with the Project developer/landowner, and that a Native American monitor from the Soboba Band is present during earth-moving activities. Similarly, Tuba Ebru Ozdil, Cultural Planner for the Pechanga Band of Luiseño Indians, states that the proposed Project area lies within the tribe's ancestral territory and is close to known cultural sites. The Pechanga Band also wishes to be present during earth-moving activities, and requests tribal review of all

archaeological and environmental documentation, as well as proposed Project plans, and further government-to-government consultation with the lead agency. The City has determined that they will consult with the Pechanga Band for the proposed Project.

4. Field Survey

The intensive-level field survey produced completely negative results for potential cultural resources. The ground surface in the entire proposed Project area was closely inspected for any evidence of human activities dating to the prehistoric or historic periods, but none was found. A metal trough was noted in the southwest portion of the proposed Project area, and a small amount of modern refuse was observed in a light scatter over the property, but none of these items holds any historical or archaeological interest. In sum, no evidence of any buildings, structures, objects, sites, features, or artifacts more than 50 years of age was encountered during the field survey.

Summary

In summary of the research results presented above, no potential "historical resources" were previously recorded within or adjacent to the proposed Project area, and none was encountered during the present survey. In addition, Native American input during this study did not identify any sites of traditional cultural value in the vicinity, and historic maps show no notable cultural features within the proposed Project area during the historic period. Based on these findings, and in light of the criteria listed above, the present report concludes that no historical resources exist within or adjacent to the proposed Project area.

However, because archaeological resource sites have been identified within the City of Wildomar, there is the potential for the unanticipated discovery of these resources. Because these resources are known to exist in the general area, the mitigation measures listed in this section (**CUL-1** through **CUL-6**) will ensure that any unanticipated discovery would not have a significant impact on archeological resources. Impacts will remain less than significant with mitigation incorporated. No additional mitigation is required.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? *Less Than Significant Impact with Mitigation Incorporated*

Methods and Procedures

1. Records Searches

The records search service was provided by the San Bernardino County Museum (SBCM) in Redlands and the Natural History Museum of Los Angeles County (NHMLAC) in Los Angeles. These institutions maintain files of regional paleontological localities as well as supporting maps and documents. The records search results were used to identify known paleontological localities in or near the proposed Project area, or in the general vicinity.

2. Literature Review

In addition to the records searches, a literature search was conducted using materials in the CRM TECH library, including unpublished reports produced during surveys of other properties in the area, and the personal library of CRM TECH geologist/paleontologist Harry M. Quinn, California Professional Geologist #3477.

3. Field Survey

On July 5, 2012, CRM TECH (Project paleontologist) conducted the field survey of the proposed Project area. During the survey, the Project paleontologist walked parallel east-west transects spaced 15 meters (approx. 50 feet) apart. The areas enclosed by fencing were inspected from the perimeter. Using these methods, the ground surface in the entire proposed Project area was systematically and carefully examined to determine the soil types, to verify the geological formations, and to look for any indications of paleontological remains. Visibility of the native ground surface was virtually zero where the proposed Project area lies under pavement, and varied from fair to good (50-80%) in the open fields, depending on the density of the vegetation.

Results and Findings

1. Records Searches

The Natural History Museum of Los Angeles County and the San Bernardino County Museum found no known paleontological localities within the proposed Project area. However, numerous paleontological localities have been reported nearby from sediment lithologies similar to those known to occur at this location, namely the Pleistocene-age Pauba Formation and an unnamed sandstone and conglomerate formation.

Based on previous discoveries, the San Bernardino County Museum considers the proposed Project vicinity to be an area of high paleontologic sensitivity, with a demonstrated high potential to contain "significant nonrenewable fossil resources present at the surface and in the subsurface" primarily Pleistocene-age vertebrate fossils. The Natural History Museum also notes that the entire proposed Project area contains exposures of the Plio-Pleistocene Pauba Formation that may contain significant fossil vertebrate remains. Both of the museums note the presence of small vertebrate fossils in the Pauba Formation and the need, therefore, to collect and process sediment samples to inspect them for small specimens.

2. Literature Review

The proposed Project area has been mapped by Mann as *Qp*, namely the Pauba Formation of Pleistocene age, and *Qfa*, the Temecula Arkose of probable Pleistocene age. Rogers maps it as *Qc*, or nonmarine sedimentary rocks of Pleistocene age. Kennedy maps the surface geology at this location as *Qps*, the sandstone portion of the Pauba Formation, with some *Kgdd*, or Granodiorite, in the northern portion. The Pauba Formation is assigned a late Pleistocene age and the Granodiorite a Mesozoic age.

Hill et al. also map the surface geology in the proposed Project area as *Qps* with some *Kgd* in the northern portion. The *Qps* represents the sandstone member of the Pleistocene-age Pauba

Formation, described as "light-brown, moderately well indurated sandstone and siltstone facies," and the *Kgd* is described as granodiorite of Cretaceous age (*ibid*.). Kennedy and Morton (2003) map the surface geology at the proposed Project location as *Qpfs*, which is defined as the sandstone member of the Pauba Formation, with *Kpvg*, or monzogranite to granodiorite, in the northern portion. Based on the mapping, the proposed Project area is located on an uplifted block north of the Wildomar Fault.

Knecht maps the surface soils as *AtC2*, *AtD2*, *MmB*, *MnD2*, *MnE3*, *PlD*, *RnD2*, and *RnE3*. The *AtC2* and *AtD2* soil belong to the Arlington and Greenfield Series. These soils are found on terraces and ridges and in concave areas where dissected terraces and alluvial fans merge and are commonly eroded. The *MmB*, *MnD2*, and *MnE3* soils belong to the Monserate Series, which form on terraces and old alluvial fans composed predominantly of granitic material. The *PlD* soils belong to the Placentia Series. They develop on alluvial fans and terraces in alluvium derived mainly from metasedimentary sandstones. The *RnD2* and *RnE3* soils belong to the Ramona and Buren Series. These soils form on old dissected terrace deposits.

3. Field Survey

The field survey produced negative results for any indication of paleontological resources, and no surficial evidence of fossil remains or potentially fossiliferous sediments were encountered. As mentioned above, the surface soils in most of the proposed Project area have been disturbed in the past by disking and various construction activities. Consequently, no intact paleontological deposits are likely to survive in the surface soils, and none were observed.

Discussion

The results of the records searches and the literature research indicate that the proposed Project area is located upon outcrops of the Pleistocene-age Pauba Formation, which has uplifted along the north flank of the Wildomar Fault Zone. Sediments of this group have produced a number of vertebrate and some invertebrate fossils during construction monitoring on properties located approximately 3-5 miles to the southeast of the proposed Project area and throughout the region. Based on these findings, the proposed Project area is assigned a high potential to contain nonrenewable paleontological remains.

CEQA guidelines (Title 14 CCR App. G, Sec. V(c)) require that public agencies in the State of California determine whether a proposed Project would "directly or indirectly destroy a unique paleontological resource" during the environmental review process. The present Paleo Report, conducted in compliance with this provision, is designed to identify any significant, non-renewable paleontological resources that may exist within or adjacent to the proposed Project area, and to assess the possibility for such resources to be encountered in future excavation and construction activities.

In summary of the research results presented above, the proposed Project's potential to impact paleontological resources has been determined to be high, especially for Pleistocene-age vertebrate fossils. Therefore, it is recommended that a paleontological resource impact mitigation program shall be implemented during the proposed Project to prevent such impacts or reduce them to a level less than significant. With the incorporation of Mitigation Measures **CUL-7** through **CUL-9**, any proposed Project impacts can be reduced to a less than significant level.

d) Disturb any human remains, including those interred outside of formal cemeteries? *Less Than Significant Impact With Mitigation Incorporated*

Neither the City nor the County have records of the proposed Project site containing any previously identified formal or informal cemetery. Although there are no known archaeological resources on the proposed Project site, in the event human remains are encountered during ground-disturbing activities, mitigation measures (**CUL-1** through **CUL-6**) identified below would reduce any impacts to a level of less than significant. No additional mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

CUL-1 Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation:

> If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the appropriate Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Commission and/or City Council. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: *As a condition of project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Building and Planning Departments.*

CUL-2 At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe[3] to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal

[3] The appropriate Tribe will be selected from the list of Tribal representatives provided by the Native American Heritage Commission.

monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

Timing/Implementation: *Prior to the issuance of a grading permit.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-3 Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation:

> If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-4 The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found on the Project site, to the appropriate Tribe for proper treatment and disposition as defined by the appropriate Tribe.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

CUL-5 All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the appropriate culturally affiliated Native American Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

Timing/Implementation: *As a condition of Project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-6 To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified professional shall monitor all construction activities that could potentially impact archaeological and/or paleontological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.

Timing/Implementation: As a condition of Project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-7 A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

Timing/Implementation: As a condition of Project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-8 Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

CUL-9 Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).

Timing/Implementation: *As a condition of project approval, and implemented during ground-disturbing construction activities.*

Enforcement/Monitoring: *City of Wildomar Engineering and Planning Departments.*

6. GEOLOGY AND SOILS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?			✓	
ii) Strong seismic ground shaking?			✓	
iii) Seismic-related ground failure, including liquefaction?			✓	
iv) Landslides?				✓
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Geologic Hazards Evaluation and Updated Preliminary Geotechnical/Fault Investigation, Proposed 9-Acre Medical ad Education Center Development and Associated 29.4-Acre Tentative Parcel Map 36492, Located East of Yamas Drive, South of Clinton Keith Road and West of Elizabeth Lane in the City of Wildomar, Riverside County, California*, prepared by LGC, dated August 24, 2012 (Geo Study), and is contained Appendix F, of the enclosed CD.

a) i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? *Less Than Significant Impact*

The proposed Project is located within seismically active Southern California (Seismic Zone 4) and is expected to experience occasional strong ground motions from earthquakes caused by both local and regional faults. According to the Geo Study, based on a review of published and unpublished geologic/geotechnical maps and literature pertaining to the proposed Project site and regional geology, the closest active faults are the Elsinore-Temecula Fault located approximately 3.0 miles from the proposed Project site and the Elsinore-Glen Ivy Fault located approximately 7.8 miles from the proposed Project site. Other active faults, within 20 miles of the proposed Project site are the Elsinore-Julian Fault, approximately 19.6 miles; and the San Jacinto Fault, approximately 20 miles. These faults are capable of producing a moderate to strong magnitude earthquake.

The Geo Study indicates that no faults (active, potentially active, or inactive) are known to traverse through the proposed Project site, based on review of geologic literature and aerial photographs, as well as geologic mapping. The site does not lie within an Alquist-Priolo Earthquake Fault Hazard Zone as defined by the State of California in the Alquist-Priolo Earthquake Fault Hazard Zoning Act or a Riverside County Fault Zone. The possibility of damage due to ground rupture is considered negligible since active faults are not known to cross the proposed Project site.

As there is no evidence of a known fault on the proposed Project site, the proposed Project would not expose people or structure to potential substantial adverse effects associated with ground rupture and this would be considered a less than significant impact.

ii) Strong seismic ground shaking? *Less Than Significant Impact*

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the proposed Project site, include soil liquefaction and dynamic settlement. Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. According to the Geo Study, the potential for liquefaction is considered remote.

Other secondary seismic effects include shallow ground rupture, and seiches and tsunamis. In general, these secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault, and the on-site geology. According to the Geo Study, ground rupture due to active faulting is not likely on-site due to the absence of known active fault traces. Cracking due to shaking from distant seismic events is not considered a significant hazard, although it is a possibility at any time. Based on the elevation of the development at the proposed Project site with respect to sea level, and its distance from large, open bodies of water, the potential of seiche and/or tsunami are considered to be negligible.

Completion of a geotechnical soils report and compliance with the California Building Code will minimize the potential for damage associated with strong seismic ground shaking and reduce any impacts to a less than significant level. This is a standard condition and is not considered unique mitigation under CEQA. Impacts will remain less than significant. No additional mitigation is required.

iii) Seismic-related ground failure, including liquefaction? *Less Than Significant Impact*

Please reference the discussion in Response 6.a.ii, above. To address any potential impacts from other seismic-related ground failure, including liquefaction, compliance with the standard requirements contained in the California Building Code are expected to reduce the impacts associated with ground failure hazards to a less than significant level. No additional mitigation is required.

iv) Landslides? *No Impact*

According to the Geo Study, review of geologic literature and aerial photographs, as well as geologic mapping and previous field exploration does not indicate the presence of landslides on, or directly adjacent to, the proposed Project site. Based on this information, no impacts are anticipated. No mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil? *Less Than Significant Impact*

Soil erosion may result during construction, as grading and construction can loosen surface soils and make soils susceptible to effects of wind and water movement across the surface. The City routinely requires the submittal of detailed Erosion Control Plans with any grading plans. The implementation of this standard requirement is expected to address any erosion issues associated with the future grading of the site. As a result, these impacts are considered to be less than significant with the implementation of the necessary erosion and runoff control measures required as part of the approval of a grading plan. No additional mitigation is required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? *Less Than Significant Impact*

Please reference the discussion in Response 6.a.ii, above. To address any potential impacts as a result of being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, compliance with the standard requirements contained in the California Building Code are expected to reduce the impacts associated with ground failure hazards to a less than significant level. No additional mitigation is required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? *Less Than Significant Impact*

According to the Geo Study, the majority of the proposed Project site is underlain by 2 feet to 15 feet of potentially compressible undocumented artificial fill, young alluvium and very weathered bedrock, which may be prone to potential intolerable post-grading settlement and/or hydroconsolidation, under the surcharge of the development proposed structural loads and/or fill loads. It is recommended that these materials be overexcavated to underlying bedrock.

Any development proposed on the site is required to comply with the California Building Code and commonly accepted engineering practices, which require special design and construction methods for dealing with expansive and unstable soil behavior. Compliance with recommendations included

in the soils report that is required prior to issuance of a grading plan, as well as with applicable building codes, would ensure that soils at development sites would be capable of supporting the structures resulting from the proposed Project. This compliance would reduce impacts resulting from expansive and unstable soils to a less than significant level. No additional mitigation is required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? *No Impact*

The proposed Project does not propose the use or construction of septic tanks or alternative wastewater disposal systems. No impacts are anticipated. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. All grading shall conform to the California Building Code, Ordinance 457, and all other relevant laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.
2. Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded per the requirements of Ordinance 457 (refer to dept. form 284-47). Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer.
3. Prior to the issuance of a grading permit, the developer shall submit a geotechnical soils reports to the City Engineer for review and approval prior to issuance of grading permit. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by the City of Wildomar.

MITIGATION MEASURES

None.

7. GREENHOUSE GAS EMISSIONS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar,* prepared by Albert A. Webb Associates, dated February 13, 2013, Revised July 17, 2013, Revised October 18, 2013 (AQ/GHG Analysis), and is contained Appendix B, of the enclosed CD. Please refer to the AQ/GHG Analysis in Appendix B for a detailed discussion of the federal, state and regional regulatory setting. The discussion below will center on the short- and long-term emissions analysis. Even though the following analysis, below, concludes that the Project has less than significant greenhouse gas Emissions impacts and no mitigation is required, the Project applicant has agreed to implement certain measures to further reduce the Project's greenhouse gas impacts. Therefore, mitigation measure **GHG-1**, though not legally required, has been incorporated into this document. This "mitigation measure" is voluntary and not legally required since the analysis shows that proposed Project's impacts, described below, have no significant impacts.

a,b) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or, conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? *Less Than Significant Impact*

Methodology

At this time, there are no adopted numeric thresholds that govern the determination of the significance of the Project's GHG emissions. This analysis in the AQ/GHG Analysis used the AB 32 reduction target as a significance threshold, which called for the state to achieve 1990 levels of GHG emissions by 2020. This equates to a 28.5 percent reduction in GHG emissions. The AQ/GHG Analysis's methodology is to compare the Project's GHG emissions as proposed to the Project's emissions if the Project were constructed before AB 32, which is often referred to as a Business-As-Usual (BAU) analysis.

Many aspects of the GHG estimates for the BAU analysis are similar to those analyzed for the proposed Project. BAU emissions for construction will be similar to those shown for the Project, as the same Project footprint will be disturbed. Therefore, construction under the BAU analysis is assumed to be equivalent to that of the Project and was not modeled separately. BAU emissions

for the remaining sources of GHG emissions were estimated using CalEEMod and are similar to the GHG estimates for the Project with the following exceptions:

- The energy-related GHG emissions were estimated according to the historical 2005 Title 24 standards.
- Mobile source emissions factors do not include the Pavley motor vehicle standards for cars and light trucks and the Low Carbon Fuel Standard (LCFS) for motor vehicle fuels;
- No adjustments were made for the water efficient landscape requirements in the City Municipal Code or the CalGreen code requirements that were not in effect at the time AB 32 was passed.

Emissions Estimates

It should be noted that the release of GHG in general and CO_2 specifically into the atmosphere is not of itself an adverse environmental affect. It is the affect that increased concentrations of GHG including CO_2 in the atmosphere has upon the Earth's climate (i.e., climate change) and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although air quality modeling can estimate a project's incremental contribution of CO_2 into the atmosphere, it is not feasible to determine whether or how an individual project's relatively small incremental contribution (on a global scale) might translate into physical effects on the environment. Since the Earth's climate is determined by the complex interaction of different components of the Earth and its atmosphere, it is not possible to discern whether the presence or absence of GHG emitted by the Project would result in any measurable impact that would cause climate change.

The following Project activities were analyzed below for their contribution to global GHG emissions:

Short-Term Analysis

Construction-Related Activities

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the proposed Project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. Life-cycle emissions associated with the manufacture of building materials are also not quantified in this analysis although they undoubtedly exist. Quantification was not attempted because of the large spatio-temporal variation in sources for building products used to construct the proposed Project and the consequent large uncertainty associated with the resulting emissions. For this reason, to attempt to quantify life-cycle emissions of materials would be speculative. This conclusion is consistent with recent guidance on quantification of emissions for commercial projects presented by the California Air Pollution Control Officer's Association guidance. *CEQA and Climate Change* (CAPCOA, p. 65).

Table 5.7-1, *Project Construction Equipment GHG Emissions*, summarizes the CalEEMod output results and presents the GHG emissions estimates for the proposed Project in metric tonnes per year (MT/yr) for CO_2, CH_4, N_2O, and CO_2E (GHG and ozone-depleting gases).

Table 5.7-1
Project Construction Equipment GHG Emissions

Year	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
2013	332.35	0.03	0.00	333.03
2014	888.53	0.07	0.00	889.99
2015	1,026.99	0.08	0.00	1,026.76
2016	617.91	0.04	0.00	618.80
Total	**2,827.01**	**0.23**	**0.00**	**2,868.58**
Amortized Total				**95.62**

Evaluation of Table 5.7-1, above indicates that an estimated 2,868.58 $MTCO_2E$ will occur from proposed Project construction equipment over the course of the estimated construction period. The draft SCAQMD GHG threshold Guidance document released in October 2008 (SCAQMD 2008b, p. 3-8) recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the proposed Project's GHG emissions were spread evening over 30 years to yield and average of 95.62 $MTCO_2E/yr$.

Long-Term Analysis

Area Source Emissions

CalEEMod estimates the GHG emissions associated with area sources which include landscape equipment emissions, architectural coating, consumer products, and hearths. Landscape equipment servicing the proposed Project site create CO_2 resulting from fuel combustion based on the proposed Project's land uses. Consumer products consist of consumer use of solvents and personal care products and architectural coatings consist of an average building square footage to be repainted each year. Hearth emissions do not apply to the proposed Project because no dwelling units are proposed. The CalEEMod output contained in Appendix A of the AQ/GHG Analysis shows that the GHG emissions from area sources are negligible and are reported at zero.

Energy-Related Emissions

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings is typically

generated at an off-site power plant which indirectly generates GHG emissions. The electricity intensity factor for the Project was modified to reflect the 2020 Renewable Portfolio Standard (RPS), which requires a 33 percent mix of renewable energy sources (see footnote #11 of the AQ/GHG Analysis). The default electricity intensity factor was used for the BAU.

The default energy usage values used in CalEEMod are based on the CEC sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies and reflect current 2008 Title 24 improvements (CalEEMod User's Guide, p. 30). The 2013 Title 24 standards were approved in May 2013 and take effect on January 1, 2014 and are 30 percent more efficient than the 2008 standards (see footnote #12 of the AQ/GHG Analysis). To reflect the 2013 Title 24 standards which the Project will be subject to, a 30 percent reduction was in energy usage was input in CalEEMod. In addition, the Project will install high-efficiency lighting throughout the Project as a design feature. A 40 percent reduction was input within CalEEMod to account for this design feature, which is conservative since Energy Star lighting is approximately 75 percent more efficient than traditional lighting (see footnote #13 of the AQ/GHG Analysis). The BAU scenario utilized historical 2005 Title 24 standards available within CalEEMod.

Table 5.7-2, *Annual Project Energy-Related GHG Emissions*, summarizes the GHG emissions estimates reported by CalEEMod for the proposed Project.

Table 5.7-2
Annual Project Energy-Related GHG Emissions

	Metric Tons per year (MT/yr)			
	CO_2	**CH_4**	**N_2O**	**Total CO_2E**
Project 2020				
Electricity	748.65	0.04	0.02	754.70
Natural Gas	886.16	0.00	0.00	86.69
Total	**834.81**	**0.04**	**0.02**	**841.39**
BAU 2020				
Electricity	1,389.93	0.06	0.02	1,398.64
Natural Gas	121.24	0.00	0.00	121.97
Total	**1,511.17**	**0.06**	**0.02**	**1,520.61**

Mobile Source Emissions

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults or in Project-specific traffic analyses. The information provided in the Project-specific Traffic Study (*Traffic Impact Analysis Report, Tentative Parcel Map*

No. 36492 (TIA), prepared by Albert A. Webb Associates, dated February 2013, Revised July 15, 2013) was used for the Mobile Source Emissions analysis in the AQ/GHG Analysis. The GHG emissions estimated in CalEEMod for the Project include the Pavley motor vehicle standards for cars and light trucks and the Low Carbon Fuel Standard (LCFS) for motor vehicle fuels whereas the GHG emissions for the BAU scenario do not (see footnote #14 of the AQ/GHG Analysis).
Table 5.7-3, *Annual Project Mobile Source GHG Emissions*, shows the proposed Project's mobile source emissions.

Table 5.7-3
Annual Project Mobile Source GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
Project 2020				
Mobile	3,196.48	0.14	0.00	3,199.32
BAU 2020				
Mobile	4,113.06	0.14	0.00	4,115.90

Solid Waste-Related Emissions

CalEEMod also calculates the GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the state. The waste generation rates and emission estimates were based on CalEEMod default factors. However, this analysis assumes that additional waste will be diverted from landfills through recycling, reduction in waste generated, and/or composting to meet the 2020 statewide goal of 75 percent waste diverted (see footnote #15 of the AQ/GHG Analysis). The BAU scenario assumes a solid waste diversion rate from landfills of 53 percent which is what was reported in 2006, the year AB 32 was passed (see footnote #16 of the AQ/GHG Analysis).

Table 5.7-4
Annual Project Waste-Related GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
Project 2020				
Solid Waste	35.93	2.12	0.00	80.52
BAU 2020				
Solid Waste	67.55	3.99	0.00	151.37

Table 5.7-4, *Annual Project Waste-Related GHG Emissions,* above, indicates that total proposed Project-related GHG emissions from solid waste disposal are estimated to be approximately 80.52 $MTCO_2E$ annually and 151.37 $MTCO_2E$ annually for the Project and BAU, respectively. Biogenic CO_2 emissions[1] (which equal the total CO_2 emissions in *Table 5.7-4, Annual Project Waste-Related GHG Emissions*) were not included when CARB analyzed the GHG emissions inventory under AB 32. Therefore, they are not included in the Project's total GHG emissions shown in *Table 5.7-6, Total Annual Project-Related GHG Emissions*, below.

Water-Related Energy Usage

Electricity is also indirectly used in water supply, treatment, and distribution, as well as wastewater treatment in southern California and plays a large role in GHG production.

There are three (3) processes necessary to supply potable water to urban users (i.e., residential, commercial, and industrial):

(1) Supply and conveyance of the water from the source;
(2) Treatment of the water to potable standards; and
(3) Distribution of the water to individual users.

After use, the wastewater is treated and either reused as reclaimed/recycled water or returned to the environment (CEC 2005, p. 21). CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project's location. Default values were used for electricity intensity factor associated with the supply and conveyance of water from its source which assumes that the water is being imported from northern California.

The Project's indoor water use was reduced by 20 percent to account for the mandatory reduction outlined in the CalGreen code (CalGreen, p. 30). Outdoor water use from the Project will also be reduced as a result of Project compliance with the water efficient landscape ordinances enforced

[1] Biogenic emissions are emissions from natural sources, such as plants and trees.

by the City under Municipal Code Section 17.276 (WMC) which requires a 30 percent reduction. Since neither of these requirements was in place when AB 32 was passed, the BAU scenario assumed no reductions were taken for indoor or outdoor water use.

The following table shows the GHG emissions from water-related energy usage for the Project and BAU.

Table 5.7-5
Annual Project Water-Related GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2E
Project 2020				
Water-Related Energy	223.67	1.63	0.05	271.88
BAU 2020				
Water-Related Energy	375.84	2.04	0.06	436.20

Total Project GHG Emissions

As shown in Table 5.7-6, *Total Annual Project-Related GHG Emissions*, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 4,453 $MTCO_2E$ per year which includes construction-related emissions amortized over a typical project life of 30 years. The GHG emissions from the BAU scenario are approximately 6,252 $MTCO_2E$ per year. The table below indicates that the majority of GHG emissions are from vehicle use (mobile sources) followed by energy consumption.

As shown in Table 5.7-6, *Total Annual Project-Related GHG Emissions*, a comparison of the Project's GHG emissions in 2020 and the BAU GHG emissions corresponds to a 28.7 percent reduction. This achieves the 28.5 percent reduction target set by AB 32.

Table 5.7-6
Total Annual Project-Related GHG Emissions

Source	Metric Tons per year (MT/yr)	
	Project 2020	**BAU 2020**
Amortized Construction	95.62	95.62
Energy	841.39	1,520.61
Mobile	3,199.32	4,115.90
Solid Waste	44.59	83.83
Water	271.88	436.20
Total	**4,452.80**	**6,252.16**
Percent Reduction from BAU	**28.7**	**___**

Conclusion

The above analysis indicates that the proposed Project along with its design feature of high efficiency lighting and the implementation of statewide GHG reduction measures would result in a 28.7 percent reduction compared to the BAU emissions level, which achieves the AB 32 reduction target of 28.5 percent. Therefore, the Project has demonstrated compliance with AB 32 and no additional analysis or mitigation is required.

Regarding compliance with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHG, the City does not currently have an adopted plan (e.g., Climate Action Plan, or GHG reduction plan) for the purposes of reducing GHG emissions. Although there are no plans or policies at the local level, the CARB Scoping Plan is applicable at the state level. As described above, beginning on page 24, AB 32 directed CARB to adopt the Scoping Plan for achieving GHG reductions.

Project consistency with the applicable measures in the Scoping Plan is shown in Table 5.7-7, CARB Scoping Plan Measure Project Comparison. Most of the reduction measures are not applicable to the Project and were not listed. The Project is consistent with the feasible measures. Examples of inapplicable measures include the California Cap-and-Trade Program, Industrial Emissions, High-Speed Rail, and Sustainable Forests.

The strategies listed in Table 5.7-7, *CARB Scoping Plan Measure Project Comparison,* as well as mitigation measures **AQ-1** and **AQ-2**, shall be required as mitigation measures for the proposed Project (mitigation measure **GHG-1**) to further reduce impacts to Greenhouse Gasses. The majority of these strategies are designed to apply to construction and operation of buildings. During the plot plan review process the City will determine which of the strategies described in Table 5.7-7, (as well as any that may occur subsequent to this document) should be applied to the

proposed Project. The City will apply the appropriate strategies at the time of building permit application. In addition, development on the proposed Project site would be subject to all future applicable regulatory requirements, which would also reduce the GHG emissions of the proposed Project.

Table 5.7-7
CARB Scoping Plan Measure Project Comparison

Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The Project will be compliant with the 2013 Title 24 standards, which become effective January 1, 2014.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards and became mandatory in the 2010 edition of the Code (January 2011), on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The Project will be subject to these mandatory standards.

High Global Warming Potential Gases –Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the Project that are required to comply with the measures will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The Project will be required to comply with the 75 percent waste reduction required in AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The Project will comply with all applicable section of the City's Municipal Code, including Section 17.276 (WMC).
Source: CARB Scoping Plan	

STANDARD CONDITIONS & REQUIREMENTS

1. None.

MITIGATION MEASURES

GHG-1 Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.

Timing/Implementation: During Construction Activities and Project Operations.

Enforcement/Monitoring: City of Wildomar Planning and Building Departments.

8. HAZARDS AND HAZARDOUS MATERIALS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		✓		
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		✓		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓

DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? *Less Than Significant Impact with Mitigation Incorporated*

The Riverside County Environmental Health Department issues permits to and conducts inspections of businesses that use, store, or handle quantities of hazardous materials and/or waste

greater than or equal to 55 gallons or 500 pounds, or 200 cubic feet of compressed gas, at any time. The Riverside County Environmental Health Department also implements the Hazardous Material Management Plans (Business Emergency Plans) that include an inventory of hazardous materials used, handled, or stored at any business in Wildomar.

The proposed Project may create an additional possible hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. During the construction phase, there is a potential for accidental release of petroleum products in sufficient quantity to pose a hazard to people and the environment. Prior to initiating construction, a Stormwater Pollution Prevention Plan will be approved by the City to address any construction-related spills or accidents. This requirement is included in Mitigation Measure **HAZ-1**. With Mitigation Measure **HAZ-1**, the proposed Project is not expected to result in a significant impact on the environment.

In addition, the proposed Project is located immediately adjacent to Clinton Keith Road. It is possible that an accident or spill may expose future building occupants to hazardous materials. However, the likelihood of this type of event is rare and it is not considered to be significant. In addition, some hazardous materials will be stored on the premises; however, those used are commonly associated with office, restaurant, and commercial retail development. No impacts are anticipated beyond those commonly associated with these types of developments. No additional mitigation is required.

There is the potential for upset of hazardous materials associated with medical uses on the proposed Project site. A hallmark of medical services in general, is the use of a variety of hazardous materials and the generation of hazardous waste in support of medical services. There are two potential sources of accidental release of hazardous or toxic substances from medical office operations and these two sources can occur under three different circumstances. The first source of an accidental release can occur during delivery of the hazardous materials. Such accident release can occur anywhere between the chemical storage location and the proposed facilities. The second source of an accidental release can occur within the medical office, but under conditions where the spill is contained within the medical offices and does not result in general exposure of the surrounding population. Finally, an accidental release can occur that could be released into the general environment where surrounding land uses and people may be affected.

The transport of hazardous materials and wastes is strictly controlled by the State of California. A regulatory structure has been created to respond to the accidental release of hazardous or toxic materials during transport. The change in circumstances from the existing environmental setting is that if the proposed Project is approved for implementation, future operations may require delivery of hazardous and toxic materials to the proposed Project site to support operations. Deliveries will be random and are expected to occur on a daily basis to support operations.

Each day our communities experience the delivery of a variety of hazardous or toxic materials, ranging from petroleum products (gasoline and diesel) to large gas canisters, such as chlorine for water and wastewater treatment plants and compressed natural gas (propane). The proposed project will add to the existing transport of hazardous and toxic materials entering the City of Wildomar. If a transport accident occurs, it may or may not be accompanied by an accidental release of the hazardous or toxic materials. Thus, a potential exists to experience an accidental release of medical-related hazardous or toxic materials to the local environment.

The key to determining whether this change in the environment represents a significant adverse impact is to assess whether this change represents a high probability of accidental release and whether such a release poses a significant hazard based on the known response capability to such an accident. Most of the medical office related hazardous material may be either solid, containerized (gas canisters), or stringently packaged (radioactive material). Based on these facts regarding the type and character of hazardous materials and the response capabilities of the City and regional agencies to a transport accident, the City finds that the potential for significant risk due transport is a less than significant impact to the environment from implementing the proposed Project.

Within the medical office building a potential for accidental release of hazardous material also exists. Mitigation measures are provided below (**HAZ-2** and **HAZ-3**) to ensure that a plan is implemented as part of medical office operations. The City finds that the potential for significant risk due to internal hospital/medical office use of hazardous and toxic materials will be less than significant, with implementation of the mitigation measures.

The final source of accidental release to the environment is from a release that would escape the medical offices into the surrounding environment. Because of the small quantities of solid and liquid hazardous materials at the site during operations, most of the medical office hazardous materials cannot escape to the surrounding environment. Mitigation is required to control the release of stored hazardous gases in canisters is identified below (**HAZ-4**). Based on the analysis presented in this section and with implementation of these mitigation measures, the City finds the potential for risk to the surrounding environment and population from an accidental release of hazardous substances within the medical offices is considered to be less than significant.

b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? *Less Than Significant Impact with Mitigation Incorporation*

The proposed Project may create a hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment; however, due to the quantity and nature of these materials, commonly associated with office, restaurant, and retail development, these impacts will be considered less than significant. No impacts are anticipated beyond those commonly associated with office, restaurant, and retail development. No additional mitigation measures are required. Please reference the discussion in 8.a., above, as it relates to potential upset and accidental conditions involving the release of hazardous materials into the environment as it pertains to medical offices. Impacts will be reduced to a less than significant level with mitigation incorporation.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? *No Impact*

No existing or proposed schools are located within one-quarter mile the proposed Project site. Ronald Reagan Elementary School is located approximately 1-mile to the northwest of the proposed Project site. Donald Graham Elementary School is located on the west side of I-15, approximately 1.6 miles from the proposed Project site. Tovashal Elementary School is located southeasterly of the proposed Project site, approximately 1.4 miles away. Therefore, implementation of the proposed Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impacts are anticipated. No mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? *No Impact*

The proposed Project is not located on any hazardous materials site as designated by Government Code Section 65962.5. According to the *RMEC, LLC Phase I Environmental Study*, prepared by EnviroSoil, Inc., dated January 5, 2011, contained in Appendix G of this Initial Study, EnviroSoil, Inc. did not identify any current on-site environmental concerns in connection with the subject property. This review included all list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impacts are anticipated. No mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? *No Impact*

The proposed Project site is not located within any airport land use plan. The closest public airport is French Valley Airport, which is located approximately 5.6 miles southeast of the proposed Project site. Given the distance between the proposed Project and the French Valley Airport, and since the proposed Project site is not within in the airport land use plan for the French Valley Airport, no impacts are anticipated from the proposed Project that would result in a safety hazard for people residing or working in the proposed Project area. No mitigation is required.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? *No Impact*

The closest private airstrip to the proposed Project site is Skylark Field, which is located approximately 4.6 miles northwest of the proposed Project site. Based on this distance between Skylark Park and the proposed Project site, implementation of the proposed Project will not result in a safety hazard for people residing or working in the proposed Project area. No impacts are anticipated. No mitigation is required.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? *No Impact*

Access to the proposed Project site is from Clinton Keith Road and Elizabeth Lane, which are currently improved and will be additionally improved through the implementation of the proposed Project, as well as future improvements to Bunny Trail, Lot "C," and Yamas Drive, which are currently unimproved/ non-existent. Development of the proposed Project will not require the closure or relocation of any roadways and operation of the proposed Project is not expected to interfere with access to any roadways. Therefore, the proposed Project will have no impact on any plans for emergency evacuation. No mitigation is required.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? *No Impact*

According to the Riverside County Land Information System (2013), the proposed Project site is not located in the High Wildfire Zone area. These areas are more often found in more rural areas of Riverside County. The purpose of the wildland fire hazard area designation is to address safety concerns in potentially dangerous wildland fire areas. Since the proposed Project site is located outside the High Wildfire Zone area, development on the proposed Project site would not expose people or structures to a significant risk of loss, injury, or death involving wildland fire. No impacts are anticipated and no mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. As required by existing ordinance 8.56, subsequent development on the site will need to comply with the County of Riverside, Department of Environmental Health, Local Enforcement Agency (LEA) for all activities related to potential hazardous materials.

MITIGATION MEASURES

HAZ-1 All spills or leakage of any hazardous products, including petroleum products, during construction and operational activities shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan prepared for the Project development.

Timing/Implementation: Prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Engineering Department.

HAZ-2 Prior to the certificate of occupancy for a medical office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety Department.

HAZ-3 As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety Department and Fire Departments.

HAZ-4 Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Building and Safety Department and Fire Departments.

9. HYDROLOGY AND WATER QUALITY.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?		✓		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			✓	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		✓		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?		✓		
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		✓		
f) Otherwise substantially degrade water quality?		✓		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?				✓
h) Place within 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j) Inundation by seiche, tsunami, or mudflow?				✓

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Preliminary On-Site Hydrology for Rancon Medical and Educational Center, Tentative Parcel Map 36492, Plot Plan for Parcels 1, 2, 3 and* 13, prepared by Albert A. Webb Associates, dated September 2012 (Hydrology Report), and the *Project-Specific Preliminary Water Quality Management Plan (WQMP), Rancon Medical and Educational Center (RMEC), Tentative Parcel Map 36492, Plot Plan for Parcels 1, 2, 3 and 13,* prepared by Albert A. Webb Associates, dated September 2012 (WQMP). The Hydrology Report is contained Appendix H, and the WQMP is contained Appendix I, of the enclosed CD. Please refer to the WQMP for detailed information on hydrologic conditions of concern, Best Management Practices (BMPs), operation and maintenance responsibility for treatment control BMPs, and funding. Please refer to the Hydrology Report for detailed information on hydrological data, hydrology results, and methodologies.

a) **Violate any water quality standards or waste discharge requirements?** *Less Than Significant Impact with Mitigation Incorporated*

The storm water for the proposed Project will discharge into a natural channel that meanders in a southerly direction for approximately 3 miles until joining with Murrieta Creek. Murrieta Creek then runs in a southeasterly direction for approximately 9 miles until it joins with Temecula Creek to form the Santa Margarita River. The Santa Margarita River continues in a southwesterly direction for approximately 29.2 miles until forming the Santa Margarita Lagoon and outfalling into the Pacific Ocean near Camp Pendleton (San Diego County). Murrieta Creek (Channel), the Santa Margarita River, as well as the Santa Margarita Lagoon are all on the federal 303(d) list of impaired water bodies. Listing a water body as impaired in California is governed by the Water Quality Control Policy for developing California's Clean Water Act Section 303(d) Listing Policy. The State and Regional Water Boards assess water quality data for California's waters every two years to determine if they contain pollutants at levels that exceed protective water quality criteria and standards. This biennial assessment is required under Section 303(d) of the Federal Clean Water Act.

Potential pollutants from both Phases of the proposed Project (which may potentially include: an industrial park uses, medical offices, commercial retail, a restaurant, and associated parking areas), would be sediment/turbidity, nutrients, organic compounds, trash/debris, oxygen demanding substances, pathogens (bacteria & viruses), oil and grease, pesticides, and metals.

The on-site runoff from the proposed Project site will ultimately flow through Murrieta Creek and the Santa Margarita River. These two water bodies do not meet water quality standards associated with their beneficial uses and are impaired by nutrients, oxygen demanding substances, pathogens (bacteria & viruses), and metals. Therefore, treatment controls BMPs, with a medium to high effectiveness for treating these pollutants of concern, will be incorporated into the proposed Project design. In addition, Mitigation Measure HYD-1 requires the preparation and implementation of a SWPPP and WQMP for all Phases of development. BMPs will be an integral component of the SWPPP and WQMP.

The following types of wastes are expected to be generated from the developed condition:

- Oil and grease from trucks and cars and other automotive fluids;
- Pesticides, herbicides, and fertilizers in landscaped areas;

- Food waste from restaurant;
- Trash; and
- Medical waste.

Lastly, the proposed Project site has historically been used for agriculture. Nutrients are the most common pollutant associated with this practice. However, since nutrients are an existing "pollutant of concern", future treatment control BMPs will address this issue, as contained in Mitigation Measure **HYD-1**.

The proposed Project is required to prepare a stormwater pollution and prevention plan (SWPPP) to be administered during and post construction. The SWPPP incorporates best management practices (BMPs) to ensure that potential water quality impacts are minimized. BMPs typically include vegetative cover, silt fencing, regular watering of the soil, sedimentation areas, covering of the soil, etc. Each set of BMPs is written specifically for the project for which the SWPPP is required. The SWPPP is submitted to the Regional Water Quality Control Board and to the City for review, and a copy of the SWPPP must be kept accessible on the proposed Project site at all times.

Future development associated with the proposed Project would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Stormwater Permit No. R9-2010-0014, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. A key component of the NPDES permit is the implementation of the Areawide Urban Runoff Management Program for the City, which includes the requirement of stormwater quality treatment and/or BMPs in project design for both construction and operation for new development.

The proposed Project will also be required to submit to the City for review and approval of a new or modified Water Quality Management Plan (WQMP) that identifies specific BMPs and other measures necessary to protect water quality for all Phases of development. The preliminary WQMP included as Appendix J is designed to address construction 11.62 acres for the commercial development of Parcels 1, 2, 3, and 13 of Tentative Parcel Map 36492 (APN: 380-250-022) and Plot Plan for Parcels 1, 2, 3, and 13.

Mitigation Measure **HYD-1** has been included, requiring a SWPPP and WQMP for all Phases of development. Therefore, the any development on the proposed Project site is not expected to violate any water quality standards, waste discharge requirements, or have a significant impact on the environment after mitigation is incorporated.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? *Less Than Significant Impact*

The proposed Project will modify on-site local drainage patterns and absorption rates; however, these modifications will be incorporated into an existing drainage system. The description of the on-and off-site drainage system is discussed below in Response 9.c. Due to the nature and design

of the proposed Project, implementation of the proposed Project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). While there will be an increase in the amount of impervious surfaces as a result of implementation of the proposed Project, any impacts from this increase will be off-set through the use of on-site detention and retention, which is included in the proposed Project design. Any impacts are considered less than significant. No mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? *Less Than Significant Impact with Mitigation Incorporated*

Off-site flows, north of Clinton Keith Road, enter the site at two locations along Clinton Keith Road. One location is in the extreme northwest corner of Parcel 1. Here, four 48" Reinforced Concrete Pipes (RCPs) convey flows under Clinton Keith Road to a natural channel that continues southwesterly until joining Murrieta Creek. Also, there is a 24" Corrugated Metal Pipe (CMP) that conveys street flows from an Asphalt Concrete (AC) curb/spillway along Clinton Keith Road. The other location is approximately 350' south of the northeast corner. At this location, flows are conveyed through a basin just east of Elizabeth Lane into a 60" RCP that crosses under Elizabeth Lane and outlets into a natural channel. This channel meanders in a southerly direction until joining Murrieta Creek. In addition, flows from the adjacent mini-storage building and parking area to the east confluence with this channel and enter the site at two locations. The first location is at a low point in Elizabeth Lane where a catch basin with 24" RCP to the east street side and a curb opening to the west street side convey street flows and outlet midway along the eastern boundary of the site into this natural channel. The second location is approximately 250' north of the intersection of Elizabeth Lane and Bunny Trail where a 30" RCP culvert outlets into the natural channel. Once the combined flows exit the site, they continue in natural channels for approximately 3 miles until they join Murrieta Creek.

On-site flows presently drain towards three meandering natural drainage courses. The north-west area of the Plot Plan site (2.1 acres) drains into Stream 3, where the existing four 48" RCPs under Clinton Keith Road outlet. The mid-area of the site consists of 3.3 acres and drains into the natural Stream 2. The easterly site area drains into the natural Stream 1 where the proposed Plot Plan for Parcels 1, 2, 3 and 13 will drain to during the post-developed conditions.

The proposed on-site storm drain system and drainage design will maintain these existing flows by the following:

- The existing four 48" RCP culverts in the northwest corner that run under Clinton Keith Road will be extended under the widened southern half of the road, maintaining existing flows with no impact downstream. The site grading proposes that the north-west portion of 0.6 acres drains to Stream 3 in a manner that the proposed condition flows do not exceed existing condition flows generated from the 2.1 acres.
- Near the above mentioned culverts, an AC spillway inlet into a 24" CMP will be replaced with a catch basin along with the street improvement widening.

- The existing 60" RCP that carries flows from north side of Clinton Keith Road will be extended approximately 400 lineal feet and outlet back into the natural drainage channel approximately 150' south of the most southerly drive entrance from Elizabeth Lane.
- An existing catch basin at a low point along the east side of Elizabeth Lane that directly discharges into a natural channel will join the above mentioned 60" RCP, as well as a proposed catch basin directly on the west side of Elizabeth Lane.
- The existing 30" RCP that carries flows from the adjacent mini-storage facility will be extended approximately 200 lineal feet and join a culvert that will be built under Bunny Lane.
- A 40' long culvert will be built under Bunny Lane to allow storm water to continue flowing in a southerly direction as it currently does.
- An on-site drainage system is proposed to capture the on-site flows and convey them to the proposed water quality/detention basin.
- Detention basins will be constructed at the outlet locations for each stream subareas to mitigate the increased runoff from the post-developed site conditions and release measured flows into the natural streams with no adverse impact downstream. For preliminary purposes, the basins are sized for the differences between the volumes of the 10-year, 24-hour pre- and post-developed conditions storm events. The 100-year events will bypass through.

  A detention basin will be constructed in the southeast corner of Parcel 13 to mitigate the increased runoff from the post-developed parcels 1, 2 and 3 proposed Project site and release measured flows into the natural Stream 1 with no adverse impact downstream. The proposed basin will serve dual purpose as being a water quality sand filtration basin and a detention mitigation basin. The 2-year, 24-hour and the 10-year, 24-hour storm events were mitigated through the basin which is sufficient to prove the basin capacity. The 100-year events will bypass through. The proposed basin outlet structure will have orifices to restrict the 2- and the 10-year flows and a weir on top of the structure for bypassing the 100-year flows. The post development flows for the 2 and 10 year storms will be no greater than pre-development flows.

  Based upon the results of the Hydrology Report, it is concluded that the proposed facilities will adequately provide drainage conveyance in accordance with a 100-Year design storm event. The proposed facilities, with adequate maintenance, will convey flows safely through the region in accordance with Riverside County Flood Control and Water Conservation District requirements for drainage conveyance and without an impact upon the existing storm drain improvements.

  As discussed above, all Phases of the proposed Project will require preparation of a stormwater pollution and prevention plan (SWPPP), which will incorporate BMPs to ensure that potential water quality impacts are minimized. The SWPPP is required to include a counter-measure plan describing measures to ensure proper collection of sedimentation produced on the site. Mitigation Measure **HYD-1** has been included, requiring a SWPPP and WQMP for all Phases of development. Therefore, the any development on the proposed Project site is not expected to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site after mitigation is incorporated.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site? *Less Than Significant Impact with Mitigation Incorporated*

Please reference the discussion in 8.c, above. Impacts are considered less than significant with mitigation incorporated.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? *Less Than Significant Impact with Mitigation Incorporated*

While the proposed Project will result in both immediate and future increases in runoff water, these increases will be adequately conveyed via the improvements proposed by mitigation measure **HYD-1**. The proposed Project will be required to prepare a WQMP and a SWPPP that will include BMPs designed to reduce and manage increases in runoff water at the site. With the incorporation of mitigation, proposed Project impacts will be reduced to a less than significant level. No additional mitigation measures are required.

f) Otherwise substantially degrade water quality? *Less Than Significant Impact with Mitigation Incorporated*

The proposed Project and/or future development associated with the proposed Project would not otherwise substantially degrade water quality. All development on the proposed Project site would be subject to the requirements of the NPDES Stormwater Permit No. R8-2010-0033, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. A key component of the NPDES permit is the implementation of the Area-wide Urban Runoff Management Program for the City, which includes the requirement of stormwater quality treatment and/or BMPs in project design for both construction and operation for new development.

Implementation of Mitigation Measure **HYD-1** would condition future development to prepare and comply with the requirements of the SWPPP and final Water Quality Management Plan, which would ensure that significant water quality impacts and violations of standards and requirements do not occur. With the incorporation of mitigation, proposed Project impacts will be reduced to a less than significant level. No additional mitigation measures are required.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map? *No Impact*

The proposed Project would not result in the development of housing on the proposed Project site. According to the Riverside County Land Information System (2013), the proposed Project site is not located within a 100-year flood hazard. Therefore, the proposed Project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map. No impacts are anticipated. No mitigation is required.

h) Place within 100-year flood hazard area structures which would impede or redirect flood flows? *No Impact*

The proposed Project does not propose to impede or redirect any flood flows. The proposed Project site is located outside of the 100-year flood hazard area. No impacts are anticipated. No mitigation is required.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? *No Impact*

According to Figure 11 of the Elsinore Area Plan, the proposed Project site is located outside of the inundation area of Lake Elsinore. No impacts are anticipated. No mitigation is required.

j) Inundation by seiche, tsunami, or mudflow? *No Impact*

The proposed Project site is not located in an area that is subject to seiches, mudflows, or tsunamis. No impacts are anticipated. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

HYD-1 Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized to below a level of significance. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.

Timing/Implementation: Prior to the issuance of a building permit.

Enforcement/Monitoring: City of Wildomar Engineering Department.

10. LAND USE AND PLANNING.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				✓
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				✓
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓

DISCUSSION

a) Physically divide an established community? *No Impact*

The proposed Project site is located on the south side of Clinton Keith Road, west of Elizabeth Lane. The General Plan land use designations for the properties immediately adjacent to the proposed Project site are as follows:

- North: Open Space-Recreation (OS-R)
- South: Business Park (BP)
- Southwest: Very High Density Residential (VHDR)
- East: Business Park (BP)
- West: Business Park (BP)

The Wildomar General Plan land use designation for the proposed Project site is Business Park (BP). The land surrounding the proposed Project, with the exception of land across Clinton Keith Road to the north, which is physically separated from the proposed Project site contain Business Park (BP) land use designations. All Phase 1 and Phase 2 development of the proposed Project will be consistent with the General Plan land use designation. Only the parcel to the east of the proposed Project site, a self-storage use is currently developed. Based on these circumstances, the proposed Project will not physically divide an established community. No impacts are anticipated. No mitigation is required.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? *No Impact*

The proposed Project will serve to implement the vision, goals and policies of multiple Elements of the City's General Plan, including, but not limited to Chapter 3 (Land Use Element), Chapter 4 (Circulation Element), Chapter 6 (Safety Element), Chapter 7 (Noise Element), and Chapter 9 (Air Quality Element). As discussed in Section V.4 (Biological Resources) of this Initial Study, the proposed Project is consistent with the Riverside County Multiple Species Habitat Conservation Plan (MSHCP). As a result, implementation of the proposed Project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project (including, but not limited to the policies of the general plan, specific plan, local coastal program, or zoning ordinance) adopted to protect environmental resources. Any potential conflicts were anticipated in the General Plan and/or MHSCP. No impacts are anticipated. No mitigation is required.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? *No Impact*

As stated above in Response 10.b., the City of Wildomar participates in the MSHCP. The MSHCP establishes areas of sensitivity considered criteria areas or cells. Projects outside of these areas can proceed consistent with the provisions of CEQA and are subject to payment of an MSHCP Mitigation Fee. This is a standard condition and not considered unique mitigation under CEQA. The MSHCP establishes procedures for the determination of sensitivity. The proposed Project is subject to the MSHCP but is outside of any criteria area or cell. The proposed Project will not conflict with any habitat conservation plan or natural community conservation plan. No impacts are anticipated. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. Prior to the issuance of a grading permit, the developer shall pay the regional impact mitigation fee established by the Riverside County MSHCP.

MITIGATION MEASURES

None.

11. MINERAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				✓

DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state? *No Impact*

The proposed Project site is located within an area designated at MRZ-3 by the Wildomar General Plan. The proposed Project site is designated MRZ-3 (areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposits is undetermined). The proposed Project site has not known to have been mined in the past. Since the proposed Project site has not been used for mining, the proposed Project is not expected to result in the loss of availability of a known mineral resource in an area classified or designated by the State that would be of value to the region or the residents of the State. No impacts are expected from the proposed Project and no mitigation is required.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? *No Impact*

There are no known locally important mineral resource recovery sites identified on the proposed Project site in the Wildomar General Plan or in a specific plan or other land use plan of value to the region or to the residents of the state. No impacts are anticipated. No mitigation measure is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

None.

12. NOISE.

Issues, would the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓		
b) The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Preliminary Acoustical Analysis – Rancon Medical and Educational Center, Plot Plan No. 36492*, prepared by Albert A. Webb Associates, dated July 2012, Revised July 17, 2013, (Acoustical Analysis), and is contained Appendix J, of the enclosed CD. Please refer to the Acoustical Analysis for a detailed discussion of the setting and methodology uses for the Acoustical Analysis. The discussion below will center on noise impacts to and from the proposed Project.

a) The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? *Less Than Significant Impact with Mitigation Incorporated*

Temporary on-site noise increases will occur during proposed Project construction. Once the proposed Project is operational, potentially long-term or permanent noise increases will occur on site as a result of proposed Project operations and off site as a result of Project-generated traffic on area roadways.

Temporary noise impacts will result during Proposed Project construction. Construction noise levels will vary significantly based upon the size and topographical features of the active construction zone, duration of the work day, and types of equipment utilized. Proposed Project construction will involve multiple phases (site preparation, grading, building construction, paving, architectural coating) employing differing types and quantities of mechanical equipment. Each piece of equipment will produce varying levels of noise at varying distances from within the active maintenance/construction area, as indicated in Table 5.12-1, *Construction Equipment Noise Levels*.

Table 5.12-1
Construction Equipment Noise Levels

Type of Equipment	Range of Maximum Sound Levels Measured at 50 Feet (dBA)	Suggested Maximum Sound Levels for Analysis (dBA)	Maximum Sound Levels at 70 Feet (dBA)
Pile Drivers, 12,000 to 18,000 feet-lb/blow[a]	81–96	93	90
Rock Drills	83–99	96	93
Jack Hammers	75–85	82	79
Pneumatic Tools	78–88	85	82
Pumps	74–84	80	77
Scrapers	83–91	87	84
Haul Trucks	83–94	88	85
Cranes	79–86	82	79
Portable Generators	71–87	80	77
Rollers	75–82	80	77
Dozers	77–90	85	82
Tractors	77–82	80	77
Front-End Loaders	77–90	86	83
Hydraulic Backhoe	81–90	86	83
Hydraulic Excavators	81–90	86	83
Graders	79–89	86	83
Air Compressors	76–89	86	83
Trucks	81–87	86	83

Source: Bolt, Beranek & Newman, Noise Control for Buildings and Manufacturing Plants, 1987
[a] feet-lb/blow = foot-pounds per blow

To provide a point of reference, a typical construction day with an 8-hour duration can potentially generate 84 dBA CNEL at a distance of 50 feet from the noise source, on average. Using soft site parameters (a loss of 6 dBA per doubling of distance from the source), the 65 dBA CNEL contour (applicable to exterior areas of Residential uses) is calculated to occur at a distance of approximately 320 feet.

The City of Wildomar has determined that certain noise levels may jeopardize the health or general welfare of City residents; therefore, City Municipal Code Chapter 9.48 established noise standards, as shown in Table 5.12-2, *Sound Level Standards (dB L_{max})*, below.

Table 5.12-2
Sound Level Standards (dB L_{max})

General Plan Foundation Component	General Plan Land Use Designation	General Plan Land Use Designation Name	Density	Maximum Decibel Level	
				7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Community Development	LDR	Low Density Residential	½ acre	55	45
	MDR	Medium Density Residential	2-5	55	45
	MHDR	Medium High Density Residential	5-8	55	45
	VHDR	Very High Density Residential	14-20	55	45
	CR	Retail Commercial	--	65	55
	LI	Light Industrial	--	75	55
	BP	Business Park	--	65	45
Open Space	CH	Conservation Habitat	--	45	45
	REC	Recreation	--	45	45

Source: City Municipal Code Section 9.48.040, Table 1 (abridged based on designations in vicinity of the Project shown on **Figure 4**).

The City Municipal Code determined that construction noise is exempt from noise restrictions if private projects located within one-fourth mile of occupied residences adhere to certain hours. Since occupied residential uses are within one-fourth mile of the Project site, Project-related noise shall be regulated pursuant to the hours set forth in the Municipal Code. Consistent with the intent of this restriction on construction noise hours, noise impacts resulting from construction within specified hours are not considered to jeopardize the health or general welfare of City residents. Therefore, compliance with the construction hours outlined in Section 9.48.020(I)(2) ensures compliance with City standards, as detailed in mitigation measure **NOI-1**.

There are two areas with existing sensitive receptors that could be affected by Project-related construction activity. The closest area includes a multi-family residential development located to the southwest of the proposed Project's southern boundary. There are also single-family residences northeast of the proposed Project site, across Clinton Keith Road, an urban arterial roadway, behind an existing block wall. Mitigation measures will be incorporated to further minimize exposure upon neighboring residential properties from noise generated by typical construction methods anticipated to be used by the proposed Project. **NOI-1** requires proper tuning of equipment, **NOI-2**, requires staging for the greatest distance between noise sources and receptors is incorporated and **NOI-3** requires stationary noise-generating construction equipment be placed a minimum of 320 feet from the property line of the closest existing residences. **NOI-4** requires noises barriers for impacts to existing residential development adjacent to the proposed Project. With incorporation of these mitigation measures, proposed Project impacts will remain less than significant.

Noise Impacts from Future On-Site Activities

The proposed Project consists of a multi use development consisting of a mix of business park, general offices, medical and dental-use facilities, commercial retail, and a drive-thru fast food restaurant. Noise impact sources typically associated with these types of uses could include mechanical equipment, such as air conditioning units. Limited amounts of truck trips also occur with business park uses and commercial retail uses. Commercial retail uses typically contain one to three loading areas that are located at the rear of the building and screened from view and considering the small size of the business park parcels (approximately two acres or less), truck trips within the proposed Project site would be limited and at low speeds. Therefore, the noise from these sources is not anticipated to exceed the City's normally acceptable noise levels. On-site noise associated with any manufacturing uses would not be substantial as they would be conducted indoors.

Mechanical Equipment

It is anticipated that all buildings will be air conditioned. Air conditioning units will be roof-mounted. A mitigation measure (**NOI-5**) has been included to ensure mechanical air conditioning equipment has a 25-foot setback from the roof's edge, or the equipment is set back from the building's edge far enough to break the line of sight between the air conditioning units and potential receivers, whichever is greater of the two. This will provide a minimum 3 to 5 dBA reduction immediately at the building's edge, prior to spacial distance from this noise source, which will provide an additional 3 dBA attenuation per doubling of distance. With this mitigation incorporated, impacts will remain less than significant. In addition, **NOI-5** requires a subsequent noise analysis be submitted prior to building permit issuance to ensure the noise generated by the AC units do not exceed the maximum noise allowed under the Wildomar Municipal Code.

Noise Impacts from Project-Specific Traffic Increases

It is widely accepted that most people only notice a change in the noise environment when the difference in noise levels is greater than 3 dBA. However, it is widely accepted that the average healthy ear can barely perceive changes of 3 dBA and that a change of 5 dBA is readily perceptible.

There is the potential for noise increases along area roadways, resulting from Project-related traffic. The City Municipal Code exempts roadway noise from motor vehicles; it only regulates off-highway vehicle noise produced by its tailpipe and motor vehicle sound systems (Section 9.48.060(A)). These regulations are enforced by the Riverside County Sheriff's Department. Nonetheless, for purposes of this analysis, noise level increases resulting from Project-related increases in traffic volumes on Clinton Keith Road, Elizabeth Lane and Yamas Drive are quantified and evaluated for the proposed Project area for the following scenarios:

- Existing and Existing plus proposed Project; and
- Existing plus cumulative projects plus proposed Project conditions.

The two (2) scenarios, above, were modeled to determine increases in noise levels. The increase in traffic due to the addition of proposed Project traffic allows for direct comparisons of potential increases or decreases in noise levels based upon the associated growth in traffic. Therefore, the incremental change in a noise level is the focus of this portion of the analysis results, rather than the resulting independent noise level for any given receiver.

Table 5.12-3, *Noise Contours at 50 feet from Roadway Centerline from Existing Plus Project Conditions*, compares existing noise levels (without the proposed Project) with predicted noise levels resulting from Project-specific traffic. Noise levels associated from Project-specific traffic increases are expected to increase by approximately 18.4 dBA over existing levels along Elizabeth Lane, south of Clinton Keith Road. Although this increase in noise levels is perceptible, it does not exceed the acceptable levels (reference Figure 6 of the Acoustical Analysis - Land Use Compatibility for Community Noise Exposure) for adjacent land uses and there are no sensitive receivers adjacent to this segment. There is an existing mini-storage development located east of Elizabeth Lane and south of Clinton Keith; however, there is an existing wall along the perimeter of this mini-storage facility along Elizabeth Lane. The wall is approximately 6 feet in height and is elevated on an existing landscaped berm which will provide additional attenuation to the neighboring mini-storage facility.

Table 5.12-3
Noise Contours at 50 feet from Roadway Centerline
from Existing Plus Project Conditions

Road Segment	Existing		Existing Plus Project				
	ADT	dB CNEL	ADT	Project Only ADT	dB CNEL	Total dB CNEL	Change
N/S Road Segment							
Yamas Dr. s/o Project	810	56.8	1,725	915	60.3	61.9	5.1
Elizabeth Ln s/o Clinton Keith	175	50.1	6,443	6,258	68.7	68.7	18.6
E/W Road Segment							
Clinton Keith w/o I-15	20,725	70.9	23,528	2,603	65.2	71.9	1.0
Clinton Keith e/o I-15	19,480	70.6	24,561	5,081	67.8	72.4	1.8
Clinton Keith w/o Inland Valley	18,250	70.3	23,467	5,217	67.9	72.3	2.0
Clinton Keith w/o Salida del Sol	12,890	68.8	18,127	5,237	67.9	71.4	2.6
Clinton Keith w/o Elizabeth Ln	12,765	68.8	18,002	5,237	67.9	71.4	2.6
Clinton Keith w/o Nutmeg	11,355	68.3	13,015	1,660	62.9	69.4	1.1
Clinton Keith w/o California Oaks	15,640	69.6	16,563	923	60.4	70.1	0.5
Prielipp Rd e/o Yamas	4,590	64.3	5,504	914	60.3	65.8	1.5
Prielipp Rd e/o Elizabeth	5,170	64.8	6,084	914	60.3	66.1	1.3

Table 5.12-4
Noise Contours at 50 feet from Roadway Centerline from Existing Plus Cumulative Project Traffic Plus Project Conditions

Road Segment	Existing+Cumulative		Existing Plus Cumulative Plus Project				
	ADT	dB CNEL	ADT	Project Only ADT	dB CNEL	Total	Change
N/S Road Segment							
Yamas Dr. s/o Project	851	57.0	1,766	915	60.3	62.0	5.0
Elizabeth Ln s/o Clinton Keith	184	50.3	6,452	6,268	68.7	68.7	18.4
E/W Road Segment							
Clinton Keith w/o I-15	27.497	72.1	30,300	2,803	65.2	72.9	0.8
Clinton Keith e/o I-15	26,353	71.9	31,434	5,081	67.8	73.3	1.4
Clinton Keith w/o Inland Valley	24,209	71.5	29,446	5,237	67.9	73.1	1.6
Clinton Keith w/o Salida del Sol	16,667	69.9	21,904	5,237	67.9	72.0	2.1
Clinton Keith w/o Elizabeth Ln	16,535	69.9	21,772	5,237	67.9	72.0	2.1
Clinton Keith w/o Nutmeg	14,675	69.4	16,335	1,660	62.9	70.3	0.9
Clinton Keith w/o California Oaks	18,257	70.3	19,180	923	60.4	70.7	0.4
Prielipp Rd e/o Yamas	6,924	66.1	7,838	914	60.3	67.1	1.0
Prielipp Rd e/o Elizabeth	7,662	66.5	8,576	914	60.3	67.5	0.9

As shown in Table 5.12-4, above, the proposed Project's traffic increases noise levels compared to that existing without the proposed Project, but is also not expected to exceed acceptable levels for adjacent land uses. Any impacts are considered less than significant.

b) The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? *Less Than Significant Impact*

Regarding the proposed Project's potential to generate ground-borne vibrations during construction, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Common sources of ground-borne vibration are trains, buses on rough roads, and heavy construction activities such as blasting, pile-driving, and extensive grading and heavy earth-moving equipment. Construction of the proposed Project will not incorporate the use of blasting or pile-driving. Vibration from equipment can only be felt out to a distance of approximately 50 feet from

the source. Additionally, ground-borne vibrations are not associated with the typical operation of the land uses proposed by the proposed Project. Thus, construction and operation will not produce any substantial ground-borne vibration. Any impacts would be considered less than significant. No mitigation is required.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? *Less Than Significant Impact with Mitigation Incorporated*

Please reference Response 12.a, above. Construction impacts will be of short duration and, with the incorporation of mitigation measures, will be considered less than significant. Operational impacts have been determined to be less than significant. Therefore, implementation of the proposed Project will not result in a substantial permanent increase in ambient noise levels in the proposed Project vicinity above levels existing without the proposed Project.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? *Less Than Significant Impact with Mitigation Incorporated*

Please reference Response 12.a, above. Construction impacts will be of short duration and, with the incorporation of mitigation measures, will be considered less than significant. Operational impacts have been determined to be less than significant. Therefore, implementation of the proposed Project will not result in a substantial temporary or periodic increase in ambient noise levels in the proposed Project vicinity above levels existing without the proposed Project.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? *No Impact*

The closest public airport is French Valley Airport, which is located approximately 5.6 miles southeast of the proposed Project site. The proposed Project site is outside of the airport noise and safety influence or flight surface control areas. As a result, no impacts are anticipated, and no mitigation measures are required.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? *No Impact*

The closest private airstrip to the proposed Project site is Skylark Field, which is located approximately 4.6 miles northwest of the proposed Project site. Skylark Airport is used primarily by skydiving aircraft. Given the proximity of the proposed Project to Skylark Field, no impacts are anticipated, and no mitigation measures are required.

STANDARD CONDITIONS & REQUIREMENTS

1. The proposed Project shall comply with the development standard of Chapter 9.48 of the City of Wildomar Zoning Code.

MITIGATION MEASURES

NOI-1 To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-2 The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-3 Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.

Timing/Implementation: Implemented during Project operations.

Enforcement/Monitoring: City of Wildomar Building Department.

NOI-4 Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence.

It is important to note that the barriers' attenuation will be accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.

Timing/Implementation: Prior to the issuance of occupancy permits and during project operations.

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

NOI-5 Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.

Timing/Implementation: Reviewed at building plan check.

Enforcement/Monitoring: City of Wildomar Building Department.

13. POPULATION AND HOUSING.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

DISCUSSION

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? *No Impact*

The proposed Project would not result in any increase in substantial population growth. Development of Phase 1 and Phase 2 on the proposed Project site will be consistent with the current land use designation and included in the anticipated buildout of the General Plan. The California Employment Development Department estimates that the unemployment rate in Riverside County is 11.1 percent. (EDD). The California Department of Finance estimates that the vacancy rate of homes in Wildomar is less than 8 percent, which means that of the 10,857 homes in the City, approximately 800 of them are vacant. While the number of employees is unknown at this time, it is reasonable to assume that the new jobs created by this development could be accommodated by existing residents in Wildomar. If new employees did move to the area, the existing number of vacant homes would accommodate their housing needs. As the proposed Project would not result in the construction of new homes, and the development is consistent with the General Plan, no significant impacts are anticipated. No mitigation measure is required.

b,c) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or, displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? *No Impact*

Since the proposed Project site is vacant, no housing units or people would be affected and the construction of replacement housing is not required. No significant impacts are anticipated. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

None.

14. PUBLIC SERVICES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?			✓	
b) Police protection?			✓	
c) Schools?			✓	
d) Parks?				✓
e) Other public facilities?			✓	

DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Fire protection? *Less Than Significant Impact*

The Riverside County Fire Department provides fire protection and safety services to the City of Wildomar. The nearest fire station is Wildomar Fire Station #61, located at 32637 Gruwell Street, 2¾-miles from the proposed Project site. In addition to Fire Station #61, several other Riverside County fire stations in the surrounding area would be able to provide fire protection safety services to the proposed Project site if needed. The proposed Project must comply with the requirements of the Riverside Fire Protection Department and the payment of standard development impact fees, prior to the issuance of a building permit, pursuant to Chapter 3.44.070 of the Wildomar Municipal Code. All Phases of the proposed Project are not expected to result in activities that create unusual fire protection needs or significant impacts. Any impacts would be considered incremental, and would be offset through the payment of the development impact fee. No additional mitigation is required.

b) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Police protection? *Less Than Significant Impact*

Police protection services are provided the Riverside County Sheriff's Department. The nearest sheriff's station is located at 333 Limited Street in Lake Elsinore, approximately 7.4 miles from the proposed Project site. Traffic enforcement is provided for Riverside County in this area by the California Highway Patrol, with additional support from the local Riverside County Sheriff's Department. The proposed Project is required to pay the standard development impact fees, prior to the issuance of a building permit, pursuant to Chapter 3.44.070 of the Wildomar Municipal Code. Therefore, implementation of the proposed Project is not expected to result in activities that create unusual police protection needs or significant impacts. Any impacts would be considered incremental, and would be offset through the payment of the development impact fee. No additional mitigation is required.

c) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Schools? *Less Than Significant Impact*

The proposed Project site is located within the Lake Elsinore Unified School District (LEUSD). The LEUSD has established school impact mitigation fees to address the facility impacts created by residential, commercial, and industrial development. Due to the Business Park (BP) land use designation of the proposed Project site, any development associated with the proposed Project would not generate any additional students into the LEUSD, and, therefore; has no potential to directly impact the local school system. No new population would be generated as a result of implementing the proposed Project; however, indirect impacts may result from people relocating to the area due to the potential employment opportunities created by the proposed Project. All development will be required to pay school mitigation impact fees, prior to the issuance of a building permit, which has been established by the Lake Elsinore Unified School District to mitigate any potential effects to school services. Any impacts would be considered incremental, and would be offset through the payment of the school impact mitigation fee. No additional mitigation is required.

d) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Parks? *No Impact*

Development associated with the proposed Project would be commercial retail or office in nature and would not be expected to directly affect community recreational facilities. In addition, as discussed in V.15 a and b (Recreation Resources) in the next section of this IS, the proposed Project would also not adversely affect any existing parks, recreation sites, or programs. No impacts are anticipated. No mitigation is required.

e) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities? *Less Than Significant Impact*

Development associated with the proposed Project may result in a slight increase in the demand for other governmental services such as economic development and the other community support services commonly provided by the City of Wildomar. The demand for these additional public service impacts would be incremental. This increment of impact will be off-set through the payment of the appropriate development impact fees and through the City budget for non-impact-fee programs and expenses. The City budget is based on a combination of property tax, sales tax, user fees, and state and federal government pass-through funding. Most of these revenue sources are from commercial sales, population, or development related, which means the more residents or business activity within the city, the greater the amount of funding that could be available. Therefore, while the proposed Project may add a small incremental impact to other public faculties, these impacts are considered less than significant. No additional mitigation measures, beyond the standard requirements, are required.

STANDARD CONDITIONS & REQUIREMENTS

1. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required development impact fees for police and fire services pursuant to Chapter 3.44.070 of the Wildomar Municipal Code and in effect at the time of building permit issuance.

2. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required school impact mitigation fees established by the Lake Elsinore Unified School District and in effect at the time of building permit issuance.

MITIGATION MEASURES

None.

15. RECREATION.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			✓	

DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated? *Less Than Significant Impact*

All Phases of development associated with the proposed Project are not expected to result in an increase in use of existing neighborhood and regional parks or other recreational facilities. Retail commercial and office uses do not typically result in increases in impacts to recreation resources. However, there may be a potential increase in residential growth, due to persons relocating to the area as a result of the jobs created by the proposed Project. This growth and the associated impacts would be indirect, or secondary impacts, are would be at most, a small, incremental increase. Due to this, any impacts to recreation resources, as a result of implementation of the proposed Project, would be considered less than significant. No mitigation is required.

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? *Less Than Significant Impact*

The proposed Project will not require the construction or expansion of new recreational facilities. There are no parks or recreational facilities included as part of any Phase of the proposed Project. Please reference the discussion above about incremental impacts due to increased residential growth. Any impacts to recreation resources, as a result of implementation of the proposed Project, would be considered less than significant. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

None.

MITIGATION MEASURES

None.

16. TRANSPORTATION / TRAFFIC.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		✓		
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			✓	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?			✓	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			✓	

DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Traffic Impact Analysis Report, Tentative Parcel Map No. 36492* (TIA), prepared by Albert A. Webb Associates, dated February 2013, Revised July 15, 2013, and is contained Appendix K, of the enclosed CD. Please refer to the TIA for a detailed discussion of the setting and methodology uses for the TIA. The discussion below will center on impacts to transportation/traffic resources from the proposed Project.

Based on direction from the City's Traffic Engineer, the study area for the proposed Project includes the following intersections:

1. I-15 Southbound Ramps (NS) / Clinton Keith Road (EW)
2. I-15 Northbound Ramps (NS) / Clinton Keith Road (EW)
3. George Avenue (NS) / Clinton Keith Road (EW)
4. Inland Valley Drive (NS) / Clinton Keith Road (EW)
5. Salida Del Sol (NS) / Clinton Keith Road (EW)
6. Project Driveway 1 (NS) / Clinton Keith Road (EW)
7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
8. Nutmeg Street (NS) / Clinton Keith Road (EW)
9. California Oaks Road (NS) / Clinton Keith Road (EW)
10. Elizabeth Lane (NS) / Project Driveway 2 (EW)
11. Elizabeth Lane (NS) / Project Driveway 3 (EW)
12. Elizabeth Lane (NS) / Project Driveway 4 (EW)
13. Elizabeth Lane (NS) / Project Driveway 5 (EW)
14. Yamas Drive (NS) / Project Driveway 6 (EW)
15. Yamas Drive (NS) / Project Driveway 7 (EW)
16. Yamas Drive (NS) / Prielipp Road (EW)
17. Elizabeth Lane (NS) / Prielipp Road (EW)
18. Nutmeg Street (NS) / Jackson Avenue (EW)

The method of traffic projection for the proposed Project is based on the following criteria:

- Existing traffic conditions;
- Ambient growth projections;
- Project generated traffic; and
- Cumulative project generated traffic.

As is standards practice in traffic forecasting and impact analysis, an opening year of the proposed Project is provided as a starting, or reference point, for the TIA. The proposed Project TIA uses a study year for the proposed Project of 2017 for analysis purposes.

a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? *Less Than Significant Impact with Mitigation Incorporated*

Intersection and roadway functioning is often described by its level of service (LOS). LOS A constitutes light traffic conditions with no interruptions in service or delays at intersections, while LOS F represents congested and unstable conditions with slow moving traffic accompanied by significant delays at many intersections. The City of Wildomar has adopted the County of Riverside General Plan. According to the County of Riverside General Plan, Policy C 2.1:

Maintain the following countywide target Levels of Service:

LOS "C" along all County maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways,

Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections.

LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities.

Table 5.16-1, *Project Trip Generation*, presents the daily and peak hour trip generation for the proposed Project. As shown, the proposed Project is anticipated to generate approximately 9,193 gross daily trip-ends. These gross daily trip-ends are reduced due to internal trip-ends, and pass-by trips; thereby, netting 7,969 daily trip ends, including 713 gross trip-ends during the AM peak hour and 782 gross trip-ends during the PM peak hour.

Table 5.16-1
Project Trip Generation

Land Use	Qty	Unit	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Business Park	294.9	TSF	413	347	66	408	94	314	3,918
General Office Building	42.42	TSF	94	83	11	126	21	105	689
Internal Trips[1]						(9)	(5)	(4)	(148)
NET NEW TRIPS FOR LAND USE			94	83	11	117	16	101	541
Medical-Dental Office Building	31.42	TSF	72	57	15	109	29	80	1,135
Internal Trips[1]						(9)	(5)	(4)	(148)
NET NEW TRIPS FOR LAND USE			72	57	15	100	24	76	987
Shopping Center	19.4	TSF	59	36	23	212	104	108	2,339
Internal Trips[1]						(31)	(14)	(17)	(595)
Pass-by Trips (34% for PM Peak only)[2]						(62)	(31)	(31)	(62)
NET NEW TRIPS FOR LAND USE			59	36	23	119	59	60	1,682
Fast-Food Restaurant with Drive-Through Window	3	TSF	148	75	73	102	53	49	1,488
Internal Trips[1]						(25)	(13)	(12)	(535)
Pass-by Trips (49% for AM Peak, 50% for PM Peak)[2]			(73)	(37)	(36)	(39)	(20)	(19)	(112)
NET NEW TRIPS FOR LAND USE			75	38	37	38	20	18	841
NET NEW TRIPS FOR TOTAL PROJECT			713	561	152	782	213	569	7,969

TSF = 1,000 Square Feet Gross Floor Area
[1] See Multi-Use Development Trip Generation and Internal Capture Summary in Appendix A for internal trip calculations.
[2] Average pass-by trip percentages from *Trip Generation Handbook* by Institute of Transportation Engineers (ITE), 2001.

Level of Service

Levels of Service – Existing Conditions

The existing levels of service for proposed Project the study area intersections vary from LOS A to D. The existing intersection of I-15 Southbound Ramps @ Clinton Keith Road operates at a LOS "D". Based on this information, none of the proposed Project study area intersections operate at an unacceptable LOS.

Levels of Service – Existing Plus proposed Project Conditions

For existing plus proposed Project traffic conditions without off-site improvements, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to F. The following study area intersection is expected to operate at an unacceptable LOS:

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)

With the recommended improvements presented in Mitigation Measure TR-1, levels of service at the impacted proposed Project study area intersection could be improved to meet the required level of service as required in County of Riverside General Plan, Policy C 2.1, discussed above. Impacts will be considered less than significant with mitigation incorporated.

Levels of Service – Existing Plus Ambient Growth Plus Cumulative Conditions

For existing plus ambient growth plus cumulative traffic conditions, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to C. None of the proposed Project study area intersections are expected to operate at an unacceptable LOS.

Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project Conditions

For existing plus ambient growth plus cumulative plus proposed Project traffic conditions without off-site improvements, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to F. The following proposed Project study area intersection is expected to operate at an unacceptable LOS:

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)

With the recommended improvements presented in Mitigation Measure TR-1, levels of service at the impacted proposed Project study area intersection could be improved to meet the required level of service as required in County of Riverside General Plan, Policy C 2.1, discussed above. Impacts will be considered less than significant with mitigation incorporated.

Traffic Signal Warrants

Traffic Signal Warrants – Existing Conditions

For existing traffic conditions, the peak hour traffic control signal warrant is not satisfied for any of the proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations).

Traffic Signal Warrants – Existing Plus proposed Project Conditions

For existing plus proposed Project traffic conditions, the peak hour traffic control signal warrant is expected to be satisfied for the following proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations):

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
10. Elizabeth Lane (NS) / Project Driveway 2 (EW)

With the recommended improvements presented in Mitigation Measure TR-1, traffic control service at the impacted proposed Project study area intersections could be improved to meet the City's requirements. Impacts will be considered less than significant with mitigation incorporated.

Traffic Signal Warrants – Existing Plus Ambient Growth Plus Cumulative Conditions

For existing plus ambient growth plus cumulative traffic conditions, no proposed Project study area unsignalized intersections are expected to meet the peak hour traffic control signal warrant (see Appendix D of the TIA for technical calculations).

Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project Conditions

For existing plus ambient growth plus other projects plus proposed Project traffic conditions, the peak hour traffic control signal warrant is expected to be satisfied for the following proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations):

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
10. Elizabeth Lane (NS) / Project Driveway 2 (EW)

With the recommended improvements presented in Mitigation Measure **TR-1**, traffic control service at the impacted proposed Project study area intersections could be improved to meet the City's requirements. Impacts will be considered less than significant with mitigation incorporated.

In addition to Mitigation Measure **TR-1**, the proposed Project will pay fees to the City pursuant to the TUMF program and the City's DIF Program. Payment of these fees is a standard condition to off-set cumulative and region wide traffic increment added by the implementation of the proposed Project.

b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? *Less Than Significant Impact*

Clinton Keith Road is not designated as part of the Riverside County Congestion Management Program (CMP). However, it is possible that some of the vehicle trips generated by development on the proposed Project site may connect to the CMP network at Interstate 15 (I-15). Development associated with the proposed Project could add an additional increment of traffic to the designated CMP network. The increment of potential impact associated with this proposed Project would be off-set through standard conditions of approval that require payment of existing roadway network fees (e.g., development impact fees and the Transportation Uniform Mitigation Fee). Consequently, the proposed Project and associated future development would not significantly affect the designated CMP road network. Any impacts would be considered incremental, yet less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? *No Impact*

No elements of the proposed Project would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. The maximum height of the buildings in Phase 1 is 36'0" and the maximum height allowed in Industrial Park (IP) for Phase II development would be 50 feet. As discussed in Section 8 Hazards and Hazardous Materials), the proposed Project site is not located in proximity to a public or private use airport. Since the location and height of the proposed Project would not affect air traffic patterns or aircraft operations from any private or public airport, no impacts are foreseen; therefore, no mitigation measures are required.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? *Less Than Significant Impact*

The proposed Project includes dedication of right-to-way to the City to accommodate anticipated vehicle movement as a result of development on the proposed Project site. This dedication of right-of-way would be for the proposed Project's perimeter roadways (Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C"). The City has site design criteria that govern the placement of driveways to allow for adequate site distance and turning movements. These provisions would become effective at the time of plot plan consideration and approval. As the proposed Project will widen existing roadways and install improvements along its frontage, and existing city ordinances will review the placement of driveways for sight distance and turning movements, this impact is considered less than significant.

e) Result in inadequate emergency access? *Less Than Significant Impact*

Development associated with the proposed Project would include access from Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C". However, the proposed Project includes right-of-way dedication along these roadways that will serve to enhance circulation in the immediate vicinity of the proposed Project. Therefore, the proposed Project would not

interfere with area wide emergency access or the implementation of local emergency response plans. Any impacts would be considered less than significant. No mitigation is required.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? *Less Than Significant Impact*

The proposed Project includes sidewalk improvements along Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C". All improvements would be designed to comply with design criteria contained in Chapter 16.08 of the Wildomar Municipal Code, including the construction of sidewalks, curbs, and gutters along the property frontage. The City's plot plan application process would review future development's need to provide bicycle lanes, bus turnouts, or other design components to support alternative transportation as part of the proposed Project design. Any necessary improvements would be a condition of future development approval. Therefore, the proposed Project would not conflict with adopted policies supporting alternative transportation. Any impacts would be considered less than significant. No mitigation is required.

STANDARD CONDITIONS & REQUIREMENTS

1. Prior to issuance of any building permit on the proposed Project site, the Project applicant(s) shall pay the appropriate Transportation Uniform Mitigation Fee and the City of Wildomar Development Impact Fee (DIF).
2. Sight distance at the proposed Project entrance roadway should be reviewed with respect to standard City of Wildomar sight distance standards at the time of preparation of final grading, landscape and street improvement plans.
3. Participate in the phased construction of off-site traffic signals through payment of proposed Project's fair share of traffic signal fees.
4. Signing/striping should be implemented in conjunction with detailed construction plans for the proposed Project site.

MITIGATION MEASURES

TR-1 The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service. The following improvements shall be constructed:

Roadways

- Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line (Phase 1).
- Construct partial width improvements on the westerly side of Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line (Phase 1).
- Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line (Phase 2).

Intersections (proposed Project's actual improvements necessary are shown in bold, italic, underlined. The items that are not bold, italic, underlined are already existing)

- Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics (Phase 1):
  Northbound: ***One right-turn lane. Stop controlled.***
  Southbound: Not applicable.
  Eastbound: One through lane. ***One right-turn lane.***
  Westbound: One through lane.
- ***Install a traffic signal*** at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics (Phase 1):
  Northbound: ***One left-turn lane.*** One shared through and right-turn lane.
  Southbound: ***One left-turn lane.*** One shared through and right-turn lane.
  Eastbound: One left-turn lane. One through lane. ***One right-turn lane.***
  Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.
- Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics (Phase 1):
  Northbound: One shared left-turn, through and right-turn lane.
  Southbound: One shared left-turn, through and right-turn lane.
  Eastbound: ***One shared left-turn, through and right-turn lane. Stop controlled.***
  Westbound: One shared left-turn, through and right-turn lane. Stop controlled.
- Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW) with the following geometrics (Phase 1):
  Northbound: One shared left-turn and through lane.
  Southbound: One shared through and right-turn lane.
  Eastbound: ***One shared left-turn and right-turn lane. Stop controlled.***
  Westbound: Not applicable.
- Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):
  Northbound: Not applicable.
  Southbound: One right-turn lane.
  Eastbound: ***One shared left-turn and right-turn lane. Stop controlled***
  Westbound: Not applicable.
- Construct the intersection of Project Driveway 4 (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):
  Northbound: Not Applicable.
  Southbound: ***One shared left-turn and right-turn lane. Stop controlled.***
  Eastbound: One shared left-turn and through lane.
  Westbound: One shared through and right-turn lane.
- Construct the intersection of Yamas Drive (NS) and proposed Project Driveway 5(EW) with the following geometrics (Phase 2):
  Northbound: ***One shared through and right-turn lane.***
  Southbound: ***One shared left-turn and through lane.***
  Eastbound: Not applicable.
  Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***

- Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):
  Northbound: ***One shared through and right-turn lane.***
  Southbound: ***One shared left-turn and through lane.***
  Eastbound: Not applicable.
  Westbound: ***One shared left-turn and right-turn lane. Stop controlled.***

  Timing/Implementation: Implemented during the appropriate Phase of proposed Project construction.

  Enforcement/Monitoring: City of Wildomar Traffic Engineering Department.

17. UTILITIES AND SERVICES SYSTEMS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			✓	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?			✓	
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			✓	

The Elsinore Valley Municipal Water District (EVWMD) will provide water and sewer services for the proposed Project. Electric, gas, cable, and telephone services would be extended onto the site from existing main lines, either in Clinton Keith Road or Elizabeth Lane. Electricity would be provided by Southern California Edison, gas by Southern California Gas, and telephone service would be provided by Verizon. The site is located within the boundaries of the Lake Elsinore Unified School District (LEUSD). Municipal or local government services are provided by the City of Wildomar. Fire and security services are provided by the City of Wildomar through contracts with the Riverside County Fire Department and the Riverside County Sheriff's Department. Solid waste disposal services are provided to the City of Wildomar by Waste Management, Inc.

DISCUSSION

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? *Less Than Significant Impact*

The San Diego Regional Water Quality Control Board regulates wastewater discharges within the portion of the City of Wildomar encompassing the proposed Project site. Development on the proposed Project site would receive wastewater services from the Elsinore Valley Municipal Water District (EVMWD). The proposed Project will not require or will not result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects. Therefore, impacts are considered less than significant and no additional mitigation measures are required. For a complete discussion of urban runoff-related water quality impacts associated with construction and operation of the proposed Project, please refer to Section 9, Hydrology and Water Quality, of this Initial Study.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? *Less Than Significant Impact*

The proposed Project site is within the service boundary for EVMWD. All development on the proposed Project site would be connecting to EVMWD water and sewer service infrastructure. Phase 1 development would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Service Planning Letter #2448-0 (see Appendix M of this Initial Study) has been issued by EVWMD for Phase 1 of development. As a result, any potential impacts are considered incremental and less than significant. No additional mitigation is required

The proposed Project is consistent with the City's General Plan designations. No amendments to the current General Plan designations are included as part of the proposed Project. These General Plan Land Use designations have been in place on the proposed Project site since 2003. According to the Elsinore Valley Municipal Water District, *Draft Program Environmental Impact Report Water Distribution System Master Plan and Wastewater Master Plan (SCH No. 2008111100),* April 2010(http://www.evmwd.com/civica/filebank/blobdload.asp?BlobID=5369), (p. 1-3), the Wastewater Master Plan (WMP) anticipated an increase the capacity of water and wastewater infrastructure and would therefore accommodate the population growth projected for the service area through 2030. As a result, the development proposed in Phase 2 has been anticipated as part of the WMP. Any impacts from Phase 2 would be considered less than significant and no additional mitigation is required.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? *Less Than Significant Impact*

The proposed Project would not result in the generation of stormwater. Phase 2 development on the proposed Project site would connect to the existing storm drainage facilities. On-site runoff would be incorporated into the existing drainage system after treatment by the best management practices identified in the required Water Quality Management Plan (and discussed

in Section 9, Hydrology and Water Quality, of this Initial Study). All development would be required to be designed to ensure that post-construction stormwater runoff rates do not exceed pre-construction flows. Therefore, existing infrastructure would have adequate capacity to serve future development on the proposed Project site and no new or expansion of existing stormwater drainage facilities would be necessary. Impacts associated with new or expanded stormwater water drainage facilities are considered less than significant. No additional mitigation is required.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? *Less Than Significant Impact*

The proposed Project site is within the service boundary for the EVMWD, and future development on the proposed Project site would be connecting to EVMWD water service infrastructure. EVMWD utilizes both groundwater and imported water supplies to ensure adequate water is available for consumers. Imported water is utilized to ensure that significant overdraft of local groundwater supplies does not occur. Based on the EVMWD's Urban Water Master Plan, no adverse impacts to groundwater resources are forecast to occur from implementing the proposed Project. Service Planning Letter #2448-0 (see Appendix L of this Initial Study) has been issued by EVWMD for Phase 1 of development. Any impacts are considered less than significant. No mitigation is required.

e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? *Less Than Significant Impact*

As described above, all development on the proposed Project site would connect to water and sewer service infrastructure. All Phases of development would be conditioned to obtain approvals from the Riverside County Department of Environmental Health. The proposed Project would not impact the EVMWD's ability to serve existing customers. Impacts are considered less than significant. No additional mitigation is required.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? *Less Than Significant Impact*

The main disposal site in the vicinity of the proposed Project site is the El Sobrante Landfill in Corona. The El Sobrante Landfill is projected to reach capacity in 2030. Development on the proposed Project site would be served by a landfill with sufficient permitted capacity to accommodate the proposed Project's solid waste disposal needs. Impacts are considered incremental, yet less than significant. No additional mitigation is required.

The proposed Project would not substantially alter existing or future solid waste generation patterns and disposal services. The proposed Project would be consistent with the County Integrated Waste Management Plan. All development would be required to comply with the recommendations of the Riverside County Waste Management Department and be consistent with the County Integrated Waste Management Plan. These requirements are standard to all retail commercial, restaurant and office projects, and are not considered mitigation pursuant to CEQA. Any impacts would be less than significant. No additional mitigation is required.

g) Comply with federal, state, and local statutes and regulations related to solid waste? *Less Than Significant Impact*

The proposed Project will comply with federal, state, and local statutes and regulations related to solid waste. Please refer to Response 17.f., above. The proposed Project does not any propose activities that would conflict with the any applicable programmatic requirements. In addition, any future development shall comply with construction and debris removal and recycling requirements and shall contract with the City's waste hauler/franchisee for all bins and their removal in accordance with City Ordinance. As a result, the proposed Project will comply with all of the applicable requirements and any impacts will be less than significant. No additional mitigation measures are required.

STANDARD CONDITIONS & REQUIREMENTS

1. The Project applicant(s) for future development on the proposed Project site shall obtain approval from the Riverside County Department of Environmental Health before receiving water and wastewater service from the Elsinore Valley Municipal Water District.

2. Prior to issuance of a building permit, a recycling collection and loading area plan shall be submitted to the City and to Riverside County Waste Management Division.

MITIGATION MEASURES

None.

VI. MANDATORY FINDINGS OF SIGNIFICANCE

Issues, does the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		✓		
c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

DISCUSSION

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a) **Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?** *Less Than Significant Impact with Mitigation Incorporated*

Based on evaluations and discussions contained in this IS, the proposed Project and associated future commercial development on the proposed Project site has a very limited potential to incrementally degrade the quality of the environment because it is not in an environmentally sensitive location, and it is consistent with the City of Wildomar General Plan. As a result, the proposed Project would not significantly affect the environment with implementation of the mitigation measures contained in this IS.

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) *Less Than Significant Impact with Mitigation Incorporated*

Aesthetics

Implementation of the proposed Project would not contribute to cumulative visual resource or aesthetic impacts. The City's plot plan application process will ensure development is in compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Thus, while incremental, impacts to aesthetic resources are not considered cumulatively considerable. Cumulative conditions were anticipated in the City's General Plan Land Use Plan designation of BP (Business Park). The proposed Project is consistent with the General Plan.

Agricultural Resources

Implementation of the proposed project would not contribute to cumulative impacts to agricultural resources or forestland impacts. No agricultural resources will be impacted through the implementation of the proposed Project. Thus, less than cumulatively considerable impacts to agricultural resources and forestland resources are anticipated under cumulative conditions.

Air Quality

The proposed project may contribute to cumulative air quality impacts in the vicinity. As previously stated, the SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. In other words, the SCAQMD considers projects that are consistent with the AQMP, which is intended to bring the basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts. The discussion under Impact a) describes the SCAQMD criteria for determining consistency with the AQMP and further demonstrates that the proposed project would be consistent with it. As such, cumulative impacts would be less than significant per the SCAQMD significance threshold since the project would be consistent with the AQMP.

Biological Resources

The potential for biological impacts is addressed through mitigation measures **BIO-1** through **BIO-6**, resulting in the proposed Project having a less than cumulatively considerable impact on biological resources. The proposed Project is consistent with the Riverside County MSHCP, which was created to address biological resources County-wide. In addition, Project impacts to state and federal resources will be avoided to the greatest extent possible, and where impacts shall occur, will be mitigated to result in a no net loss of resources.

Cultural Resources

Development on the proposed Project site would contribute to an increase in cultural resource impacts. Based on the analysis contained in this Initial Study, the potential for there is potential

for these sub-surface resources to be present on the proposed Project site. However, mitigation measures **CUL-1** though **CUL-8** would reduce the potential impacts associated with development on the Project site, resulting in either: avoidance, preservation, or curation of any resources found on site during ground disturbance and grading activities. Thus, the proposed Project would have a less than cumulatively considerable impact, as determined by the agencies that have jurisdiction over these resources.

Geology and Soils

Project-related impacts on geology and soils associated with development on the proposed Project site are site-specific, and development on the site would not contribute to seismic hazards or water quality impacts associated with soil erosion. However compliance with Standard Conditions and Requirements would result in a decreased exposure to the risks associated with seismic activity. Therefore, the proposed Project is anticipated to have no impact on cumulative geophysical conditions in the region.

Greenhouse Gas Emissions

The greenhouse gas analysis provided in subsection 7, Greenhouse Gas Emissions, analyzed the proposed Project's cumulative contribution to global climate change and determined that the proposed Project would not create a cumulatively considerable environmental impact resulting from greenhouse gas emissions. The proposed Project will provide jobs in a housing rich environment.

Hazards and Hazardous Materials

The proposed Project is not expected to utilize or contribute to hazards associated with the accidental release of hazardous materials. However, even if hazardous materials are used on the site, implementation of mitigation measures **HAZ-1** through **HAZ-4** and compliance with federal, state, and City regulations will ensure that cumulative hazard conditions are less than cumulatively considerable.

Hydrology and Water Quality

Development on the proposed Project site has the potential to result in cumulative hydrology and water quality impacts; however, implementation of mitigation measure **HYD-1** would reduce the proposed Project's potential cumulative impacts on hydrology and water quality to less than cumulatively considerable. There will be no changes to off-site and on-site drainage patterns as a result of Project design and compliance with mitigation measure **HYD-1**.

Land Use and Planning

The proposed Project is consistent with the existing land use designation of the General Plan and is consistent with the existing zoning. The proposed Project is consistent with existing and proposed development in the project vicinity . Because the proposed Project area is surrounded by existing urban development and land designated for urban development, and the proposed Project is consistent with both the General Plan and zoning designations for the site, the proposed Project would result in no cumulative impacts to land uses.

Mineral Resources

Currently, no mineral resources are known to exist at the proposed Project site and there is no significant potential that unknown mineral resources exist at the site. There are no known locally important mineral resource recovery sites identified by the Wildomar General Plan and the proposed project will not impact access to any unknown mineral sites located outside of the proposed project boundaries. Any impacts would be less than cumulatively considerable.

Noise

Development on the proposed Project site would result in temporary and permanent changes in the ambient noise levels in the vicinity; however, implementation of mitigation measures **NOI-1** though **NOI-5** would reduce cumulative noise impacts to less than cumulatively considerable. With mitigation incorporation, construction noise and noise from Project operations, will be within the acceptable standards mandated in the City's General Plan.

Population and Housing

Cumulative development in the vicinity of the proposed Project would indirectly increase the population and number of housing units in Wildomar and Riverside County. However, development at the proposed Project site is consistent with current land use designations and growth assumed in the Land Use Element of the Wildomar General Plan. The cumulative environmental and growth inducement effects are evaluated in the technical sections of this IS/MND. Given that this growth is anticipated in the General Plan, this impact is considered less than cumulatively considerable.

Public Services

Implementation of the proposed Project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the immediate area, may increase the demand for public services. However, with the implementation of the City's Standard Conditions and Requirements, any necessary infrastructure or facilities expansion will be reviewed for potential impacts. Impacts related to the proposed Project are less than cumulatively considerable.

Recreation

Implementation of the proposed Project will have a minimal impact upon Recreation Resources. Because the proposed Project is non-residential , any impacts are considered indirect, incremental and less than significant. Impacts related to the proposed Project are less than cumulatively considerable.

Transportation/Traffic

Development on the proposed Project site would contribute trips to the circulation network under cumulative conditions. As a standard condition, the Project applicant will be responsible to implement and pay its fair-share contribution toward necessary improvements through a payment of the TUMF. Mitigation Measure **TR-1** requires improvements to roadways and

intersections that will be affected by the implementation of the proposed Project. The proposed Project's impacts to cumulative traffic conditions would be less than cumulatively considerable as analyzed in the proposed Project TIA. The TIA analyzed Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project Conditions and determined that all impacts could be mitigated to a less than significant level.

Utilities and Service Systems

Construction and operational activities related to the development on the proposed Project may result in impacts to utilities and service systems, including solid waste. However, any impacts would be less than cumulatively considerable. As discussed and analyzed in Section V.17, Utilities and Service Systems, of this Initial Study, implementation of the proposed Project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Sufficient water supplies are available to serve the project from existing entitlements and resources and no new or expanded entitlements are needed. Adequate wastewater capacity exists to serve the project's projected demand in addition to the provider's existing commitments. Lastly, the proposed Project will be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and the proposed Project will comply with federal, state, and local statutes and regulations related to solid waste. Project impacts, while incremental, will not be cumulatively considerable.

c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? *Less Than Significant Impact with Mitigation Incorporated*

The proposed Project does not have the potential to significantly adversely affect humans, either directly or indirectly. While a number of impacts were identified as having a potential to significantly impact humans, with the identified mitigation measures and standard requirements, these impacts are expected to be less than significant. With implementation of the identified measures, the proposed Project and associated future development are not expected to cause significant adverse impacts to humans. All significant impacts are avoidable, and the City of Wildomar will ensure that measures imposed to protect human beings are implemented.

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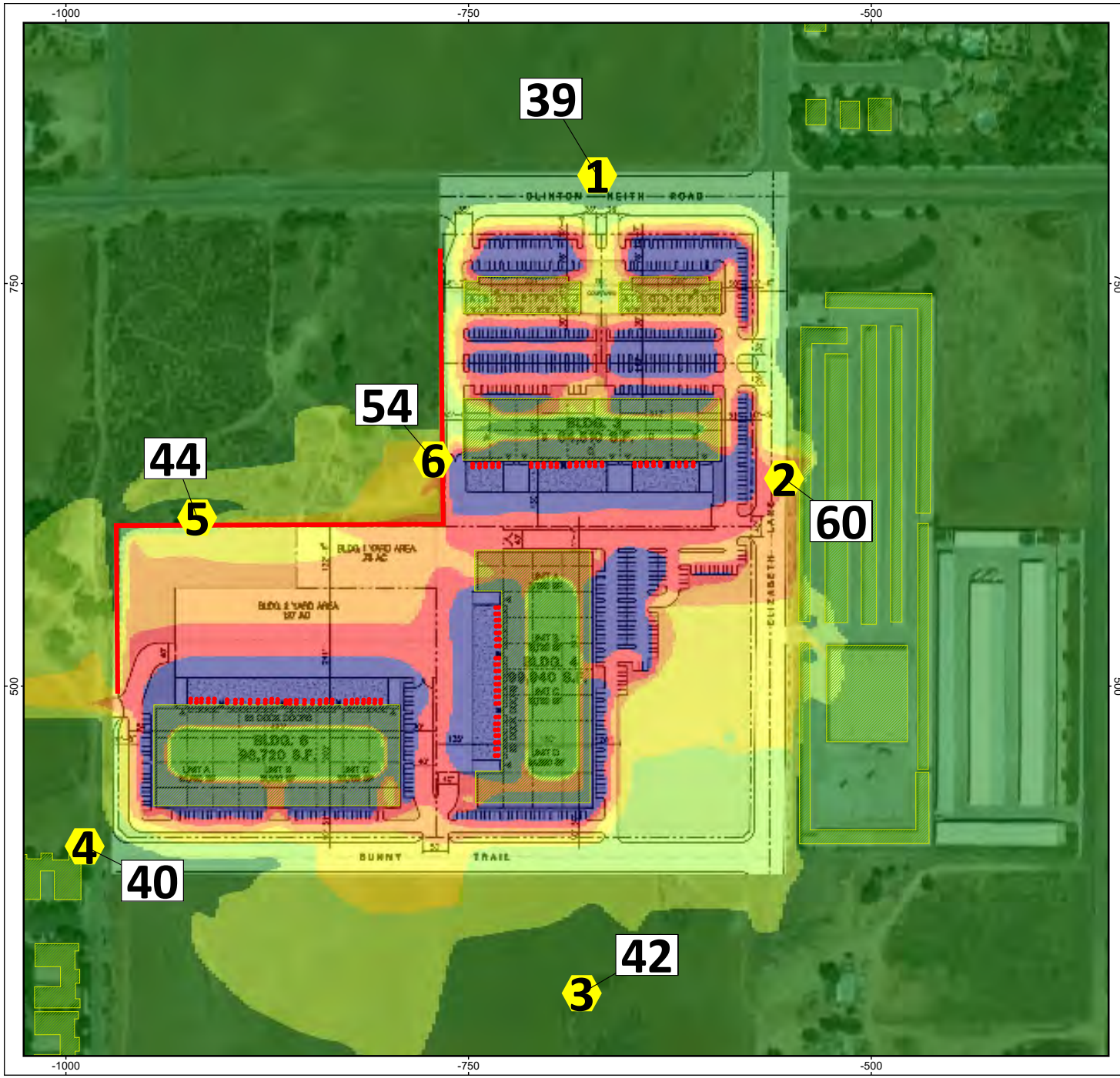
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Appendix C:

SoundPLAN Input and Output



10432201 Wildomar 29 - Noise
Noise Level Contours
Parking, Backup alarms, Idling trucks
Situation 2: 8' CMU Wall

Levels in dB(A)

<	45
45 -	50
50 -	55
55 -	60
60 -	65
>=	65

Signs and symbols

- Level table, dBA
- Point Receiver
- Backup Alarm / Idling Diesel Truck
- Buildings
- 8' CMU Wall

Length scale 1:200

0 100 200 400 600 feet

MD ACOUSTICS
Sound Solutions for Planning and Design

1075

Source	Source type	Lmax dB(A)	A dB	
Receiver R1 Fl G Lmax,lim dB(A) Lmax 38.8 dB(A)				
Backup beep	Point	20.4	0.0	
Idling Diesel	Point	12.1	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.2	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.1	0.0	
Backup beep	Point	20.8	0.0	
Idling Diesel	Point	12.2	0.0	
Backup beep	Point	20.8	0.0	
Idling Diesel	Point	12.2	0.0	
Backup beep	Point	21.1	0.0	
Idling Diesel	Point	12.3	0.0	
Backup beep	Point	21.4	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	21.3	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	21.3	0.0	
Idling Diesel	Point	12.6	0.0	
Backup beep	Point	21.2	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.1	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.1	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	22.0	0.0	
Idling Diesel	Point	13.1	0.0	
Backup beep	Point	22.0	0.0	
Idling Diesel	Point	13.0	0.0	
Backup beep	Point	21.8	0.0	
Idling Diesel	Point	12.6	0.0	
Backup beep	Point	21.6	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	21.6	0.0	
Idling Diesel	Point	12.4	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.1	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.1	0.0	
Backup beep	Point	20.6	0.0	
Idling Diesel	Point	12.0	0.0	
Backup beep	Point	20.6	0.0	
Idling Diesel	Point	12.0	0.0	
Backup beep	Point	18.7	0.0	
Idling Diesel	Point	11.3	0.0	
Backup beep	Point	18.6	0.0	
Idling Diesel	Point	12.3	0.0	
Backup beep	Point	18.2	0.0	
Idling Diesel	Point	12.4	0.0	
Backup beep	Point	17.9	0.0	
Idling Diesel	Point	12.3	0.0	
Backup beep	Point	17.8	0.0	
Idling Diesel	Point	12.2	0.0	
Backup beep	Point	17.5	0.0	
Idling Diesel	Point	12.0	0.0	
Backup beep	Point	17.4	0.0	
Idling Diesel	Point	11.9	0.0	
Backup beep	Point	17.8	0.0	
Idling Diesel	Point	12.1	0.0	
Backup beep	Point	18.0	0.0	
Idling Diesel	Point	12.3	0.0	
Backup beep	Point	17.6	0.0	
Idling Diesel	Point	12.0	0.0	
Backup beep	Point	17.4	0.0	
Idling Diesel	Point	11.9	0.0	
Backup beep	Point	17.5	0.0	
Idling Diesel	Point	11.9	0.0	
Backup beep	Point	17.4	0.0	
Idling Diesel	Point	11.9	0.0	
Backup beep	Point	17.3	0.0	
Idling Diesel	Point	11.8	0.0	
Backup beep	Point	17.2	0.0	
Idling Diesel	Point	11.7	0.0	
Backup beep	Point	17.1	0.0	
Idling Diesel	Point	11.6	0.0	
Backup beep	Point	17.6	0.0	
Idling Diesel	Point	11.9	0.0	
Backup beep	Point	17.7	0.0	
Idling Diesel	Point	11.9	0.0	
Backup beep	Point	17.1	0.0	
Idling Diesel	Point	13.2	0.0	
Backup beep	Point	17.4	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	13.4	0.0	
Backup beep	Point	17.5	0.0	
Idling Diesel	Point	13.6	0.0	
Backup beep	Point	19.9	0.0	
Idling Diesel	Point	13.7	0.0	
Backup beep	Point	29.6	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	29.6	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	29.7	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	29.7	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	29.7	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	29.7	0.0	
Idling Diesel	Point	20.8	0.0	
Backup beep	Point	32.2	0.0	
Idling Diesel	Point	23.3	0.0	
Backup beep	Point	32.2	0.0	
Idling Diesel	Point	23.3	0.0	
Backup beep	Point	32.2	0.0	
Idling Diesel	Point	23.3	0.0	
Backup beep	Point	32.2	0.0	
Idling Diesel	Point	23.3	0.0	
Backup beep	Point	31.8	0.0	
Idling Diesel	Point	23.0	0.0	
Backup beep	Point	32.2	0.0	
Idling Diesel	Point	23.3	0.0	
Backup beep	Point	32.2	0.0	
Idling Diesel	Point	23.3	0.0	
Backup beep	Point	31.3	0.0	
Idling Diesel	Point	22.5	0.0	
Backup beep	Point	31.3	0.0	
Idling Diesel	Point	22.5	0.0	
Backup beep	Point	31.2	0.0	
Idling Diesel	Point	22.4	0.0	
Backup beep	Point	31.1	0.0	
Idling Diesel	Point	22.4	0.0	
Backup beep	Point	31.0	0.0	
Idling Diesel	Point	22.3	0.0	
Backup beep	Point	30.8	0.0	
Idling Diesel	Point	22.1	0.0	
Backup beep	Point	30.8	0.0	
Idling Diesel	Point	22.1	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	30.9	0.0	
Idling Diesel	Point	22.2	0.0	
Backup beep	Point	30.5	0.0	
Idling Diesel	Point	21.9	0.0	
Backup beep	Point	30.5	0.0	
Idling Diesel	Point	21.8	0.0	
Backup beep	Point	30.5	0.0	
Idling Diesel	Point	21.8	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.8	0.0	
Backup beep	Point	30.5	0.0	
Idling Diesel	Point	21.8	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.8	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.7	0.0	
151	PLot	14.7	0.0	
152	PLot	19.2	0.0	
153	PLot	13.7	0.0	
154	PLot	3.7	0.0	
155	PLot	3.8	0.0	
156	PLot	7.5	0.0	
157	PLot	9.7	0.0	
158	PLot	9.1	0.0	
159	PLot	7.0	0.0	
160	PLot	14.8	0.0	
161	PLot	11.6	0.0	
162	PLot	38.8	0.0	
163	PLot	37.2	0.0	
164	PLot	38.4	0.0	
165	PLot	36.0	0.0	
166	PLot	34.2	0.0	
167	PLot	32.4	0.0	
168	PLot	33.2	0.0	
169	PLot	36.0	0.0	
170	PLot	30.2	0.0	
171	PLot	20.4	0.0	
172	PLot	20.0	0.0	
173	PLot	30.7	0.0	
174	PLot	21.9	0.0	
175	PLot	13.9	0.0	
176	PLot	-0.1	0.0	
177	PLot	-0.3	0.0	
178	PLot	11.7	0.0	
Receiver R2 Fl G Lmax,lim dB(A) Lmax 60.1 dB(A)				

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	49.8	0.0	
Idling Diesel	Point	38.8	0.0	
Backup beep	Point	49.1	0.0	
Idling Diesel	Point	38.8	0.0	
Backup beep	Point	49.4	0.0	
Idling Diesel	Point	38.9	0.0	
Backup beep	Point	49.6	0.0	
Idling Diesel	Point	39.1	0.0	
Backup beep	Point	49.8	0.0	
Idling Diesel	Point	39.3	0.0	
Backup beep	Point	50.8	0.0	
Idling Diesel	Point	40.3	0.0	
Backup beep	Point	51.0	0.0	
Idling Diesel	Point	40.6	0.0	
Backup beep	Point	51.3	0.0	
Idling Diesel	Point	40.8	0.0	
Backup beep	Point	51.6	0.0	
Idling Diesel	Point	41.1	0.0	
Backup beep	Point	51.8	0.0	
Idling Diesel	Point	41.3	0.0	
Backup beep	Point	52.3	0.0	
Idling Diesel	Point	41.8	0.0	
Backup beep	Point	52.6	0.0	
Idling Diesel	Point	42.1	0.0	
Backup beep	Point	52.9	0.0	
Idling Diesel	Point	42.3	0.0	
Backup beep	Point	53.2	0.0	
Idling Diesel	Point	42.6	0.0	
Backup beep	Point	53.5	0.0	
Idling Diesel	Point	42.9	0.0	
Backup beep	Point	53.8	0.0	
Idling Diesel	Point	43.2	0.0	
Backup beep	Point	55.6	0.0	
Idling Diesel	Point	44.8	0.0	
Backup beep	Point	55.9	0.0	
Idling Diesel	Point	45.2	0.0	
Backup beep	Point	56.3	0.0	
Idling Diesel	Point	45.5	0.0	
Backup beep	Point	56.8	0.0	
Idling Diesel	Point	46.0	0.0	
Backup beep	Point	57.3	0.0	
Idling Diesel	Point	46.4	0.0	
Backup beep	Point	58.3	0.0	
Idling Diesel	Point	47.3	0.0	
Backup beep	Point	58.8	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	47.9	0.0	
Backup beep	Point	59.4	0.0	
Idling Diesel	Point	48.4	0.0	
Backup beep	Point	60.1	0.0	
Idling Diesel	Point	48.5	0.0	
Backup beep	Point	22.7	0.0	
Idling Diesel	Point	13.8	0.0	
Backup beep	Point	22.6	0.0	
Idling Diesel	Point	13.7	0.0	
Backup beep	Point	22.5	0.0	
Idling Diesel	Point	13.6	0.0	
Backup beep	Point	22.4	0.0	
Idling Diesel	Point	13.5	0.0	
Backup beep	Point	22.3	0.0	
Idling Diesel	Point	13.4	0.0	
Backup beep	Point	22.2	0.0	
Idling Diesel	Point	13.3	0.0	
Backup beep	Point	22.1	0.0	
Idling Diesel	Point	13.2	0.0	
Backup beep	Point	22.0	0.0	
Idling Diesel	Point	13.2	0.0	
Backup beep	Point	21.9	0.0	
Idling Diesel	Point	13.2	0.0	
Backup beep	Point	21.8	0.0	
Idling Diesel	Point	13.0	0.0	
Backup beep	Point	21.7	0.0	
Idling Diesel	Point	12.9	0.0	
Backup beep	Point	21.6	0.0	
Idling Diesel	Point	12.9	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.9	0.0	
Backup beep	Point	21.3	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.2	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	21.0	0.0	
Idling Diesel	Point	12.6	0.0	
Backup beep	Point	21.0	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	21.0	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	20.8	0.0	
Idling Diesel	Point	12.4	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.5	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	20.6	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	33.5	0.0	
Idling Diesel	Point	24.2	0.0	
Backup beep	Point	33.5	0.0	
Idling Diesel	Point	24.3	0.0	
Backup beep	Point	33.5	0.0	
Idling Diesel	Point	24.3	0.0	
Backup beep	Point	33.6	0.0	
Idling Diesel	Point	24.4	0.0	
Backup beep	Point	33.9	0.0	
Idling Diesel	Point	24.5	0.0	
Backup beep	Point	34.0	0.0	
Idling Diesel	Point	24.6	0.0	
Backup beep	Point	34.1	0.0	
Idling Diesel	Point	24.6	0.0	
Backup beep	Point	34.1	0.0	
Idling Diesel	Point	24.6	0.0	
Backup beep	Point	34.1	0.0	
Idling Diesel	Point	24.7	0.0	
Backup beep	Point	34.1	0.0	
Idling Diesel	Point	24.7	0.0	
Backup beep	Point	34.1	0.0	
Idling Diesel	Point	24.7	0.0	
Backup beep	Point	34.1	0.0	
Idling Diesel	Point	24.7	0.0	
Backup beep	Point	34.1	0.0	
Idling Diesel	Point	24.7	0.0	
Backup beep	Point	34.4	0.0	
Idling Diesel	Point	24.8	0.0	
Backup beep	Point	34.4	0.0	
Idling Diesel	Point	24.7	0.0	
Backup beep	Point	34.4	0.0	
Idling Diesel	Point	24.7	0.0	
Backup beep	Point	34.3	0.0	
Idling Diesel	Point	24.7	0.0	
Backup beep	Point	36.5	0.0	
Idling Diesel	Point	27.1	0.0	
Backup beep	Point	36.9	0.0	
Idling Diesel	Point	27.0	0.0	
Backup beep	Point	36.5	0.0	
Idling Diesel	Point	27.0	0.0	
Backup beep	Point	36.5	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	27.1	0.0	
Backup beep	Point	36.7	0.0	
Idling Diesel	Point	27.0	0.0	
Backup beep	Point	36.6	0.0	
Idling Diesel	Point	26.9	0.0	
Backup beep	Point	36.4	0.0	
Idling Diesel	Point	26.8	0.0	
Backup beep	Point	36.2	0.0	
Idling Diesel	Point	26.7	0.0	
Backup beep	Point	36.1	0.0	
Idling Diesel	Point	26.6	0.0	
Backup beep	Point	36.0	0.0	
Idling Diesel	Point	26.4	0.0	
Backup beep	Point	35.8	0.0	
Idling Diesel	Point	26.3	0.0	
151	PLot	31.5	0.0	
152	PLot	36.1	0.0	
153	PLot	31.7	0.0	
154	PLot	29.0	0.0	
155	PLot	24.2	0.0	
156	PLot	30.8	0.0	
157	PLot	26.0	0.0	
158	PLot	24.3	0.0	
159	PLot	21.9	0.0	
160	PLot	29.1	0.0	
161	PLot	25.3	0.0	
162	PLot	20.4	0.0	
163	PLot	21.0	0.0	
164	PLot	29.4	0.0	
165	PLot	25.2	0.0	
166	PLot	26.2	0.0	
167	PLot	25.7	0.0	
168	PLot	34.0	0.0	
169	PLot	38.9	0.0	
170	PLot	34.7	0.0	
171	PLot	18.2	0.0	
172	PLot	14.4	0.0	
173	PLot	31.5	0.0	
174	PLot	45.0	0.0	
175	PLot	17.9	0.0	
176	PLot	7.7	0.0	
177	PLot	3.8	0.0	
178	PLot	2.7	0.0	
Receiver R3 Fl G Lmax,lim dB(A) Lmax 41.8 dB(A)				
Backup beep	Point	28.8	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	20.2	0.0	
Backup beep	Point	28.7	0.0	
Idling Diesel	Point	20.2	0.0	
Backup beep	Point	28.7	0.0	
Idling Diesel	Point	20.2	0.0	
Backup beep	Point	28.7	0.0	
Idling Diesel	Point	20.2	0.0	
Backup beep	Point	28.7	0.0	
Idling Diesel	Point	20.2	0.0	
Backup beep	Point	29.2	0.0	
Idling Diesel	Point	20.6	0.0	
Backup beep	Point	29.2	0.0	
Idling Diesel	Point	20.6	0.0	
Backup beep	Point	29.2	0.0	
Idling Diesel	Point	20.6	0.0	
Backup beep	Point	29.3	0.0	
Idling Diesel	Point	20.8	0.0	
Backup beep	Point	30.8	0.0	
Idling Diesel	Point	20.8	0.0	
Backup beep	Point	30.9	0.0	
Idling Diesel	Point	21.4	0.0	
Backup beep	Point	31.0	0.0	
Idling Diesel	Point	21.6	0.0	
Backup beep	Point	33.9	0.0	
Idling Diesel	Point	22.6	0.0	
Backup beep	Point	35.6	0.0	
Idling Diesel	Point	23.4	0.0	
Backup beep	Point	37.5	0.0	
Idling Diesel	Point	26.8	0.0	
Backup beep	Point	38.8	0.0	
Idling Diesel	Point	28.3	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	31.7	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	31.7	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	31.7	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	31.7	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	31.7	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	31.6	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	31.6	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	41.4	0.0	
Idling Diesel	Point	31.5	0.0	
Backup beep	Point	40.8	0.0	
Idling Diesel	Point	31.3	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	28.8	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	28.8	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	28.7	0.0	
Backup beep	Point	40.5	0.0	
Idling Diesel	Point	27.9	0.0	
Backup beep	Point	39.6	0.0	
Idling Diesel	Point	28.5	0.0	
Backup beep	Point	38.8	0.0	
Idling Diesel	Point	28.6	0.0	
Backup beep	Point	39.0	0.0	
Idling Diesel	Point	28.1	0.0	
Backup beep	Point	39.2	0.0	
Idling Diesel	Point	28.3	0.0	
Backup beep	Point	39.4	0.0	
Idling Diesel	Point	28.4	0.0	
Backup beep	Point	39.5	0.0	
Idling Diesel	Point	28.5	0.0	
Backup beep	Point	39.6	0.0	
Idling Diesel	Point	28.7	0.0	
Backup beep	Point	39.8	0.0	
Idling Diesel	Point	28.8	0.0	
Backup beep	Point	39.9	0.0	
Idling Diesel	Point	28.9	0.0	
Backup beep	Point	40.0	0.0	
Idling Diesel	Point	26.7	0.0	
Backup beep	Point	22.3	0.0	
Idling Diesel	Point	26.9	0.0	
Backup beep	Point	22.6	0.0	
Idling Diesel	Point	16.6	0.0	
Backup beep	Point	23.2	0.0	
Idling Diesel	Point	17.0	0.0	
Backup beep	Point	23.5	0.0	
Idling Diesel	Point	17.2	0.0	
Backup beep	Point	23.3	0.0	
Idling Diesel	Point	17.1	0.0	
Backup beep	Point	23.7	0.0	
Idling Diesel	Point	17.5	0.0	
Backup beep	Point	24.0	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	17.8	0.0	
Backup beep	Point	24.3	0.0	
Idling Diesel	Point	17.4	0.0	
Backup beep	Point	16.4	0.0	
Idling Diesel	Point	9.2	0.0	
Backup beep	Point	16.4	0.0	
Idling Diesel	Point	9.1	0.0	
Backup beep	Point	16.5	0.0	
Idling Diesel	Point	9.3	0.0	
Backup beep	Point	16.7	0.0	
Idling Diesel	Point	9.4	0.0	
Backup beep	Point	16.8	0.0	
Idling Diesel	Point	9.5	0.0	
Backup beep	Point	16.8	0.0	
Idling Diesel	Point	9.3	0.0	
Backup beep	Point	16.9	0.0	
Idling Diesel	Point	9.3	0.0	
Backup beep	Point	17.0	0.0	
Idling Diesel	Point	9.3	0.0	
Backup beep	Point	17.2	0.0	
Idling Diesel	Point	9.5	0.0	
Backup beep	Point	17.3	0.0	
Idling Diesel	Point	9.6	0.0	
Backup beep	Point	17.8	0.0	
Idling Diesel	Point	10.1	0.0	
Backup beep	Point	17.7	0.0	
Idling Diesel	Point	10.1	0.0	
Backup beep	Point	17.5	0.0	
Idling Diesel	Point	9.7	0.0	
Backup beep	Point	17.8	0.0	
Idling Diesel	Point	9.8	0.0	
Backup beep	Point	17.9	0.0	
Idling Diesel	Point	9.9	0.0	
Backup beep	Point	18.0	0.0	
Idling Diesel	Point	10.1	0.0	
Backup beep	Point	18.2	0.0	
Idling Diesel	Point	10.2	0.0	
Backup beep	Point	18.4	0.0	
Idling Diesel	Point	10.4	0.0	
Backup beep	Point	19.0	0.0	
Idling Diesel	Point	11.1	0.0	
Backup beep	Point	18.9	0.0	
Idling Diesel	Point	11.0	0.0	
Backup beep	Point	18.6	0.0	
Idling Diesel	Point	10.6	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	19.3	0.0	
Idling Diesel	Point	11.4	0.0	
Backup beep	Point	19.6	0.0	
Idling Diesel	Point	11.8	0.0	
Backup beep	Point	19.9	0.0	
Idling Diesel	Point	12.1	0.0	
Backup beep	Point	20.2	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	20.6	0.0	
Idling Diesel	Point	13.1	0.0	
Backup beep	Point	21.0	0.0	
Idling Diesel	Point	13.6	0.0	
Backup beep	Point	21.6	0.0	
Idling Diesel	Point	14.6	0.0	
151	PLot	24.2	0.0	
152	PLot	28.1	0.0	
153	PLot	20.9	0.0	
154	PLot	12.0	0.0	
155	PLot	12.8	0.0	
156	PLot	16.5	0.0	
157	PLot	18.7	0.0	
158	PLot	19.3	0.0	
159	PLot	17.9	0.0	
160	PLot	29.6	0.0	
161	PLot	33.6	0.0	
162	PLot	4.2	0.0	
163	PLot	2.2	0.0	
164	PLot	11.2	0.0	
165	PLot	2.0	0.0	
166	PLot	10.2	0.0	
167	PLot	8.8	0.0	
168	PLot	11.4	0.0	
169	PLot	13.5	0.0	
170	PLot	6.0	0.0	
171	PLot	1.2	0.0	
172	PLot	-7.1	0.0	
173	PLot	11.3	0.0	
174	PLot	20.2	0.0	
175	PLot	28.7	0.0	
176	PLot	27.1	0.0	
177	PLot	24.1	0.0	
178	PLot	23.1	0.0	
Receiver R4 Fl G Lmax,lim dB(A) Lmax 39.6 dB(A)				
Backup beep	Point	27.5	0.0	
Idling Diesel	Point	19.1	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	27.7	0.0	
Idling Diesel	Point	19.2	0.0	
Backup beep	Point	27.8	0.0	
Idling Diesel	Point	19.3	0.0	
Backup beep	Point	27.8	0.0	
Idling Diesel	Point	19.3	0.0	
Backup beep	Point	30.6	0.0	
Idling Diesel	Point	21.9	0.0	
Backup beep	Point	30.3	0.0	
Idling Diesel	Point	21.6	0.0	
Backup beep	Point	30.2	0.0	
Idling Diesel	Point	21.5	0.0	
Backup beep	Point	30.1	0.0	
Idling Diesel	Point	21.4	0.0	
Backup beep	Point	30.0	0.0	
Idling Diesel	Point	21.3	0.0	
Backup beep	Point	30.0	0.0	
Idling Diesel	Point	21.3	0.0	
Backup beep	Point	27.3	0.0	
Idling Diesel	Point	18.6	0.0	
Backup beep	Point	27.2	0.0	
Idling Diesel	Point	18.6	0.0	
Backup beep	Point	27.2	0.0	
Idling Diesel	Point	18.5	0.0	
Backup beep	Point	23.7	0.0	
Idling Diesel	Point	15.2	0.0	
Backup beep	Point	23.6	0.0	
Idling Diesel	Point	15.2	0.0	
Backup beep	Point	23.6	0.0	
Idling Diesel	Point	15.1	0.0	
Backup beep	Point	23.2	0.0	
Idling Diesel	Point	14.8	0.0	
Backup beep	Point	23.2	0.0	
Idling Diesel	Point	14.7	0.0	
Backup beep	Point	23.1	0.0	
Idling Diesel	Point	14.7	0.0	
Backup beep	Point	23.1	0.0	
Idling Diesel	Point	14.6	0.0	
Backup beep	Point	22.9	0.0	
Idling Diesel	Point	14.5	0.0	
Backup beep	Point	22.8	0.0	
Idling Diesel	Point	14.4	0.0	
Backup beep	Point	22.8	0.0	
Idling Diesel	Point	14.3	0.0	
Backup beep	Point	22.7	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	14.3	0.0	
Backup beep	Point	22.7	0.0	
Idling Diesel	Point	14.2	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.7	0.0	
Backup beep	Point	29.2	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	29.2	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	29.2	0.0	
Idling Diesel	Point	20.6	0.0	
Backup beep	Point	29.1	0.0	
Idling Diesel	Point	20.6	0.0	
Backup beep	Point	29.1	0.0	
Idling Diesel	Point	20.6	0.0	
Backup beep	Point	30.7	0.0	
Idling Diesel	Point	21.1	0.0	
Backup beep	Point	30.3	0.0	
Idling Diesel	Point	21.4	0.0	
Backup beep	Point	30.3	0.0	
Idling Diesel	Point	21.4	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.5	0.0	
Backup beep	Point	29.6	0.0	
Idling Diesel	Point	21.3	0.0	
Backup beep	Point	29.4	0.0	
Idling Diesel	Point	20.8	0.0	
Backup beep	Point	29.5	0.0	
Idling Diesel	Point	21.0	0.0	
Backup beep	Point	29.7	0.0	
Idling Diesel	Point	21.1	0.0	
Backup beep	Point	29.9	0.0	
Idling Diesel	Point	21.2	0.0	
Backup beep	Point	30.2	0.0	
Idling Diesel	Point	21.6	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.7	0.0	
Backup beep	Point	30.5	0.0	
Idling Diesel	Point	21.9	0.0	
Backup beep	Point	30.7	0.0	
Idling Diesel	Point	22.1	0.0	
Backup beep	Point	30.9	0.0	
Idling Diesel	Point	22.3	0.0	
Backup beep	Point	31.2	0.0	
Idling Diesel	Point	22.6	0.0	

Source	Source type	Lmax dB(A)	A dB
Backup beep	Point	31.5	0.0
Idling Diesel	Point	22.9	0.0
Backup beep	Point	26.9	0.0
Idling Diesel	Point	18.5	0.0
Backup beep	Point	26.5	0.0
Idling Diesel	Point	18.1	0.0
Backup beep	Point	26.3	0.0
Idling Diesel	Point	17.9	0.0
Backup beep	Point	26.0	0.0
Idling Diesel	Point	17.5	0.0
Backup beep	Point	25.7	0.0
Idling Diesel	Point	17.3	0.0
Backup beep	Point	25.1	0.0
Idling Diesel	Point	16.6	0.0
Backup beep	Point	24.7	0.0
Idling Diesel	Point	16.2	0.0
Backup beep	Point	24.5	0.0
Idling Diesel	Point	16.0	0.0
Backup beep	Point	24.2	0.0
Idling Diesel	Point	15.7	0.0
Backup beep	Point	23.9	0.0
Idling Diesel	Point	15.5	0.0
Backup beep	Point	23.3	0.0
Idling Diesel	Point	15.1	0.0
Backup beep	Point	23.5	0.0
Idling Diesel	Point	15.3	0.0
Backup beep	Point	23.6	0.0
Idling Diesel	Point	15.3	0.0
Backup beep	Point	22.9	0.0
Idling Diesel	Point	14.5	0.0
Backup beep	Point	22.7	0.0
Idling Diesel	Point	14.5	0.0
Backup beep	Point	22.5	0.0
Idling Diesel	Point	14.3	0.0
Backup beep	Point	22.3	0.0
Idling Diesel	Point	14.1	0.0
Backup beep	Point	22.0	0.0
Idling Diesel	Point	13.9	0.0
Backup beep	Point	21.5	0.0
Idling Diesel	Point	13.6	0.0
Backup beep	Point	21.7	0.0
Idling Diesel	Point	13.8	0.0
Backup beep	Point	21.8	0.0
Idling Diesel	Point	13.7	0.0
Backup beep	Point	21.0	0.0

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	13.1	0.0	
Backup beep	Point	20.9	0.0	
Idling Diesel	Point	13.2	0.0	
Backup beep	Point	20.9	0.0	
Idling Diesel	Point	13.2	0.0	
Backup beep	Point	20.6	0.0	
Idling Diesel	Point	13.0	0.0	
Backup beep	Point	20.6	0.0	
Idling Diesel	Point	13.1	0.0	
Backup beep	Point	20.3	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.2	0.0	
Idling Diesel	Point	12.7	0.0	
151	PLot	2.1	0.0	
152	PLot	10.2	0.0	
153	PLot	5.7	0.0	
154	PLot	-0.1	0.0	
155	PLot	-1.3	0.0	
156	PLot	3.7	0.0	
157	PLot	2.2	0.0	
158	PLot	1.7	0.0	
159	PLot	-1.5	0.0	
160	PLot	8.7	0.0	
161	PLot	25.7	0.0	
162	PLot	9.2	0.0	
163	PLot	9.4	0.0	
164	PLot	7.9	0.0	
165	PLot	7.2	0.0	
166	PLot	12.2	0.0	
167	PLot	11.4	0.0	
168	PLot	7.6	0.0	
169	PLot	9.9	0.0	
170	PLot	1.0	0.0	
171	PLot	7.2	0.0	
172	PLot	-9.2	0.0	
173	PLot	5.0	0.0	
174	PLot	8.9	0.0	
175	PLot	19.8	0.0	
176	PLot	29.5	0.0	
177	PLot	37.1	0.0	
178	PLot	39.6	0.0	
Receiver R5 Fl G Lmax,lim dB(A) Lmax 43.7 dB(A)				
Backup beep	Point	40.7	0.0	
Idling Diesel	Point	30.7	0.0	
Backup beep	Point	41.8	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	30.7	0.0	
Backup beep	Point	43.7	0.0	
Idling Diesel	Point	30.6	0.0	
Backup beep	Point	43.6	0.0	
Idling Diesel	Point	30.9	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	32.8	0.0	
Backup beep	Point	42.1	0.0	
Idling Diesel	Point	31.7	0.0	
Backup beep	Point	41.9	0.0	
Idling Diesel	Point	31.6	0.0	
Backup beep	Point	41.7	0.0	
Idling Diesel	Point	31.3	0.0	
Backup beep	Point	41.3	0.0	
Idling Diesel	Point	31.1	0.0	
Backup beep	Point	41.1	0.0	
Idling Diesel	Point	30.8	0.0	
Backup beep	Point	40.8	0.0	
Idling Diesel	Point	30.5	0.0	
Backup beep	Point	40.6	0.0	
Idling Diesel	Point	30.4	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	30.3	0.0	
Backup beep	Point	40.2	0.0	
Idling Diesel	Point	30.0	0.0	
Backup beep	Point	40.1	0.0	
Idling Diesel	Point	29.9	0.0	
Backup beep	Point	39.9	0.0	
Idling Diesel	Point	29.7	0.0	
Backup beep	Point	39.0	0.0	
Idling Diesel	Point	28.9	0.0	
Backup beep	Point	38.9	0.0	
Idling Diesel	Point	28.8	0.0	
Backup beep	Point	38.7	0.0	
Idling Diesel	Point	28.6	0.0	
Backup beep	Point	38.6	0.0	
Idling Diesel	Point	28.5	0.0	
Backup beep	Point	38.4	0.0	
Idling Diesel	Point	28.3	0.0	
Backup beep	Point	38.1	0.0	
Idling Diesel	Point	28.1	0.0	
Backup beep	Point	37.9	0.0	
Idling Diesel	Point	27.9	0.0	
Backup beep	Point	37.8	0.0	
Idling Diesel	Point	27.8	0.0	

Source	Source type	Lmax dB(A)	A dB
Backup beep	Point	37.6	0.0
Idling Diesel	Point	27.6	0.0
Backup beep	Point	42.1	0.0
Idling Diesel	Point	32.2	0.0
Backup beep	Point	41.7	0.0
Idling Diesel	Point	32.0	0.0
Backup beep	Point	41.4	0.0
Idling Diesel	Point	31.6	0.0
Backup beep	Point	41.1	0.0
Idling Diesel	Point	31.4	0.0
Backup beep	Point	40.9	0.0
Idling Diesel	Point	31.3	0.0
Backup beep	Point	40.8	0.0
Idling Diesel	Point	31.2	0.0
Backup beep	Point	40.6	0.0
Idling Diesel	Point	31.1	0.0
Backup beep	Point	40.4	0.0
Idling Diesel	Point	30.8	0.0
Backup beep	Point	40.2	0.0
Idling Diesel	Point	30.7	0.0
Backup beep	Point	40.1	0.0
Idling Diesel	Point	30.6	0.0
Backup beep	Point	39.9	0.0
Idling Diesel	Point	30.4	0.0
Backup beep	Point	39.8	0.0
Idling Diesel	Point	30.3	0.0
Backup beep	Point	39.6	0.0
Idling Diesel	Point	30.2	0.0
Backup beep	Point	39.5	0.0
Idling Diesel	Point	30.0	0.0
Backup beep	Point	39.3	0.0
Idling Diesel	Point	29.9	0.0
Backup beep	Point	39.1	0.0
Idling Diesel	Point	29.6	0.0
Backup beep	Point	38.9	0.0
Idling Diesel	Point	29.5	0.0
Backup beep	Point	38.8	0.0
Idling Diesel	Point	29.4	0.0
Backup beep	Point	38.7	0.0
Idling Diesel	Point	29.3	0.0
Backup beep	Point	38.5	0.0
Idling Diesel	Point	30.0	0.0
Backup beep	Point	39.4	0.0
Idling Diesel	Point	30.0	0.0
Backup beep	Point	40.4	0.0

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	31.0	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	42.9	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	42.9	0.0	
Idling Diesel	Point	33.5	0.0	
Backup beep	Point	42.9	0.0	
Idling Diesel	Point	33.5	0.0	
Backup beep	Point	42.8	0.0	
Idling Diesel	Point	33.4	0.0	
Backup beep	Point	42.8	0.0	
Idling Diesel	Point	33.4	0.0	
Backup beep	Point	42.6	0.0	
Idling Diesel	Point	33.2	0.0	
Backup beep	Point	42.6	0.0	
Idling Diesel	Point	33.2	0.0	
Backup beep	Point	42.7	0.0	
Idling Diesel	Point	33.3	0.0	
Backup beep	Point	42.5	0.0	
Idling Diesel	Point	33.1	0.0	
Backup beep	Point	42.5	0.0	
Idling Diesel	Point	33.1	0.0	
Backup beep	Point	42.4	0.0	
Idling Diesel	Point	33.0	0.0	
Backup beep	Point	42.3	0.0	
Idling Diesel	Point	32.9	0.0	
Backup beep	Point	42.2	0.0	
Idling Diesel	Point	32.8	0.0	
Backup beep	Point	42.2	0.0	
Idling Diesel	Point	32.6	0.0	
Backup beep	Point	42.2	0.0	
Idling Diesel	Point	32.7	0.0	
Backup beep	Point	42.3	0.0	
Idling Diesel	Point	32.8	0.0	
Backup beep	Point	42.0	0.0	
Idling Diesel	Point	32.5	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	42.0	0.0	
Idling Diesel	Point	32.5	0.0	
Backup beep	Point	41.9	0.0	
Idling Diesel	Point	32.4	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	32.4	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	32.3	0.0	
Backup beep	Point	41.7	0.0	
Idling Diesel	Point	32.2	0.0	
Backup beep	Point	41.7	0.0	
Idling Diesel	Point	32.1	0.0	
151	PLot	4.5	0.0	
152	PLot	21.5	0.0	
153	PLot	15.3	0.0	
154	PLot	6.4	0.0	
155	PLot	2.9	0.0	
156	PLot	8.6	0.0	
157	PLot	4.4	0.0	
158	PLot	3.4	0.0	
159	PLot	0.1	0.0	
160	PLot	5.0	0.0	
161	PLot	14.0	0.0	
162	PLot	19.0	0.0	
163	PLot	19.4	0.0	
164	PLot	12.7	0.0	
165	PLot	10.9	0.0	
166	PLot	23.1	0.0	
167	PLot	22.5	0.0	
168	PLot	17.4	0.0	
169	PLot	18.3	0.0	
170	PLot	9.1	0.0	
171	PLot	17.9	0.0	
172	PLot	-0.5	0.0	
173	PLot	12.2	0.0	
174	PLot	17.1	0.0	
175	PLot	23.1	0.0	
176	PLot	8.6	0.0	
177	PLot	7.3	0.0	
178	PLot	23.0	0.0	
Receiver R6 Fl G Lmax,lim dB(A) Lmax 53.9 dB(A)				
Backup beep	Point	53.9	0.0	
Idling Diesel	Point	44.3	0.0	
Backup beep	Point	52.6	0.0	
Idling Diesel	Point	43.0	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	51.6	0.0	
Idling Diesel	Point	42.0	0.0	
Backup beep	Point	50.6	0.0	
Idling Diesel	Point	41.0	0.0	
Backup beep	Point	49.7	0.0	
Idling Diesel	Point	40.2	0.0	
Backup beep	Point	47.9	0.0	
Idling Diesel	Point	38.3	0.0	
Backup beep	Point	47.4	0.0	
Idling Diesel	Point	37.8	0.0	
Backup beep	Point	47.0	0.0	
Idling Diesel	Point	37.4	0.0	
Backup beep	Point	46.5	0.0	
Idling Diesel	Point	36.9	0.0	
Backup beep	Point	46.2	0.0	
Idling Diesel	Point	36.6	0.0	
Backup beep	Point	45.5	0.0	
Idling Diesel	Point	35.8	0.0	
Backup beep	Point	45.1	0.0	
Idling Diesel	Point	35.5	0.0	
Backup beep	Point	44.8	0.0	
Idling Diesel	Point	35.2	0.0	
Backup beep	Point	44.5	0.0	
Idling Diesel	Point	34.9	0.0	
Backup beep	Point	44.3	0.0	
Idling Diesel	Point	34.7	0.0	
Backup beep	Point	44.2	0.0	
Idling Diesel	Point	34.5	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	33.2	0.0	
Backup beep	Point	39.6	0.0	
Idling Diesel	Point	32.8	0.0	
Backup beep	Point	39.3	0.0	
Idling Diesel	Point	32.4	0.0	
Backup beep	Point	39.1	0.0	
Idling Diesel	Point	32.2	0.0	
Backup beep	Point	38.9	0.0	
Idling Diesel	Point	32.0	0.0	
Backup beep	Point	38.5	0.0	
Idling Diesel	Point	31.6	0.0	
Backup beep	Point	38.3	0.0	
Idling Diesel	Point	31.4	0.0	
Backup beep	Point	38.1	0.0	
Idling Diesel	Point	31.2	0.0	
Backup beep	Point	37.9	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	31.0	0.0	
Backup beep	Point	36.2	0.0	
Idling Diesel	Point	24.3	0.0	
Backup beep	Point	36.5	0.0	
Idling Diesel	Point	25.2	0.0	
Backup beep	Point	36.7	0.0	
Idling Diesel	Point	26.7	0.0	
Backup beep	Point	36.5	0.0	
Idling Diesel	Point	26.7	0.0	
Backup beep	Point	36.8	0.0	
Idling Diesel	Point	27.4	0.0	
Backup beep	Point	37.0	0.0	
Idling Diesel	Point	27.6	0.0	
Backup beep	Point	37.3	0.0	
Idling Diesel	Point	28.0	0.0	
Backup beep	Point	39.3	0.0	
Idling Diesel	Point	34.0	0.0	
Backup beep	Point	40.0	0.0	
Idling Diesel	Point	33.9	0.0	
Backup beep	Point	43.8	0.0	
Idling Diesel	Point	33.8	0.0	
Backup beep	Point	43.8	0.0	
Idling Diesel	Point	33.7	0.0	
Backup beep	Point	43.9	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	45.2	0.0	
Idling Diesel	Point	33.8	0.0	
Backup beep	Point	45.0	0.0	
Idling Diesel	Point	35.0	0.0	
Backup beep	Point	44.9	0.0	
Idling Diesel	Point	34.8	0.0	
Backup beep	Point	44.7	0.0	
Idling Diesel	Point	34.7	0.0	
Backup beep	Point	44.8	0.0	
Idling Diesel	Point	34.7	0.0	
Backup beep	Point	44.7	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	44.7	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	44.6	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	44.6	0.0	
Idling Diesel	Point	34.5	0.0	
Backup beep	Point	44.5	0.0	
Idling Diesel	Point	34.5	0.0	

Source	Source type	Lmax dB(A)	A dB	
Backup beep	Point	43.4	0.0	
Idling Diesel	Point	33.1	0.0	
Backup beep	Point	43.5	0.0	
Idling Diesel	Point	33.3	0.0	
Backup beep	Point	43.6	0.0	
Idling Diesel	Point	33.3	0.0	
Backup beep	Point	43.7	0.0	
Idling Diesel	Point	33.5	0.0	
Backup beep	Point	43.9	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	44.1	0.0	
Idling Diesel	Point	33.8	0.0	
Backup beep	Point	44.3	0.0	
Idling Diesel	Point	34.0	0.0	
Backup beep	Point	44.4	0.0	
Idling Diesel	Point	34.1	0.0	
Backup beep	Point	44.6	0.0	
Idling Diesel	Point	34.3	0.0	
Backup beep	Point	44.4	0.0	
Idling Diesel	Point	34.1	0.0	
Backup beep	Point	44.4	0.0	
Idling Diesel	Point	34.0	0.0	
Backup beep	Point	44.3	0.0	
Idling Diesel	Point	33.9	0.0	
Backup beep	Point	44.2	0.0	
Idling Diesel	Point	33.8	0.0	
Backup beep	Point	44.5	0.0	
Idling Diesel	Point	34.2	0.0	
Backup beep	Point	44.6	0.0	
Idling Diesel	Point	34.2	0.0	
Backup beep	Point	44.7	0.0	
Idling Diesel	Point	34.4	0.0	
Backup beep	Point	44.9	0.0	
Idling Diesel	Point	34.5	0.0	
Backup beep	Point	45.0	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.3	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.2	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.1	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.5	0.0	
Idling Diesel	Point	34.8	0.0	
Backup beep	Point	45.5	0.0	

Source	Source type	Lmax dB(A)	A dB	
Idling Diesel	Point	34.9	0.0	
Backup beep	Point	45.6	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.7	0.0	
Idling Diesel	Point	34.7	0.0	
Backup beep	Point	45.7	0.0	
Idling Diesel	Point	34.8	0.0	
Backup beep	Point	45.8	0.0	
Idling Diesel	Point	34.8	0.0	
Backup beep	Point	45.4	0.0	
Idling Diesel	Point	34.7	0.0	
151	PLot	14.2	0.0	
152	PLot	27.4	0.0	
153	PLot	20.7	0.0	
154	PLot	10.3	0.0	
155	PLot	11.4	0.0	
156	PLot	15.3	0.0	
157	PLot	9.9	0.0	
158	PLot	8.1	0.0	
159	PLot	5.0	0.0	
160	PLot	10.0	0.0	
161	PLot	21.5	0.0	
162	PLot	16.7	0.0	
163	PLot	15.6	0.0	
164	PLot	14.4	0.0	
165	PLot	14.7	0.0	
166	PLot	30.1	0.0	
167	PLot	31.5	0.0	
168	PLot	16.5	0.0	
169	PLot	20.4	0.0	
170	PLot	13.2	0.0	
171	PLot	20.5	0.0	
172	PLot	4.7	0.0	
173	PLot	11.3	0.0	
174	PLot	20.6	0.0	
175	PLot	25.4	0.0	
176	PLot	6.5	0.0	
177	PLot	5.9	0.0	
178	PLot	19.6	0.0	

Wildomar 29 - Noise
3rd octave spectra of the sources in dB(A) - Situation 2 - 8' CMU - SP

Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	

Wildomar 29 - Noise
3rd octave spectra of the sources in dB(A) - Situation 2 - 8' CMU - SP

Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	

Wildomar 29 - Noise
3rd octave spectra of the sources in dB(A) - Situation 2 - 8' CMU - SP

Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9

Wildomar 29 - Noise
3rd octave spectra of the sources in dB(A) - Situation 2 - 8' CMU - SP

Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9

Wildomar 29 - Noise
3rd octave spectra of the sources in dB(A) - Situation 2 - 8' CMU - SP

Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
	753.78			58.3	87.0					70.4			82.0			74.5			79.0			79.1			79.5			76.8			70.6	
	345.81			56.5	81.9					65.3			76.9			69.4			73.9			74.0			74.4			71.7			65.5	
	275.36			55.8	80.2					63.6			75.2			67.7			72.2			72.3			72.7			70.0			63.8	
	397.16			56.9	82.9					66.3			77.9			70.4			74.9			75.0			75.4			72.7			66.5	
	355.41			56.1	81.6					64.9			76.5			69.0			73.5			73.6			74.0			71.3			65.1	
	486.92			57.1	84.0					67.3			78.9			71.4			75.9			76.0			76.4			73.7			67.5	
	931.88			54.3	84.0					67.3			78.9			71.4			75.9			76.0			76.4			73.7			67.5	
	378.23			56.2	81.9					65.3			76.9			69.4			73.9			74.0			74.4			71.7			65.5	
	387.79			56.4	82.3					65.6			77.2			69.7			74.2			74.3			74.7			72.0			65.8	
	349.83			57.2	82.6					66.0			77.6			70.1			74.6			74.7			75.1			72.4			66.2	
	481.98			56.7	83.5					66.8			78.4			70.9			75.4			75.5			75.9			73.2			67.0	
	56.13			54.3	71.8					55.1			66.7			59.2			63.7			63.8			64.2			61.5			55.3	
	303.56			56.3	81.2					64.5			76.1			68.6			73.1			73.2			73.6			70.9			64.7	
	448.95			56.7	83.2					66.6			78.2			70.7			75.2			75.3			75.7			73.0			66.8	
	74.52			54.3	73.0					56.4			68.0			60.5			65.0			65.1			65.5			62.8			56.6	

Wildomar 29 - Noise
3rd octave spectra of the sources in dB(A) - Situation 2 - 8' CMU - SP

Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
	171.07			54.7	77.0					60.3			71.9			64.4			68.9			69.0			69.4			66.7			60.5	
	180.22			54.4	77.0					60.3			71.9			64.4			68.9			69.0			69.4			66.7			60.5	
	70.69			54.5	73.0					56.4			68.0			60.5			65.0			65.1			65.5			62.8			56.6	
	355.15			56.4	81.9					65.3			76.9			69.4			73.9			74.0			74.4			71.7			65.5	
	671.08			58.2	86.5					69.8			81.4			73.9			78.4			78.5			78.9			76.2			70.0	
	245.67			56.8	80.7					64.1			75.7			68.2			72.7			72.8			73.2			70.5			64.3	
	397.28			56.3	82.3					65.6			77.2			69.7			74.2			74.3			74.7			72.0			65.8	
	455.28			56.0	82.6					66.0			77.6			70.1			74.6			74.7			75.1			72.4			66.2	
	434.59			56.8	83.2					66.6			78.2			70.7			75.2			75.3			75.7			73.0			66.8	
	562.47			56.7	84.2					67.6			79.2			71.7			76.2			76.3			76.7			74.0			67.8	
	56.09			52.5	70.0					53.4			65.0			57.5			62.0			62.1			62.5			59.8			53.6	
	123.94			53.8	74.8					58.1			69.7			62.2			66.7			66.8			67.2			64.5			58.3	
	381.10			57.4	83.2					66.6			78.2			70.7			75.2			75.3			75.7			73.0			66.8	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax m	Ymax m	Lw dB(A)	Ko dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	ADI dB	Amisc dB	dLrefl dB(A)	Ls dB(A)	Cmet dB	Lr dB(A)
Receiver R1 Fl G Lmax,lim dB(A) Lmax 38.8 dB(A)																	
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	346.1	-61.8	1.5	-22.5	-2.6	0.0		0.0	17.6	0.0	17.6
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	349.8	-61.9	1.5	-22.4	-2.6	0.0		0.0	17.7	0.0	17.7
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	353.3	-62.0	1.5	-22.8	-2.7	0.0		0.0	17.1	0.0	17.1
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	329.5	-61.3	1.5	-23.0	-2.8	0.0		0.0	17.3	0.0	17.3
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	333.6	-61.5	1.5	-23.0	-2.8	0.0		0.0	17.2	0.0	17.2
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	341.9	-61.7	1.5	-22.9	-2.8	0.0		0.0	17.1	0.0	17.1
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	413.3	-63.3	1.5	-8.2	-3.4	0.0		0.0	29.6	0.0	29.6
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	411.2	-63.3	1.5	-8.2	-3.4	0.0		0.0	29.6	0.0	29.6
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	409.2	-63.2	1.5	-8.3	-3.3	0.0		0.0	29.7	0.0	29.7
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	357.4	-62.1	1.5	-22.4	-2.6	0.0		0.0	17.4	0.0	17.4
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	361.5	-62.2	1.5	-22.2	-2.6	0.0		0.0	17.5	0.0	17.5
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	365.5	-62.3	1.5	-22.1	-2.5	0.0		2.3	19.9	0.0	19.9
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	325.7	-61.2	1.5	-23.1	-2.8	0.0		0.0	17.4	0.0	17.4
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	286.5	-60.1	1.4	-23.5	-2.9	0.0		0.0	17.9	0.0	17.9
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	290.7	-60.3	1.4	-23.5	-2.9	0.0		0.0	17.8	0.0	17.8
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	294.5	-60.4	1.4	-23.6	-2.9	0.0		0.0	17.5	0.0	17.5
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	275.4	-59.8	1.4	-23.3	-2.7	0.0		0.0	18.7	0.0	18.7
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	279.1	-59.9	1.4	-23.3	-2.7	0.0		0.0	18.6	0.0	18.6
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	282.8	-60.0	1.4	-23.4	-2.8	0.0		0.0	18.2	0.0	18.2
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	313.8	-60.9	1.4	-23.1	-2.8	0.0		0.0	17.6	0.0	17.6
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	318.0	-61.0	1.5	-23.2	-2.8	0.0		0.0	17.4	0.0	17.4
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	321.8	-61.1	1.5	-23.1	-2.8	0.0		0.0	17.5	0.0	17.5
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	298.5	-60.5	1.4	-23.6	-2.9	0.0		0.0	17.4	0.0	17.4
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	306.0	-60.7	1.4	-23.2	-2.7	0.0		0.0	17.8	0.0	17.8
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	309.9	-60.8	1.4	-23.0	-2.6	0.0		0.0	18.0	0.0	18.0
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	368.3	-62.3	1.5	-11.4	-2.6	0.0		2.6	30.8	0.0	30.8
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	370.5	-62.4	1.5	-11.2	-2.6	0.0		2.6	30.9	0.0	30.9

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	363.4	-62.2	1.5	-11.9	-2.5	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	375.0	-62.5	1.5	-10.8	-2.7	0.0		2.6	31.1	0.0	31.1	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	372.6	-62.4	1.5	-11.0	-2.6	0.0		2.6	31.0	0.0	31.0	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	366.8	-62.3	1.5	-11.5	-2.6	0.0		2.6	30.8	0.0	30.8	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	356.9	-62.0	1.5	-12.1	-2.4	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	355.7	-62.0	1.5	-12.2	-2.4	0.0		2.6	30.4	0.0	30.4	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	354.3	-62.0	1.5	-12.2	-2.4	0.0		2.6	30.4	0.0	30.4	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	361.4	-62.2	1.5	-12.0	-2.5	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	360.0	-62.1	1.5	-12.0	-2.5	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	358.5	-62.1	1.5	-12.1	-2.5	0.0		2.6	30.4	0.0	30.4	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	377.5	-62.5	1.5	-10.6	-2.7	0.0		2.6	31.2	0.0	31.2	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	397.4	-63.0	1.5	-8.7	-3.2	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	395.2	-62.9	1.5	-8.8	-3.2	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	392.3	-62.9	1.5	-8.9	-3.1	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	406.7	-63.2	1.5	-8.4	-3.3	0.0		0.0	29.7	0.0	29.7	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	404.4	-63.1	1.5	-8.5	-3.3	0.0		0.0	29.7	0.0	29.7	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	400.2	-63.0	1.5	-8.6	-3.2	0.0		0.0	29.7	0.0	29.7	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	387.2	-62.8	1.5	-9.1	-3.1	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	380.8	-62.6	1.5	-10.4	-2.8	0.0		2.6	31.3	0.0	31.3	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	379.5	-62.6	1.5	-10.5	-2.8	0.0		2.6	31.3	0.0	31.3	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	389.6	-62.8	1.5	-9.0	-3.1	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	383.0	-62.7	1.5	-9.2	-3.0	0.0		2.2	31.8	0.0	31.8	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	384.7	-62.7	1.5	-9.1	-3.0	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	183.7	-56.3	1.2	-24.4	-2.7	0.0		0.2	21.1	0.0	21.1	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	180.7	-56.1	1.2	-24.3	-2.7	0.0		0.9	22.0	0.0	22.0	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	182.9	-56.2	1.2	-24.3	-2.7	0.0		0.5	21.4	0.0	21.4	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	180.3	-56.1	1.2	-24.3	-2.7	0.0		0.9	22.0	0.0	22.0	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	182.7	-56.2	1.2	-24.4	-2.8	0.0		0.8	21.6	0.0	21.6	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	181.9	-56.2	1.2	-24.4	-2.8	0.0		0.8	21.6	0.0	21.6	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	189.2	-56.5	1.2	-24.3	-2.8	0.0		0.2	20.8	0.0	20.8	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	181.2	-56.2	1.2	-24.4	-2.8	0.0		1.0	21.8	0.0	21.8	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	178.6	-56.0	1.2	-24.4	-2.7	0.0		0.4	21.5	0.0	21.5	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	180.8	-56.1	1.2	-24.4	-2.7	0.0		0.3	21.3	0.0	21.3	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	178.9	-56.0	1.2	-24.3	-2.7	0.0		0.4	21.5	0.0	21.5	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	179.1	-56.1	1.2	-24.3	-2.7	0.0		0.0	21.1	0.0	21.1	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	179.7	-56.1	1.2	-24.3	-2.7	0.0		0.0	21.2	0.0	21.2	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	182.1	-56.2	1.2	-24.4	-2.7	0.0		0.5	21.5	0.0	21.5	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	178.6	-56.0	1.2	-24.4	-2.7	0.0		0.0	21.1	0.0	21.1	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	181.3	-56.2	1.2	-24.4	-2.7	0.0		0.3	21.3	0.0	21.3	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	178.7	-56.0	1.2	-24.4	-2.7	0.0		0.4	21.5	0.0	21.5	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	190.6	-56.6	1.2	-24.3	-2.8	0.0		0.2	20.8	0.0	20.8	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	188.3	-56.5	1.2	-24.4	-2.8	0.0		0.0	20.6	0.0	20.6	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	192.1	-56.7	1.2	-24.3	-2.8	0.0		0.2	20.7	0.0	20.7	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	185.8	-56.4	1.2	-24.4	-2.8	0.0		0.0	20.7	0.0	20.7	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	187.0	-56.4	1.2	-24.4	-2.8	0.0		0.0	20.6	0.0	20.6	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	193.7	-56.7	1.2	-24.2	-2.8	0.0		0.2	20.7	0.0	20.7	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	184.8	-56.3	1.2	-24.4	-2.8	0.0		0.0	20.7	0.0	20.7	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	195.3	-56.8	1.2	-24.2	-2.8	0.0		0.0	20.4	0.0	20.4	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	355.0	-62.0	0.8	-9.9	-1.3	0.0		2.6	21.8	0.0	21.8	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	383.0	-62.7	0.9	-7.3	-1.6	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	352.5	-61.9	0.8	-9.9	-1.3	0.0		2.6	21.7	0.0	21.7	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	395.7	-62.9	0.9	-7.0	-1.7	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	385.5	-62.7	0.9	-7.3	-1.6	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	184.0	-56.3	0.6	-22.7	-0.8	0.0		0.1	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	381.2	-62.6	0.9	-7.4	-1.6	0.0		2.2	23.0	0.0	23.0	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	353.9	-62.0	0.8	-9.9	-1.3	0.0		2.6	21.8	0.0	21.8	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	182.8	-56.2	0.6	-22.7	-0.8	0.0		0.1	12.6	0.0	12.6
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	390.6	-62.8	0.9	-7.1	-1.7	0.0		2.5	23.3	0.0	23.3
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	387.9	-62.8	0.9	-7.2	-1.6	0.0		2.5	23.3	0.0	23.3
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	197.1	-56.9	0.7	-22.4	-0.8	0.0		0.1	12.1	0.0	12.1
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	183.2	-56.3	0.6	-22.7	-0.8	0.0		0.1	12.5	0.0	12.5
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	393.5	-62.9	0.9	-7.0	-1.7	0.0		2.5	23.3	0.0	23.3
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	365.0	-62.2	0.9	-9.3	-1.4	0.0		2.6	22.1	0.0	22.1
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	191.0	-56.6	0.7	-22.6	-0.8	0.0		0.1	12.2	0.0	12.2
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	359.6	-62.1	0.9	-9.7	-1.3	0.0		2.7	21.8	0.0	21.8
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	370.9	-62.4	0.9	-8.9	-1.4	0.0		2.6	22.3	0.0	22.3
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	193.9	-56.7	0.7	-22.5	-0.8	0.0		0.0	12.1	0.0	12.1
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	361.6	-62.2	0.9	-9.6	-1.3	0.0		2.6	21.9	0.0	21.9
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	368.7	-62.3	0.9	-9.0	-1.4	0.0		2.6	22.2	0.0	22.2
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	192.4	-56.7	0.7	-22.6	-0.8	0.0		0.1	12.2	0.0	12.2
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	366.5	-62.3	0.9	-9.2	-1.4	0.0		2.6	22.1	0.0	22.1
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	377.7	-62.5	0.9	-8.4	-1.5	0.0		2.6	22.5	0.0	22.5
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	184.8	-56.3	0.6	-22.7	-0.8	0.0		0.2	12.5	0.0	12.5
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	379.1	-62.6	0.9	-8.4	-1.5	0.0		2.5	22.5	0.0	22.5
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	356.7	-62.0	0.8	-9.8	-1.3	0.0		2.6	21.8	0.0	21.8
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	195.5	-56.8	0.7	-22.4	-0.8	0.0		0.1	12.2	0.0	12.2
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	373.3	-62.4	0.9	-8.7	-1.5	0.0		2.6	22.4	0.0	22.4
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	358.1	-62.1	0.9	-9.8	-1.3	0.0		2.6	21.8	0.0	21.8
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	185.6	-56.4	0.6	-22.7	-0.8	0.0		0.1	12.3	0.0	12.3
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	375.8	-62.5	0.9	-8.6	-1.5	0.0		2.6	22.4	0.0	22.4
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	183.8	-56.3	0.6	-22.9	-0.8	0.0		0.3	12.5	0.0	12.5
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	314.3	-60.9	0.8	-18.4	-0.9	0.0		0.0	12.0	0.0	12.0
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	310.4	-60.8	0.8	-18.3	-0.9	0.0		0.0	12.3	0.0	12.3
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	184.6	-56.3	0.6	-22.9	-0.8	0.0		0.3	12.4	0.0	12.4

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	306.5	-60.7	0.8	-18.5	-0.9	0.0		0.0	12.1	0.0	12.1
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	329.9	-61.4	0.8	-18.2	-1.0	0.0		0.0	11.8	0.0	11.8
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	326.2	-61.3	0.8	-18.2	-1.0	0.0		0.0	11.9	0.0	11.9
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	183.1	-56.2	0.6	-22.9	-0.8	0.0		0.4	12.6	0.0	12.6
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	322.3	-61.2	0.8	-18.3	-1.0	0.0		0.0	11.9	0.0	11.9
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	318.4	-61.1	0.8	-18.5	-1.0	0.0		0.0	11.9	0.0	11.9
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	299.0	-60.5	0.8	-18.9	-0.9	0.0		0.0	11.9	0.0	11.9
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	283.3	-60.0	0.8	-19.0	-0.9	0.0		0.0	12.4	0.0	12.4
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	188.8	-56.5	0.6	-22.8	-0.8	0.0		0.0	12.0	0.0	12.0
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	279.6	-59.9	0.8	-19.2	-0.9	0.0		0.0	12.3	0.0	12.3
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	275.9	-59.8	0.8	-20.4	-0.9	0.0		0.0	11.3	0.0	11.3
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	190.2	-56.6	0.6	-22.8	-0.8	0.0		0.0	12.0	0.0	12.0
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	186.7	-56.4	0.6	-22.8	-0.8	0.0		0.0	12.1	0.0	12.1
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	295.0	-60.4	0.8	-19.0	-0.9	0.0		0.0	12.0	0.0	12.0
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	291.1	-60.3	0.8	-19.0	-0.9	0.0		0.0	12.2	0.0	12.2
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	187.7	-56.5	0.6	-22.8	-0.8	0.0		0.0	12.1	0.0	12.1
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	287.0	-60.1	0.8	-19.0	-0.9	0.0		0.0	12.3	0.0	12.3
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	182.6	-56.2	0.6	-22.5	-0.8	0.0		0.3	13.0	0.0	13.0
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	407.6	-63.2	0.9	-6.7	-1.8	0.0		0.0	20.7	0.0	20.7
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	180.8	-56.1	0.6	-22.5	-0.7	0.0		0.1	12.8	0.0	12.8
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	409.5	-63.2	0.9	-6.6	-1.8	0.0		0.0	20.7	0.0	20.7
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	411.7	-63.3	0.9	-6.6	-1.8	0.0		0.0	20.7	0.0	20.7
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	180.6	-56.1	0.6	-22.6	-0.7	0.0		0.1	12.8	0.0	12.8
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	181.7	-56.2	0.6	-22.4	-0.7	0.0		0.0	12.8	0.0	12.8
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	398.5	-63.0	0.9	-6.9	-1.7	0.0		0.0	20.8	0.0	20.8
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	402.8	-63.1	0.9	-6.8	-1.7	0.0		0.0	20.7	0.0	20.7
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	181.1	-56.1	0.6	-22.5	-0.7	0.0		0.0	12.7	0.0	12.7
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	405.0	-63.1	0.9	-6.7	-1.8	0.0		0.0	20.7	0.0	20.7

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	365.9	-62.3	0.9	-17.2	-1.1	0.0		1.9	13.7	0.0	13.7	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	350.2	-61.9	0.8	-17.5	-1.0	0.0		0.0	11.9	0.0	11.9	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	346.6	-61.8	0.8	-17.7	-1.0	0.0		0.0	11.9	0.0	11.9	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	182.2	-56.2	0.6	-22.5	-0.7	0.0		0.3	13.1	0.0	13.1	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	342.3	-61.7	0.8	-18.0	-1.0	0.0		0.0	11.6	0.0	11.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	334.1	-61.5	0.8	-18.1	-1.0	0.0		0.0	11.7	0.0	11.7	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	362.0	-62.2	0.9	-17.4	-1.1	0.0		1.8	13.6	0.0	13.6	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	180.5	-56.1	0.6	-22.6	-0.7	0.0		0.0	12.7	0.0	12.7	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	357.9	-62.1	0.9	-17.5	-1.1	0.0		1.7	13.4	0.0	13.4	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	353.7	-62.0	0.8	-17.8	-1.1	0.0		1.6	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	180.5	-56.1	0.6	-22.6	-0.8	0.0		0.0	12.7	0.0	12.7	
169	Lmax	PLot	-663.0	706.7	87.0	0	110.7	-51.9	0.3	0.0	-0.9	0.0		1.4	36.0	0.0	36.0	
170	Lmax	PLot	-652.9	687.2	82.0	0	131.1	-53.3	0.3	0.0	-1.0	0.0		2.2	30.2	0.0	30.2	
171	Lmax	PLot	-700.0	686.7	80.0	0	133.9	-53.5	0.3	-8.9	-0.1	0.0		2.6	20.4	0.0	20.4	
168	Lmax	PLot	-662.0	723.0	83.0	0	94.6	-50.5	0.2	0.0	-0.8	0.0		1.2	33.2	0.0	33.2	
165	Lmax	PLot	-653.8	764.8	81.6	0	55.0	-45.8	0.0	0.0	-0.5	0.0		0.7	36.0	0.0	36.0	
166	Lmax	PLot	-677.4	722.7	84.0	0	94.8	-50.5	0.2	0.0	-0.8	0.0		1.2	34.2	0.0	34.2	
167	Lmax	PLot	-675.3	706.8	84.0	0	110.6	-51.9	0.3	0.0	-0.9	0.0		0.9	32.4	0.0	32.4	
176	Lmax	PLot	-806.6	417.4	82.0	0	422.5	-63.5	0.0	-18.0	-0.6	0.0		0.0	-0.1	0.0	-0.1	
177	Lmax	PLot	-886.5	418.5	82.0	0	453.6	-64.1	0.0	-17.6	-0.6	0.0		0.0	-0.3	0.0	-0.3	
178	Lmax	PLot	-950.1	483.6	82.6	0	435.5	-63.8	0.0	-5.8	-1.3	0.0		0.0	11.7	0.0	11.7	
175	Lmax	PLot	-791.3	483.8	83.5	0	354.8	-62.0	0.2	-8.2	-0.6	0.0		1.0	13.9	0.0	13.9	
172	Lmax	PLot	-686.5	686.9	71.8	0	131.3	-53.4	0.3	0.0	-1.0	0.0		2.2	20.0	0.0	20.0	
173	Lmax	PLot	-584.3	772.1	81.0	0	97.0	-50.7	0.3	0.0	-0.8	0.0		1.0	30.7	0.0	30.7	
174	Lmax	PLot	-578.7	682.7	83.0	0	162.7	-55.2	0.4	-10.0	-0.2	0.0		3.9	21.9	0.0	21.9	
155	Lmax	PLot	-620.7	568.9	73.0	0	253.2	-59.1	0.3	-10.5	-0.3	0.0		0.4	3.8	0.0	3.8	
156	Lmax	PLot	-613.5	575.8	77.0	0	248.0	-58.9	0.3	-10.9	-0.3	0.0		0.3	7.5	0.0	7.5	
157	Lmax	PLot	-639.4	546.4	77.0	0	272.6	-59.7	0.3	-7.6	-0.6	0.0		0.3	9.7	0.0	9.7	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
154	Lmax	PLot	-584.1	587.9	73.0	0	244.9	-58.8	0.3	-11.1	-0.3	0.0		0.6	3.7	0.0	3.7	
151	Lmax	PLot	-666.4	542.0	82.0	0	275.2	-59.8	0.3	-7.5	-0.6	0.0		0.3	14.7	0.0	14.7	
152	Lmax	PLot	-658.8	554.9	86.5	0	262.6	-59.4	0.3	-7.9	-0.5	0.0		0.2	19.2	0.0	19.2	
153	Lmax	PLot	-639.7	583.8	81.0	0	235.5	-58.4	0.3	-9.1	-0.3	0.0		0.3	13.7	0.0	13.7	
162	Lmax	PLot	-686.4	777.9	82.3	0	42.6	-43.6	0.1	0.0	-0.4	0.0		0.3	38.8	0.0	38.8	
163	Lmax	PLot	-684.2	765.1	82.6	0	54.0	-45.6	0.0	0.0	-0.5	0.0		0.7	37.2	0.0	37.2	
164	Lmax	PLot	-650.7	778.0	82.2	0	43.8	-43.8	0.1	0.0	-0.4	0.0		0.3	38.4	0.0	38.4	
161	Lmax	PLot	-750.9	424.1	84.0	0	401.3	-63.1	0.1	-8.8	-0.6	0.0		0.0	11.6	0.0	11.6	
158	Lmax	PLot	-642.6	515.8	77.0	0	302.7	-60.6	0.2	-7.2	-0.7	0.0		0.4	9.1	0.0	9.1	
159	Lmax	PLot	-658.8	513.5	75.0	0	304.0	-60.6	0.2	-7.0	-0.7	0.0		0.2	7.0	0.0	7.0	
160	Lmax	PLot	-666.6	499.9	83.0	0	317.4	-61.0	0.2	-6.6	-0.9	0.0		0.2	14.8	0.0	14.8	
Receiver R2 Fl G Lmax,lim dB(A) Lmax 60.1 dB(A)																		
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	233.7	-58.4	1.3	-24.2	-3.0	0.0		2.2	21.0	0.0	21.0	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	236.2	-58.5	1.3	-24.1	-3.0	0.0		2.2	21.0	0.0	21.0	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	238.4	-58.5	1.3	-24.2	-3.1	0.0		2.2	20.8	0.0	20.8	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	222.8	-58.0	1.3	-24.3	-3.0	0.0		2.3	21.3	0.0	21.3	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	225.4	-58.1	1.3	-24.3	-3.0	0.0		2.3	21.2	0.0	21.2	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	230.7	-58.3	1.3	-24.2	-3.0	0.0		2.2	21.0	0.0	21.0	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	393.7	-62.9	1.5	-7.2	-3.6	0.0		2.6	33.5	0.0	33.5	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	390.4	-62.8	1.5	-7.2	-3.5	0.0		2.6	33.5	0.0	33.5	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	387.4	-62.8	1.5	-7.3	-3.5	0.0		2.6	33.5	0.0	33.5	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	241.3	-58.6	1.3	-24.1	-3.1	0.0		2.2	20.7	0.0	20.7	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	244.3	-58.7	1.4	-24.1	-3.1	0.0		2.2	20.7	0.0	20.7	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	247.1	-58.9	1.4	-24.1	-3.1	0.0		2.2	20.6	0.0	20.6	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	220.5	-57.9	1.3	-24.3	-3.0	0.0		2.4	21.5	0.0	21.5	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	199.1	-57.0	1.3	-24.4	-2.9	0.0		2.4	22.4	0.0	22.4	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	201.1	-57.1	1.3	-24.4	-2.9	0.0		2.4	22.3	0.0	22.3	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	202.9	-57.1	1.3	-24.4	-2.9	0.0		2.4	22.2	0.0	22.2	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	194.3	-56.8	1.2	-24.3	-2.8	0.0		2.4	22.7	0.0	22.7
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	195.9	-56.8	1.2	-24.3	-2.8	0.0		2.4	22.6	0.0	22.6
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	197.4	-56.9	1.3	-24.4	-2.9	0.0		2.4	22.5	0.0	22.5
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	213.5	-57.6	1.3	-24.3	-3.0	0.0		2.4	21.8	0.0	21.8
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	215.8	-57.7	1.3	-24.4	-3.0	0.0		2.4	21.7	0.0	21.7
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	218.2	-57.8	1.3	-24.3	-3.0	0.0		2.4	21.6	0.0	21.6
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	204.9	-57.2	1.3	-24.4	-2.9	0.0		2.4	22.1	0.0	22.1
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	209.1	-57.4	1.3	-24.3	-2.9	0.0		2.4	22.0	0.0	22.0
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	211.4	-57.5	1.3	-24.3	-2.9	0.0		2.4	21.9	0.0	21.9
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	316.5	-61.0	1.5	-10.0	-2.5	0.0		5.5	36.5	0.0	36.5
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	320.3	-61.1	1.5	-9.8	-2.6	0.0		5.5	36.5	0.0	36.5
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	306.0	-60.7	1.4	-10.6	-2.4	0.0		6.0	36.7	0.0	36.7
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	328.8	-61.3	1.5	-9.3	-2.7	0.0		3.2	34.3	0.0	34.3
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	324.4	-61.2	1.5	-9.6	-2.6	0.0		5.5	36.5	0.0	36.5
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	313.3	-60.9	1.4	-10.2	-2.5	0.0		6.0	36.9	0.0	36.9
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	292.9	-60.3	1.4	-11.5	-2.2	0.0		5.7	36.1	0.0	36.1
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	289.8	-60.2	1.4	-11.7	-2.1	0.0		5.7	36.0	0.0	36.0
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	286.6	-60.1	1.4	-12.0	-2.1	0.0		5.6	35.8	0.0	35.8
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	302.3	-60.6	1.4	-10.8	-2.3	0.0		5.9	36.6	0.0	36.6
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	299.4	-60.5	1.4	-11.0	-2.3	0.0		5.7	36.4	0.0	36.4
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	296.0	-60.4	1.4	-11.3	-2.2	0.0		5.7	36.2	0.0	36.2
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	333.5	-61.5	1.5	-9.1	-2.8	0.0		3.2	34.4	0.0	34.4
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	368.1	-62.3	1.5	-7.7	-3.3	0.0		2.9	34.1	0.0	34.1
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	364.4	-62.2	1.5	-7.8	-3.2	0.0		2.9	34.1	0.0	34.1
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	359.7	-62.1	1.5	-8.0	-3.1	0.0		2.9	34.1	0.0	34.1
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	383.5	-62.7	1.5	-7.3	-3.5	0.0		2.5	33.6	0.0	33.6
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	379.9	-62.6	1.5	-7.4	-3.4	0.0		2.8	33.9	0.0	33.9
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	372.8	-62.4	1.5	-7.6	-3.3	0.0		2.8	34.0	0.0	34.0

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	351.0	-61.9	1.5	-8.4	-3.0	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	339.5	-61.6	1.5	-8.8	-2.8	0.0		3.2	34.4	0.0	34.4	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	337.1	-61.5	1.5	-8.9	-2.8	0.0		3.2	34.4	0.0	34.4	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	355.1	-62.0	1.5	-8.2	-3.1	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	343.9	-61.7	1.5	-8.6	-2.9	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	347.2	-61.8	1.5	-8.5	-3.0	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	157.3	-54.9	1.1	0.0	-3.0	0.0		4.5	50.8	0.0	50.8	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	89.6	-50.0	0.7	0.0	-2.0	0.0		4.3	55.9	0.0	55.9	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	153.2	-54.7	1.1	0.0	-2.9	0.0		4.5	51.0	0.0	51.0	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	93.3	-50.4	0.7	0.0	-2.1	0.0		4.3	55.6	0.0	55.6	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	77.4	-48.8	0.7	0.0	-1.8	0.0		4.2	57.3	0.0	57.3	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	81.6	-49.2	0.7	0.0	-1.9	0.0		4.2	56.8	0.0	56.8	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	177.3	-56.0	1.2	0.0	-3.2	0.0		4.8	49.8	0.0	49.8	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	85.7	-49.7	0.7	0.0	-2.0	0.0		4.3	56.3	0.0	56.3	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	113.4	-52.1	0.9	0.0	-2.4	0.0		4.4	53.8	0.0	53.8	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	141.3	-54.0	1.0	0.0	-2.8	0.0		4.5	51.8	0.0	51.8	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	125.3	-53.0	1.0	0.0	-2.6	0.0		4.5	52.9	0.0	52.9	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	129.1	-53.2	1.0	0.0	-2.6	0.0		4.5	52.6	0.0	52.6	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	133.4	-53.5	1.0	0.0	-2.7	0.0		4.5	52.3	0.0	52.3	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	149.4	-54.5	1.1	0.0	-2.9	0.0		4.5	51.3	0.0	51.3	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	117.7	-52.4	0.9	0.0	-2.4	0.0		4.4	53.5	0.0	53.5	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	145.0	-54.2	1.1	0.0	-2.8	0.0		4.5	51.6	0.0	51.6	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	121.1	-52.7	0.9	0.0	-2.5	0.0		4.4	53.2	0.0	53.2	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	181.2	-56.2	1.2	0.0	-3.2	0.0		4.7	49.6	0.0	49.6	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	57.1	-46.1	0.7	0.0	-1.4	0.0		4.0	60.1	0.0	60.1	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	185.4	-56.4	1.2	0.0	-3.3	0.0		4.8	49.4	0.0	49.4	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	65.6	-47.3	0.7	0.0	-1.6	0.0		4.0	58.8	0.0	58.8	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	61.5	-46.8	0.7	0.0	-1.5	0.0		4.0	59.4	0.0	59.4	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	189.2	-56.5	1.2	0.0	-3.3	0.0		4.7	49.1	0.0	49.1	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	69.6	-47.9	0.7	0.0	-1.7	0.0		4.1	58.3	0.0	58.3	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	193.5	-56.7	1.2	0.0	-3.4	0.0		5.6	49.8	0.0	49.8	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	291.9	-60.3	0.8	-9.3	-1.1	0.0		4.9	26.6	0.0	26.6	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	346.3	-61.8	0.8	-6.8	-1.5	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	285.6	-60.1	0.8	-9.7	-1.1	0.0		4.9	26.3	0.0	26.3	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	367.2	-62.3	0.9	-6.2	-1.7	0.0		2.4	24.6	0.0	24.6	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	350.1	-61.9	0.8	-6.7	-1.5	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	149.4	-54.5	0.5	0.0	-1.0	0.0		4.3	40.8	0.0	40.8	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	343.0	-61.7	0.8	-6.9	-1.5	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	288.8	-60.2	0.8	-9.5	-1.1	0.0		4.9	26.4	0.0	26.4	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	141.2	-54.0	0.5	0.0	-1.0	0.0		4.3	41.3	0.0	41.3	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	358.8	-62.1	0.9	-6.5	-1.6	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	354.3	-62.0	0.8	-6.6	-1.6	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	193.4	-56.7	0.7	0.0	-1.3	0.0		4.6	38.8	0.0	38.8	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	144.9	-54.2	0.5	0.0	-1.0	0.0		4.3	41.1	0.0	41.1	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	363.6	-62.2	0.9	-6.3	-1.6	0.0		2.4	24.6	0.0	24.6	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	312.3	-60.9	0.8	-8.2	-1.3	0.0		5.0	27.0	0.0	27.0	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	177.3	-56.0	0.6	0.0	-1.2	0.0		4.3	39.3	0.0	39.3	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	301.3	-60.6	0.8	-8.7	-1.2	0.0		5.1	26.9	0.0	26.9	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	323.4	-61.2	0.8	-7.7	-1.4	0.0		5.0	27.1	0.0	27.1	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	185.4	-56.4	0.6	0.0	-1.2	0.0		4.4	38.9	0.0	38.9	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	305.0	-60.7	0.8	-8.5	-1.2	0.0		5.1	27.0	0.0	27.0	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	319.3	-61.1	0.8	-7.8	-1.3	0.0		5.0	27.1	0.0	27.1	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	181.2	-56.2	0.6	0.0	-1.2	0.0		4.3	39.1	0.0	39.1	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	315.6	-61.0	0.8	-8.0	-1.3	0.0		4.9	27.0	0.0	27.0	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	336.2	-61.5	0.8	-7.2	-1.4	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	153.2	-54.7	0.5	0.0	-1.1	0.0		4.3	40.6	0.0	40.6	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	338.5	-61.6	0.8	-7.1	-1.5	0.0		2.5	24.8	0.0	24.8	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	295.0	-60.4	0.8	-9.1	-1.1	0.0		5.0	26.7	0.0	26.7	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	189.2	-56.5	0.6	0.0	-1.3	0.0		4.5	38.8	0.0	38.8	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	327.9	-61.3	0.8	-7.5	-1.4	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	298.4	-60.5	0.8	-8.9	-1.2	0.0		5.0	26.8	0.0	26.8	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	157.2	-54.9	0.6	0.0	-1.1	0.0		4.3	40.3	0.0	40.3	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	332.6	-61.4	0.8	-7.3	-1.4	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	81.4	-49.2	0.2	0.0	-0.6	0.0		4.1	46.0	0.0	46.0	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	215.2	-57.6	0.7	-22.4	-0.9	0.0		1.7	13.0	0.0	13.0	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	213.1	-57.6	0.7	-22.3	-0.8	0.0		1.7	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	77.2	-48.7	0.2	0.0	-0.6	0.0		4.0	46.4	0.0	46.4	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	210.8	-57.5	0.7	-22.5	-0.8	0.0		1.8	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	224.4	-58.0	0.7	-22.2	-0.9	0.0		1.6	12.8	0.0	12.8	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	222.1	-57.9	0.7	-22.2	-0.9	0.0		1.7	12.9	0.0	12.9	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	85.6	-49.6	0.2	0.0	-0.6	0.0		4.1	45.5	0.0	45.5	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	219.8	-57.8	0.7	-22.4	-0.9	0.0		1.7	12.9	0.0	12.9	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	217.5	-57.7	0.7	-22.5	-0.9	0.0		1.7	12.9	0.0	12.9	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	206.7	-57.3	0.7	-22.6	-0.9	0.0		1.8	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	199.2	-57.0	0.7	-22.6	-0.8	0.0		1.8	13.6	0.0	13.6	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	61.3	-46.7	0.3	0.0	-0.5	0.0		3.8	48.4	0.0	48.4	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	197.7	-56.9	0.7	-22.5	-0.8	0.0		1.8	13.7	0.0	13.7	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	196.1	-56.8	0.7	-22.5	-0.8	0.0		1.8	13.8	0.0	13.8	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	56.9	-46.1	0.3	0.0	-0.4	0.0		3.2	48.5	0.0	48.5	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	69.4	-47.8	0.2	0.0	-0.5	0.0		3.9	47.3	0.0	47.3	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	204.6	-57.2	0.7	-22.6	-0.8	0.0		1.8	13.3	0.0	13.3	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	202.8	-57.1	0.7	-22.6	-0.8	0.0		1.8	13.4	0.0	13.4	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	65.4	-47.3	0.3	0.0	-0.5	0.0		3.9	47.9	0.0	47.9	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	200.8	-57.0	0.7	-22.6	-0.8	0.0		1.8	13.5	0.0	13.5	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	89.5	-50.0	0.2	0.0	-0.7	0.0		4.2	45.2	0.0	45.2	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	386.6	-62.7	0.9	-5.9	-1.8	0.0		2.4	24.3	0.0	24.3	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	125.2	-52.9	0.4	0.0	-0.9	0.0		4.3	42.3	0.0	42.3	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	389.6	-62.8	0.9	-5.9	-1.8	0.0		2.4	24.3	0.0	24.3	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	392.9	-62.9	0.9	-5.9	-1.8	0.0		2.4	24.2	0.0	24.2	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	121.0	-52.6	0.4	0.0	-0.9	0.0		4.3	42.6	0.0	42.6	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	133.3	-53.5	0.5	0.0	-0.9	0.0		4.3	41.8	0.0	41.8	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	371.9	-62.4	0.9	-6.1	-1.7	0.0		2.4	24.6	0.0	24.6	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	379.1	-62.6	0.9	-6.0	-1.7	0.0		2.5	24.5	0.0	24.5	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	129.1	-53.2	0.4	0.0	-0.9	0.0		4.3	42.1	0.0	42.1	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	382.7	-62.6	0.9	-6.0	-1.8	0.0		2.4	24.4	0.0	24.4	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	248.6	-58.9	0.8	-21.7	-0.9	0.0		1.7	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	237.7	-58.5	0.7	-21.9	-0.9	0.0		1.7	12.7	0.0	12.7	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	235.2	-58.4	0.7	-21.9	-0.9	0.0		1.7	12.7	0.0	12.7	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	93.1	-50.4	0.2	0.0	-0.7	0.0		4.2	44.8	0.0	44.8	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	232.3	-58.3	0.7	-22.1	-0.9	0.0		1.7	12.6	0.0	12.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	227.0	-58.1	0.7	-22.2	-0.9	0.0		1.6	12.7	0.0	12.7	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	245.7	-58.8	0.8	-21.8	-0.9	0.0		1.7	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	117.6	-52.4	0.4	0.0	-0.8	0.0		4.3	42.9	0.0	42.9	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	242.8	-58.7	0.7	-21.9	-0.9	0.0		1.7	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	239.9	-58.6	0.7	-22.0	-0.9	0.0		1.7	12.4	0.0	12.4	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	113.2	-52.1	0.3	0.0	-0.8	0.0		4.3	43.2	0.0	43.2	
169	Lmax	PLot	-599.0	695.1	87.0	0	80.0	-49.0	0.2	0.0	-0.7	0.0		1.4	38.9	0.0	38.9	
170	Lmax	PLot	-599.6	685.4	82.0	0	72.6	-48.2	0.1	0.0	-0.6	0.0		1.4	34.7	0.0	34.7	
171	Lmax	PLot	-700.0	686.7	80.0	0	156.9	-54.9	0.4	-16.3	-0.2	0.0		9.2	18.2	0.0	18.2	
168	Lmax	PLot	-603.8	716.7	83.0	0	100.9	-51.1	0.3	0.0	-0.8	0.0		2.6	34.0	0.0	34.0	
165	Lmax	PLot	-599.5	762.5	81.6	0	141.1	-54.0	0.4	-9.0	-0.2	0.0		6.5	25.2	0.0	25.2	
166	Lmax	PLot	-673.9	716.7	84.0	0	148.5	-54.4	0.4	-10.4	-0.2	0.0		6.8	26.2	0.0	26.2	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
167	Lmax	PLot	-673.4	695.2	84.0	0	136.5	-53.7	0.4	-12.2	-0.2	0.0		7.4	25.7	0.0	25.7	
176	Lmax	PLot	-803.2	417.6	82.0	0	326.6	-61.3	0.2	-19.3	-0.6	0.0		6.6	7.7	0.0	7.7	
177	Lmax	PLot	-891.3	417.1	82.0	0	398.2	-63.0	0.1	-15.3	-0.4	0.0		0.4	3.8	0.0	3.8	
178	Lmax	PLot	-953.1	483.6	82.6	0	424.6	-63.6	0.0	-16.2	-0.5	0.0		0.4	2.7	0.0	2.7	
175	Lmax	PLot	-791.3	485.8	83.5	0	277.0	-59.8	0.3	-9.1	-0.4	0.0		3.4	17.9	0.0	17.9	
172	Lmax	PLot	-678.0	681.9	71.8	0	134.7	-53.6	0.3	-16.4	-0.2	0.0		12.4	14.4	0.0	14.4	
173	Lmax	PLot	-578.2	722.9	81.0	0	97.1	-50.7	0.3	0.0	-0.8	0.0		1.7	31.5	0.0	31.5	
174	Lmax	PLot	-578.5	629.4	83.0	0	24.3	-38.7	0.4	0.0	-0.2	0.0		0.5	45.0	0.0	45.0	
155	Lmax	PLot	-614.7	572.9	73.0	0	82.4	-49.3	0.2	0.0	-0.7	0.0		1.1	24.2	0.0	24.2	
156	Lmax	PLot	-584.6	575.8	77.0	0	61.2	-46.7	0.0	0.0	-0.5	0.0		1.1	30.8	0.0	30.8	
157	Lmax	PLot	-633.4	546.4	77.0	0	114.4	-52.2	0.3	0.0	-0.9	0.0		1.7	26.0	0.0	26.0	
154	Lmax	PLot	-579.2	587.9	73.0	0	48.0	-44.6	0.0	0.0	-0.4	0.0		1.0	29.0	0.0	29.0	
151	Lmax	PLot	-666.9	572.5	82.0	0	126.0	-53.0	0.3	0.0	-1.0	0.0		3.1	31.5	0.0	31.5	
152	Lmax	PLot	-647.2	573.9	86.5	0	108.1	-51.7	0.3	0.0	-0.9	0.0		1.9	36.1	0.0	36.1	
153	Lmax	PLot	-628.5	583.6	81.0	0	87.0	-49.8	0.2	0.0	-0.7	0.0		1.0	31.7	0.0	31.7	
162	Lmax	PLot	-704.4	771.4	82.3	0	207.2	-57.3	0.4	-10.0	-0.2	0.0		5.2	20.4	0.0	20.4	
163	Lmax	PLot	-684.2	758.3	82.6	0	183.5	-56.3	0.4	-7.3	-0.2	0.0		1.9	21.0	0.0	21.0	
164	Lmax	PLot	-585.1	771.7	82.2	0	146.2	-54.3	0.4	0.0	-1.1	0.0		2.2	29.4	0.0	29.4	
161	Lmax	PLot	-677.9	421.6	84.0	0	241.4	-58.6	0.3	0.0	-1.6	0.0		1.2	25.3	0.0	25.3	
158	Lmax	PLot	-640.2	515.7	77.0	0	142.2	-54.0	0.4	0.0	-1.1	0.0		2.0	24.3	0.0	24.3	
159	Lmax	PLot	-652.8	513.5	75.0	0	151.8	-54.6	0.4	0.0	-1.1	0.0		2.3	21.9	0.0	21.9	
160	Lmax	PLot	-666.6	499.9	83.0	0	171.1	-55.7	0.4	0.0	-1.2	0.0		2.6	29.1	0.0	29.1	
Receiver R3 Fl G Lmax,lim dB(A) Lmax 41.8 dB(A)																		
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	175.1	-55.9	1.2	-23.1	-2.0	0.0		0.0	23.2	0.0	23.2	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	171.5	-55.7	1.2	-23.1	-2.0	0.0		0.0	23.5	0.0	23.5	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	168.0	-55.5	1.2	-23.3	-2.1	0.0		0.0	23.3	0.0	23.3	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	191.2	-56.6	1.2	-23.3	-2.2	0.0		17.9	40.0	0.0	40.0	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	187.1	-56.4	1.2	-23.3	-2.2	0.0		0.0	22.3	0.0	22.3	

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Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	179.0	-56.1	1.2	-23.4	-2.2	0.0		0.0	22.6	0.0	22.6	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	302.7	-60.6	1.4	-24.0	-3.4	0.0		0.0	16.4	0.0	16.4	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	299.7	-60.5	1.4	-24.1	-3.5	0.0		0.0	16.4	0.0	16.4	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	297.3	-60.5	1.4	-24.0	-3.4	0.0		0.0	16.5	0.0	16.5	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	164.1	-55.3	1.1	-23.2	-2.0	0.0		0.0	23.7	0.0	23.7	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	160.2	-55.1	1.1	-23.2	-1.9	0.0		0.0	24.0	0.0	24.0	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	156.4	-54.9	1.1	-23.1	-1.9	0.0		0.0	24.3	0.0	24.3	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	194.9	-56.8	1.2	-23.3	-2.2	0.0		17.9	39.9	0.0	39.9	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	233.6	-58.4	1.3	-23.2	-2.4	0.0		20.2	40.5	0.0	40.5	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	229.5	-58.2	1.3	-23.2	-2.4	0.0		19.1	39.6	0.0	39.6	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	225.6	-58.1	1.3	-23.4	-2.5	0.0		18.4	38.8	0.0	38.8	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	244.9	-58.8	1.4	-22.8	-2.3	0.0		19.9	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	241.1	-58.6	1.3	-22.8	-2.3	0.0		19.8	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	237.4	-58.5	1.3	-23.1	-2.4	0.0		20.1	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	206.6	-57.3	1.3	-23.2	-2.3	0.0		17.9	39.5	0.0	39.5	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	202.4	-57.1	1.3	-23.3	-2.3	0.0		18.1	39.6	0.0	39.6	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	198.7	-57.0	1.3	-23.2	-2.2	0.0		17.9	39.8	0.0	39.8	
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	221.6	-57.9	1.3	-23.4	-2.5	0.0		18.4	39.0	0.0	39.0	
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	214.3	-57.6	1.3	-23.1	-2.3	0.0		17.9	39.2	0.0	39.2	
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	210.5	-57.5	1.3	-23.0	-2.2	0.0		17.7	39.4	0.0	39.4	
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	240.2	-58.6	1.3	-23.8	-3.0	0.0		0.0	18.9	0.0	18.9	
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	242.5	-58.7	1.4	-24.0	-3.1	0.0		0.0	18.6	0.0	18.6	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	232.0	-58.3	1.3	-23.7	-3.0	0.0		0.0	19.3	0.0	19.3	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	248.9	-58.9	1.4	-24.0	-3.2	0.0		0.0	18.2	0.0	18.2	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	245.5	-58.8	1.4	-24.0	-3.2	0.0		0.0	18.4	0.0	18.4	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	237.6	-58.5	1.3	-23.8	-3.0	0.0		0.0	19.0	0.0	19.0	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	223.6	-58.0	1.3	-23.1	-2.7	0.0		0.0	20.6	0.0	20.6	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	221.2	-57.9	1.3	-22.9	-2.6	0.0		0.0	21.0	0.0	21.0	

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Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	219.1	-57.8	1.3	-22.4	-2.5	0.0		0.0	21.6	0.0	21.6	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	229.8	-58.2	1.3	-23.6	-2.9	0.0		0.0	19.6	0.0	19.6	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	227.9	-58.1	1.3	-23.5	-2.8	0.0		0.0	19.9	0.0	19.9	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	225.4	-58.1	1.3	-23.3	-2.8	0.0		0.0	20.2	0.0	20.2	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	252.5	-59.0	1.4	-24.1	-3.2	0.0		0.0	18.0	0.0	18.0	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	280.5	-60.0	1.4	-24.1	-3.4	0.0		0.0	16.9	0.0	16.9	
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	277.5	-59.9	1.4	-24.1	-3.4	0.0		0.0	17.0	0.0	17.0	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	273.6	-59.7	1.4	-24.1	-3.4	0.0		0.0	17.2	0.0	17.2	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	294.0	-60.4	1.4	-24.0	-3.4	0.0		0.0	16.7	0.0	16.7	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	291.0	-60.3	1.4	-24.0	-3.4	0.0		0.0	16.8	0.0	16.8	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	284.5	-60.1	1.4	-24.1	-3.4	0.0		0.0	16.8	0.0	16.8	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	266.5	-59.5	1.4	-24.1	-3.3	0.0		0.0	17.5	0.0	17.5	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	257.1	-59.2	1.4	-24.1	-3.3	0.0		0.0	17.8	0.0	17.8	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	255.3	-59.1	1.4	-24.1	-3.3	0.0		0.0	17.9	0.0	17.9	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	269.9	-59.6	1.4	-24.1	-3.3	0.0		0.0	17.3	0.0	17.3	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	261.2	-59.3	1.4	-24.0	-3.2	0.0		0.0	17.8	0.0	17.8	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	263.9	-59.4	1.4	-24.0	-3.2	0.0		0.0	17.7	0.0	17.7	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	330.4	-61.4	1.5	-15.0	-2.1	0.0		3.2	29.2	0.0	29.2	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	331.3	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	329.9	-61.4	1.5	-15.0	-2.1	0.0		3.2	29.2	0.0	29.2	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	330.8	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	333.1	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	332.5	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	332.9	-61.4	1.5	-14.9	-2.1	0.0		2.7	28.7	0.0	28.7	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	331.9	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	329.6	-61.4	1.5	-3.6	-3.8	0.0		3.1	38.8	0.0	38.8	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	329.2	-61.3	1.5	-14.9	-2.1	0.0		4.7	30.8	0.0	30.8	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	329.3	-61.3	1.5	-13.8	-2.2	0.0		6.8	33.9	0.0	33.9	

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Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax m	Ymax m	Lw dB(A)	Ko dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	ADI dB	Amisc dB	dLrefl dB(A)	Ls dB(A)	Cmet dB	Lr dB(A)
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	329.3	-61.3	1.5	-14.5	-2.1	0.0		4.5	31.0	0.0	31.0
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	329.1	-61.3	1.5	-14.8	-2.1	0.0		4.6	30.9	0.0	30.9
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	329.7	-61.4	1.5	-15.0	-2.1	0.0		3.2	29.2	0.0	29.2
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	329.4	-61.3	1.5	-6.6	-2.9	0.0		4.0	37.5	0.0	37.5
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	329.5	-61.3	1.5	-14.9	-2.1	0.0		3.2	29.3	0.0	29.3
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	329.4	-61.3	1.5	-12.0	-2.3	0.0		6.8	35.6	0.0	35.6
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	333.4	-61.5	1.5	-14.9	-2.1	0.0		2.7	28.7	0.0	28.7
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	336.6	-61.5	1.5	0.0	-4.7	0.0		2.6	40.8	0.0	40.8
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	334.1	-61.5	1.5	-14.8	-2.1	0.0		2.7	28.7	0.0	28.7
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	334.8	-61.5	1.5	0.0	-4.6	0.0		3.5	41.8	0.0	41.8
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	335.7	-61.5	1.5	0.0	-4.7	0.0		3.1	41.4	0.0	41.4
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	334.6	-61.5	1.5	-14.9	-2.1	0.0		2.7	28.7	0.0	28.7
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	334.0	-61.5	1.5	0.0	-4.6	0.0		3.5	41.8	0.0	41.8
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	335.5	-61.5	1.5	-14.7	-2.1	0.0		2.7	28.8	0.0	28.8
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	225.1	-58.0	0.7	-20.3	-0.8	0.0		0.0	13.1	0.0	13.1
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	265.2	-59.5	0.8	-21.7	-1.0	0.0		0.0	10.1	0.0	10.1
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	220.7	-57.9	0.7	-19.0	-0.8	0.0		0.0	14.6	0.0	14.6
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	281.7	-60.0	0.8	-22.0	-1.1	0.0		0.0	9.3	0.0	9.3
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	267.8	-59.5	0.8	-22.0	-1.0	0.0		0.0	9.7	0.0	9.7
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	327.8	-61.3	0.8	-12.5	-1.1	0.0		3.2	20.6	0.0	20.6
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	262.4	-59.4	0.8	-21.8	-1.0	0.0		0.0	10.1	0.0	10.1
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	222.8	-57.9	0.7	-19.9	-0.8	0.0		0.0	13.6	0.0	13.6
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	327.2	-61.3	0.8	-12.5	-1.1	0.0		3.4	20.8	0.0	20.8
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	274.8	-59.8	0.8	-22.0	-1.0	0.0		0.0	9.5	0.0	9.5
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	271.1	-59.7	0.8	-22.0	-1.0	0.0		0.0	9.6	0.0	9.6
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	333.6	-61.5	0.8	-12.3	-1.1	0.0		2.8	20.2	0.0	20.2
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	327.5	-61.3	0.8	-12.5	-1.1	0.0		3.4	20.8	0.0	20.8
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	278.7	-59.9	0.8	-22.0	-1.0	0.0		0.0	9.3	0.0	9.3

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	239.0	-58.6	0.7	-21.7	-0.9	0.0		0.0	11.1	0.0	11.1	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	331.0	-61.4	0.8	-12.4	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	231.2	-58.3	0.7	-21.3	-0.9	0.0		0.0	11.8	0.0	11.8	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	246.9	-58.8	0.8	-22.0	-1.0	0.0		0.0	10.4	0.0	10.4	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	332.2	-61.4	0.8	-12.4	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	233.4	-58.4	0.7	-21.6	-0.9	0.0		0.0	11.4	0.0	11.4	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	243.8	-58.7	0.7	-22.0	-1.0	0.0		0.0	10.6	0.0	10.6	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	331.5	-61.4	0.8	-12.4	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	241.5	-58.7	0.7	-21.7	-0.9	0.0		0.0	11.0	0.0	11.0	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	256.6	-59.2	0.8	-22.1	-1.0	0.0		0.0	9.9	0.0	9.9	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	328.0	-61.3	0.8	-12.5	-1.1	0.0		3.2	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	258.4	-59.2	0.8	-22.2	-1.0	0.0		0.0	9.8	0.0	9.8	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	226.9	-58.1	0.7	-20.8	-0.8	0.0		0.0	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	332.7	-61.4	0.8	-12.4	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	250.2	-59.0	0.8	-22.1	-1.0	0.0		0.0	10.2	0.0	10.2	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	229.4	-58.2	0.7	-21.0	-0.8	0.0		0.0	12.1	0.0	12.1	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	328.5	-61.3	0.8	-12.5	-1.1	0.0		3.2	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	253.8	-59.1	0.8	-22.1	-1.0	0.0		0.0	10.1	0.0	10.1	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	330.5	-61.4	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	207.0	-57.3	0.7	-18.5	-0.6	0.0		12.8	28.5	0.0	28.5	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	210.9	-57.5	0.7	-18.2	-0.6	0.0		12.6	28.4	0.0	28.4	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	331.1	-61.4	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	214.7	-57.6	0.7	-18.4	-0.7	0.0		12.8	28.3	0.0	28.3	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	191.6	-56.6	0.7	-18.8	-0.6	0.0		10.6	26.7	0.0	26.7	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	195.3	-56.8	0.7	-18.7	-0.6	0.0		12.9	28.9	0.0	28.9	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	329.9	-61.4	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	199.1	-57.0	0.7	-18.7	-0.6	0.0		12.8	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	202.9	-57.1	0.7	-18.7	-0.6	0.0		12.9	28.7	0.0	28.7	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	222.0	-57.9	0.7	-18.6	-0.7	0.0		13.0	28.1	0.0	28.1	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	237.7	-58.5	0.7	-18.1	-0.7	0.0		13.8	28.7	0.0	28.7	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	333.7	-61.5	0.8	0.0	-2.0	0.0		2.6	31.5	0.0	31.5	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	241.5	-58.7	0.7	-17.8	-0.7	0.0		13.7	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	245.2	-58.8	0.8	-17.7	-0.7	0.0		13.8	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	334.6	-61.5	0.8	0.0	-2.0	0.0		2.5	31.3	0.0	31.3	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	332.1	-61.4	0.8	0.0	-2.0	0.0		2.8	31.6	0.0	31.6	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	226.0	-58.1	0.7	-18.5	-0.7	0.0		13.6	28.6	0.0	28.6	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	229.8	-58.2	0.7	-18.4	-0.7	0.0		13.5	28.5	0.0	28.5	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	332.9	-61.4	0.8	0.0	-2.0	0.0		2.8	31.6	0.0	31.6	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	234.0	-58.4	0.7	-18.3	-0.7	0.0		13.1	27.9	0.0	27.9	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	329.4	-61.3	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	298.4	-60.5	0.8	-21.5	-1.0	0.0		0.0	9.3	0.0	9.3	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	327.3	-61.3	0.8	-11.3	-1.1	0.0		4.0	22.6	0.0	22.6	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	300.8	-60.6	0.8	-21.5	-1.1	0.0		0.0	9.1	0.0	9.1	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	303.8	-60.6	0.8	-21.4	-1.1	0.0		0.0	9.2	0.0	9.2	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	327.4	-61.3	0.8	-9.5	-1.2	0.0		3.0	23.4	0.0	23.4	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	327.2	-61.3	0.8	-12.3	-1.1	0.0		3.7	21.4	0.0	21.4	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	285.7	-60.1	0.8	-21.9	-1.1	0.0		0.0	9.3	0.0	9.3	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	292.1	-60.3	0.8	-21.5	-1.0	0.0		0.0	9.5	0.0	9.5	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	327.3	-61.3	0.8	-12.0	-1.1	0.0		3.6	21.6	0.0	21.6	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	295.1	-60.4	0.8	-21.5	-1.0	0.0		0.0	9.4	0.0	9.4	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	157.0	-54.9	0.6	-19.3	-0.5	0.0		0.0	17.4	0.0	17.4	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	172.1	-55.7	0.6	-18.6	-0.5	0.0		0.0	17.2	0.0	17.2	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	175.6	-55.9	0.6	-18.7	-0.5	0.0		0.0	17.0	0.0	17.0	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	328.8	-61.3	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	179.5	-56.1	0.6	-18.9	-0.5	0.0		0.0	16.6	0.0	16.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	187.5	-56.5	0.6	-18.8	-0.6	0.0		10.6	26.9	0.0	26.9	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	160.8	-55.1	0.6	-18.7	-0.5	0.0		0.0	17.8	0.0	17.8	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	327.5	-61.3	0.8	-4.9	-1.5	0.0		2.2	26.8	0.0	26.8	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	164.7	-55.3	0.6	-18.8	-0.5	0.0		0.0	17.5	0.0	17.5	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	168.5	-55.5	0.6	-19.0	-0.5	0.0		0.0	17.1	0.0	17.1	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	327.7	-61.3	0.8	-2.8	-1.7	0.0		1.9	28.3	0.0	28.3	
169	Lmax	PLot	-613.5	700.5	87.0	0	396.8	-63.0	0.1	-11.4	-0.4	0.0		1.2	13.5	0.0	13.5	
170	Lmax	PLot	-622.0	687.0	82.0	0	382.1	-62.6	0.1	-16.3	-0.4	0.0		3.3	6.0	0.0	6.0	
171	Lmax	PLot	-727.2	687.1	80.0	0	380.8	-62.6	0.1	-17.7	-0.5	0.0		1.9	1.2	0.0	1.2	
168	Lmax	PLot	-626.8	716.7	83.0	0	410.8	-63.3	0.0	-9.0	-0.5	0.0		1.2	11.4	0.0	11.4	
165	Lmax	PLot	-654.1	763.3	81.6	0	454.8	-64.1	0.0	-14.9	-0.5	0.0		0.0	2.0	0.0	2.0	
166	Lmax	PLot	-717.2	716.5	84.0	0	408.9	-63.2	0.0	-11.2	-0.5	0.0		1.0	10.2	0.0	10.2	
167	Lmax	PLot	-751.1	699.4	84.0	0	396.6	-63.0	0.1	-13.2	-0.4	0.0		1.3	8.8	0.0	8.8	
176	Lmax	PLot	-803.2	417.6	82.0	0	164.3	-55.3	0.4	0.0	-1.2	0.0		1.2	27.1	0.0	27.1	
177	Lmax	PLot	-875.9	417.4	82.0	0	224.0	-58.0	0.3	0.0	-1.5	0.0		1.2	24.1	0.0	24.1	
178	Lmax	PLot	-947.7	424.3	82.6	0	291.6	-60.3	0.3	0.0	-1.8	0.0		2.3	23.1	0.0	23.1	
175	Lmax	PLot	-788.0	431.5	83.5	0	163.2	-55.2	0.4	0.0	-1.2	0.0		1.2	28.7	0.0	28.7	
172	Lmax	PLot	-689.0	685.8	71.8	0	376.7	-62.5	0.1	-17.9	-0.5	0.0		2.0	-7.1	0.0	-7.1	
173	Lmax	PLot	-583.2	722.9	81.0	0	424.7	-63.6	0.0	-5.4	-0.8	0.0		0.0	11.3	0.0	11.3	
174	Lmax	PLot	-584.7	613.1	83.0	0	318.3	-61.0	0.2	0.0	-2.0	0.0		0.0	20.2	0.0	20.2	
155	Lmax	PLot	-620.2	560.7	73.0	0	258.4	-59.2	0.3	0.0	-1.7	0.0		0.4	12.8	0.0	12.8	
156	Lmax	PLot	-613.5	569.9	77.0	0	268.9	-59.6	0.3	0.0	-1.7	0.0		0.5	16.5	0.0	16.5	
157	Lmax	PLot	-639.4	517.7	77.0	0	212.3	-57.5	0.4	0.0	-1.4	0.0		0.3	18.7	0.0	18.7	
154	Lmax	PLot	-584.1	575.2	73.0	0	282.6	-60.0	0.3	0.0	-1.8	0.0		0.6	12.0	0.0	12.0	
151	Lmax	PLot	-669.9	513.5	82.0	0	204.5	-57.2	0.4	0.0	-1.4	0.0		0.4	24.2	0.0	24.2	
152	Lmax	PLot	-658.5	526.4	86.5	0	218.2	-57.8	0.3	0.0	-1.5	0.0		0.5	28.1	0.0	28.1	
153	Lmax	PLot	-639.2	560.6	81.0	0	254.5	-59.1	0.3	0.0	-1.6	0.0		0.4	20.9	0.0	20.9	
162	Lmax	PLot	-683.4	771.4	82.3	0	462.2	-64.3	0.0	-13.3	-0.5	0.0		0.0	4.2	0.0	4.2	
163	Lmax	PLot	-748.3	763.7	82.6	0	459.6	-64.2	0.0	-15.7	-0.5	0.0		0.0	2.2	0.0	2.2	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
164	Lmax	PLot	-586.1	771.7	82.2	0	471.8	-64.5	-0.1	-5.2	-1.4	0.0		0.0	11.2	0.0	11.2	
161	Lmax	PLot	-679.9	417.1	84.0	0	107.8	-51.6	0.3	0.0	-0.8	0.0		1.8	33.6	0.0	33.6	
158	Lmax	PLot	-648.6	509.5	77.0	0	202.7	-57.1	0.4	0.0	-1.4	0.0		0.4	19.3	0.0	19.3	
159	Lmax	PLot	-658.8	495.1	75.0	0	187.0	-56.4	0.4	0.0	-1.3	0.0		0.2	17.9	0.0	17.9	
160	Lmax	PLot	-671.6	431.3	83.0	0	122.3	-52.7	0.3	0.0	-0.9	0.0		0.0	29.6	0.0	29.6	
Receiver R4 Fl G Lmax,lim dB(A) Lmax 39.6 dB(A)																		
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	268.0	-59.6	1.4	-15.3	-1.8	0.0		2.7	30.4	0.0	30.4	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	266.9	-59.5	1.4	-15.2	-1.8	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	266.2	-59.5	1.4	-15.0	-1.8	0.0		2.5	30.7	0.0	30.7	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	273.6	-59.7	1.4	-15.9	-1.8	0.0		2.7	29.7	0.0	29.7	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	272.1	-59.7	1.4	-15.8	-1.8	0.0		2.7	29.9	0.0	29.9	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	269.5	-59.6	1.4	-15.5	-1.8	0.0		2.7	30.2	0.0	30.2	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	111.1	-51.9	0.9	-23.3	-1.8	0.0		0.0	26.9	0.0	26.9	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	113.2	-52.1	0.9	-23.5	-1.8	0.0		0.0	26.5	0.0	26.5	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	115.2	-52.2	0.9	-23.5	-1.8	0.0		0.0	26.3	0.0	26.3	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	265.0	-59.5	1.4	-14.8	-1.8	0.0		2.5	30.9	0.0	30.9	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	263.9	-59.4	1.4	-14.5	-1.8	0.0		2.5	31.2	0.0	31.2	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	262.9	-59.4	1.4	-14.2	-1.8	0.0		2.5	31.5	0.0	31.5	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	274.9	-59.8	1.4	-16.0	-1.8	0.0		2.7	29.5	0.0	29.5	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	291.5	-60.3	1.4	-15.6	-1.9	0.0		2.5	29.2	0.0	29.2	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	289.6	-60.2	1.4	-15.7	-1.9	0.0		2.5	29.1	0.0	29.1	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	287.9	-60.2	1.4	-15.8	-1.9	0.0		2.5	29.1	0.0	29.1	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	296.8	-60.4	1.4	-15.4	-1.9	0.0		3.7	30.4	0.0	30.4	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	294.9	-60.4	1.4	-15.4	-1.9	0.0		2.5	29.2	0.0	29.2	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	293.3	-60.3	1.4	-15.5	-1.9	0.0		2.5	29.2	0.0	29.2	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	279.4	-59.9	1.4	-16.3	-1.8	0.0		4.1	30.4	0.0	30.4	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	277.8	-59.9	1.4	-16.2	-1.8	0.0		3.1	29.6	0.0	29.6	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	276.3	-59.8	1.4	-16.1	-1.8	0.0		2.7	29.4	0.0	29.4	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax m	Ymax m	Lw dB(A)	Ko dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	ADI dB	Amisc dB	dLrefl dB(A)	Ls dB(A)	Cmet dB	Lr dB(A)
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	286.1	-60.1	1.4	-16.0	-1.9	0.0		4.2	30.7	0.0	30.7
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	282.6	-60.0	1.4	-16.4	-1.8	0.0		4.1	30.3	0.0	30.3
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	280.8	-60.0	1.4	-16.5	-1.8	0.0		4.1	30.3	0.0	30.3
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	174.5	-55.8	1.2	-24.1	-2.6	0.0		0.0	21.7	0.0	21.7
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	170.8	-55.6	1.2	-24.2	-2.6	0.0		0.0	21.8	0.0	21.8
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	184.7	-56.3	1.2	-24.2	-2.7	0.0		0.0	21.0	0.0	21.0
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	162.8	-55.2	1.1	-24.1	-2.5	0.0		0.0	22.3	0.0	22.3
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	167.0	-55.4	1.2	-24.1	-2.6	0.0		0.0	22.0	0.0	22.0
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	177.5	-56.0	1.2	-24.1	-2.6	0.0		0.0	21.5	0.0	21.5
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	197.8	-56.9	1.3	-24.0	-2.7	0.0		0.0	20.6	0.0	20.6
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	200.9	-57.1	1.3	-24.1	-2.8	0.0		0.0	20.3	0.0	20.3
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	204.2	-57.2	1.3	-24.1	-2.8	0.0		1.0	21.2	0.0	21.2
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	188.3	-56.5	1.2	-24.1	-2.7	0.0		0.0	20.9	0.0	20.9
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	191.2	-56.6	1.2	-24.1	-2.7	0.0		0.0	20.9	0.0	20.9
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	194.6	-56.8	1.2	-24.1	-2.7	0.0		0.0	20.6	0.0	20.6
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	158.5	-55.0	1.1	-24.1	-2.5	0.0		0.0	22.5	0.0	22.5
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	129.1	-53.2	1.0	-23.9	-2.1	0.0		0.0	24.7	0.0	24.7
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	132.0	-53.4	1.0	-24.0	-2.1	0.0		0.0	24.5	0.0	24.5
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	135.8	-53.7	1.0	-24.0	-2.2	0.0		0.0	24.2	0.0	24.2
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	117.9	-52.4	0.9	-23.6	-1.9	0.0		0.0	26.0	0.0	26.0
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	120.4	-52.6	0.9	-23.7	-1.9	0.0		0.0	25.7	0.0	25.7
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	125.5	-53.0	1.0	-23.9	-2.0	0.0		0.0	25.1	0.0	25.1
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	143.1	-54.1	1.1	-24.0	-2.3	0.0		0.0	23.6	0.0	23.6
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	153.1	-54.7	1.1	-24.1	-2.4	0.0		0.0	22.9	0.0	22.9
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	155.3	-54.8	1.1	-24.1	-2.4	0.0		0.0	22.7	0.0	22.7
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	139.6	-53.9	1.0	-24.0	-2.2	0.0		0.0	23.9	0.0	23.9
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	149.3	-54.5	1.1	-24.0	-2.3	0.0		0.0	23.3	0.0	23.3
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	146.5	-54.3	1.1	-24.0	-2.3	0.0		0.0	23.5	0.0	23.5

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	365.2	-62.2	1.5	-12.0	-2.5	0.0		2.5	30.3	0.0	30.3	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	419.3	-63.4	1.5	-15.5	-2.5	0.0		0.0	23.2	0.0	23.2	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	368.2	-62.3	1.5	-12.0	-2.5	0.0		2.5	30.2	0.0	30.2	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	416.2	-63.4	1.5	-15.5	-2.4	0.0		0.0	23.2	0.0	23.2	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	429.6	-63.7	1.5	-15.4	-2.5	0.0		0.0	22.9	0.0	22.9	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	426.1	-63.6	1.5	-15.4	-2.5	0.0		0.0	23.1	0.0	23.1	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	350.2	-61.9	1.5	-12.1	-2.4	0.0		2.6	30.6	0.0	30.6	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	422.6	-63.5	1.5	-15.4	-2.5	0.0		0.0	23.1	0.0	23.1	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	400.0	-63.0	1.5	-15.6	-2.4	0.0		0.0	23.6	0.0	23.6	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	377.4	-62.5	1.5	-12.0	-2.5	0.0		2.5	30.0	0.0	30.0	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	390.3	-62.8	1.5	-11.9	-2.6	0.0		0.0	27.2	0.0	27.2	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	387.3	-62.8	1.5	-11.9	-2.6	0.0		0.0	27.2	0.0	27.2	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	383.8	-62.7	1.5	-12.0	-2.6	0.0		0.0	27.3	0.0	27.3	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	371.2	-62.4	1.5	-12.0	-2.5	0.0		2.5	30.1	0.0	30.1	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	396.4	-63.0	1.5	-15.6	-2.4	0.0		0.0	23.6	0.0	23.6	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	374.6	-62.5	1.5	-12.0	-2.5	0.0		2.5	30.0	0.0	30.0	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	393.7	-62.9	1.5	-15.6	-2.3	0.0		0.0	23.7	0.0	23.7	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	347.2	-61.8	1.5	-15.2	-2.2	0.0		2.5	27.8	0.0	27.8	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	446.7	-64.0	1.5	-15.3	-2.6	0.0		0.0	22.7	0.0	22.7	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	344.2	-61.7	1.5	-15.4	-2.1	0.0		2.5	27.8	0.0	27.8	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	439.4	-63.8	1.5	-15.4	-2.5	0.0		0.0	22.8	0.0	22.8	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	443.0	-63.9	1.5	-15.4	-2.6	0.0		0.0	22.7	0.0	22.7	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	341.2	-61.7	1.5	-15.5	-2.1	0.0		2.5	27.7	0.0	27.7	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	436.0	-63.8	1.5	-15.4	-2.5	0.0		0.0	22.8	0.0	22.8	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	338.3	-61.6	1.5	-15.8	-2.1	0.0		2.5	27.5	0.0	27.5	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	198.8	-57.0	0.7	-21.4	-0.7	0.0		0.0	13.1	0.0	13.1	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	147.8	-54.4	0.5	-21.7	-0.6	0.0		0.0	15.3	0.0	15.3	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	205.1	-57.2	0.7	-21.5	-0.8	0.0		0.0	12.7	0.0	12.7	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	130.5	-53.3	0.4	-21.9	-0.6	0.0		0.0	16.2	0.0	16.2	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	144.4	-54.2	0.5	-21.9	-0.6	0.0		0.0	15.3	0.0	15.3	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	369.9	-62.4	0.9	-9.7	-1.4	0.0		2.5	21.4	0.0	21.4	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	150.6	-54.5	0.5	-21.8	-0.6	0.0		0.0	15.1	0.0	15.1	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	201.9	-57.1	0.7	-21.5	-0.8	0.0		0.0	12.8	0.0	12.8	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	376.2	-62.5	0.9	-9.7	-1.4	0.0		2.5	21.3	0.0	21.3	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	137.2	-53.7	0.5	-21.9	-0.6	0.0		0.0	15.7	0.0	15.7	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	140.9	-54.0	0.5	-21.9	-0.6	0.0		0.0	15.5	0.0	15.5	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	336.9	-61.5	0.8	-13.1	-1.1	0.0		2.5	19.1	0.0	19.1	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	373.3	-62.4	0.9	-9.7	-1.4	0.0		2.5	21.3	0.0	21.3	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	133.4	-53.5	0.5	-21.9	-0.6	0.0		0.0	16.0	0.0	16.0	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	178.6	-56.0	0.6	-21.8	-0.7	0.0		0.0	13.6	0.0	13.6	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	348.8	-61.8	0.8	-9.8	-1.3	0.0		2.5	21.9	0.0	21.9	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	189.3	-56.5	0.6	-21.7	-0.7	0.0		0.0	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	168.1	-55.5	0.6	-22.0	-0.7	0.0		0.0	13.9	0.0	13.9	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	342.8	-61.7	0.8	-12.7	-1.1	0.0		2.5	19.3	0.0	19.3	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	185.7	-56.4	0.6	-21.9	-0.7	0.0		0.0	13.1	0.0	13.1	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	172.0	-55.7	0.6	-22.0	-0.7	0.0		0.0	13.7	0.0	13.7	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	345.9	-61.8	0.8	-12.6	-1.2	0.0		2.5	19.3	0.0	19.3	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	175.6	-55.9	0.6	-21.7	-0.7	0.0		0.0	13.8	0.0	13.8	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	156.5	-54.9	0.6	-22.1	-0.7	0.0		0.0	14.5	0.0	14.5	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	366.9	-62.3	0.9	-9.7	-1.3	0.0		2.5	21.5	0.0	21.5	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	154.4	-54.8	0.5	-22.1	-0.6	0.0		0.0	14.5	0.0	14.5	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	195.6	-56.8	0.7	-21.6	-0.7	0.0		0.0	13.0	0.0	13.0	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	339.9	-61.6	0.8	-12.9	-1.1	0.0		2.5	19.2	0.0	19.2	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	164.0	-55.3	0.6	-22.0	-0.7	0.0		0.0	14.1	0.0	14.1	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	192.2	-56.7	0.7	-21.6	-0.7	0.0		0.0	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	363.9	-62.2	0.9	-9.7	-1.3	0.0		2.5	21.6	0.0	21.6	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	159.7	-55.1	0.6	-22.1	-0.7	0.0		0.0	14.3	0.0	14.3	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	425.0	-63.6	0.9	-12.9	-1.4	0.0		0.0	14.6	0.0	14.6	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	277.6	-59.9	0.8	-13.7	-0.9	0.0		3.7	21.5	0.0	21.5	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	279.0	-59.9	0.8	-13.8	-0.9	0.0		3.7	21.4	0.0	21.4	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	428.5	-63.6	0.9	-12.9	-1.4	0.0		0.0	14.5	0.0	14.5	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	280.8	-60.0	0.8	-13.7	-0.9	0.0		3.7	21.4	0.0	21.4	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	271.7	-59.7	0.8	-13.3	-0.9	0.0		2.7	21.1	0.0	21.1	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	273.0	-59.7	0.8	-13.4	-0.9	0.0		2.7	21.0	0.0	21.0	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	421.5	-63.5	0.9	-12.9	-1.4	0.0		0.0	14.7	0.0	14.7	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	274.5	-59.8	0.8	-13.5	-0.9	0.0		2.7	20.8	0.0	20.8	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	276.0	-59.8	0.8	-13.6	-0.9	0.0		3.3	21.3	0.0	21.3	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	284.3	-60.1	0.8	-13.3	-0.9	0.0		3.1	21.1	0.0	21.1	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	291.5	-60.3	0.8	-12.9	-1.0	0.0		2.5	20.7	0.0	20.7	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	441.9	-63.9	0.9	-12.8	-1.4	0.0		0.0	14.3	0.0	14.3	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	293.2	-60.3	0.8	-12.8	-1.0	0.0		2.5	20.7	0.0	20.7	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	295.1	-60.4	0.8	-12.8	-1.0	0.0		3.5	21.7	0.0	21.7	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	445.6	-64.0	0.9	-12.8	-1.4	0.0		0.0	14.2	0.0	14.2	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	434.9	-63.8	0.9	-12.8	-1.4	0.0		0.0	14.4	0.0	14.4	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	286.1	-60.1	0.8	-13.1	-0.9	0.0		2.5	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	287.8	-60.2	0.8	-13.0	-1.0	0.0		2.5	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	438.3	-63.8	0.9	-12.8	-1.4	0.0		0.0	14.3	0.0	14.3	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	289.8	-60.2	0.8	-12.9	-1.0	0.0		2.5	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	418.2	-63.4	0.9	-12.9	-1.3	0.0		0.0	14.7	0.0	14.7	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	116.8	-52.3	0.4	-21.2	-0.5	0.0		0.0	17.9	0.0	17.9	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	389.1	-62.8	0.9	-9.7	-1.4	0.0		0.0	18.5	0.0	18.5	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	114.8	-52.2	0.4	-21.1	-0.5	0.0		0.0	18.1	0.0	18.1	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	112.7	-52.0	0.3	-20.8	-0.4	0.0		0.0	18.5	0.0	18.5	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	392.5	-62.9	0.9	-13.0	-1.3	0.0		0.0	15.2	0.0	15.2	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	382.5	-62.6	0.9	-9.7	-1.4	0.0		0.0	18.6	0.0	18.6	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	127.0	-53.1	0.4	-21.7	-0.5	0.0		0.0	16.6	0.0	16.6	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	122.0	-52.7	0.4	-21.4	-0.5	0.0		0.0	17.3	0.0	17.3	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	386.0	-62.7	0.9	-9.7	-1.4	0.0		0.0	18.6	0.0	18.6	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	119.5	-52.5	0.4	-21.3	-0.5	0.0		0.0	17.5	0.0	17.5	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	261.0	-59.3	0.8	-11.7	-0.9	0.0		2.5	22.9	0.0	22.9	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	265.0	-59.5	0.8	-12.6	-0.9	0.0		2.6	21.9	0.0	21.9	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	266.1	-59.5	0.8	-12.8	-0.9	0.0		2.6	21.7	0.0	21.7	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	415.1	-63.4	0.9	-12.9	-1.3	0.0		0.0	14.8	0.0	14.8	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	267.6	-59.5	0.8	-12.9	-0.9	0.0		2.6	21.6	0.0	21.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	270.3	-59.6	0.8	-13.2	-0.9	0.0		2.7	21.2	0.0	21.2	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	262.0	-59.4	0.8	-12.0	-0.9	0.0		2.6	22.6	0.0	22.6	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	395.2	-62.9	0.9	-13.0	-1.3	0.0		0.0	15.2	0.0	15.2	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	263.1	-59.4	0.8	-12.2	-0.9	0.0		2.6	22.3	0.0	22.3	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	264.3	-59.4	0.8	-12.4	-0.9	0.0		2.6	22.1	0.0	22.1	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	398.8	-63.0	0.9	-13.0	-1.3	0.0		0.0	15.1	0.0	15.1	
169	Lmax	PLot	-631.5	706.5	87.0	0	470.1	-64.4	0.0	-12.6	-0.5	0.0		0.5	9.9	0.0	9.9	
170	Lmax	PLot	-655.9	687.3	82.0	0	439.0	-63.8	0.0	-16.7	-0.5	0.0		0.0	1.0	0.0	1.0	
171	Lmax	PLot	-747.5	686.1	80.0	0	373.6	-62.4	0.1	-10.0	-0.5	0.0		0.0	7.2	0.0	7.2	
168	Lmax	PLot	-648.0	722.9	83.0	0	468.9	-64.4	0.0	-11.1	-0.5	0.0		0.7	7.6	0.0	7.6	
165	Lmax	PLot	-653.8	757.9	81.6	0	489.6	-64.8	-0.1	-8.8	-0.7	0.0		0.0	7.2	0.0	7.2	
166	Lmax	PLot	-742.2	716.5	84.0	0	400.6	-63.0	0.1	-9.0	-0.6	0.0		0.7	12.2	0.0	12.2	
167	Lmax	PLot	-750.9	694.9	84.0	0	378.2	-62.5	0.1	-9.7	-0.5	0.0		0.0	11.4	0.0	11.4	
176	Lmax	PLot	-862.0	417.6	82.0	0	127.6	-53.1	0.3	0.0	-1.0	0.0		1.3	29.5	0.0	29.5	
177	Lmax	PLot	-934.8	422.4	82.0	0	57.9	-46.2	0.0	0.0	-0.5	0.0		1.9	37.1	0.0	37.1	
178	Lmax	PLot	-947.7	427.3	82.6	0	48.7	-44.7	0.1	0.0	-0.4	0.0		2.1	39.6	0.0	39.6	
175	Lmax	PLot	-784.6	433.8	83.5	0	206.5	-57.3	0.4	-15.6	-0.3	0.0		9.1	19.8	0.0	19.8	
172	Lmax	PLot	-678.5	681.8	71.8	0	418.5	-63.4	0.0	-17.1	-0.5	0.0		0.0	-9.2	0.0	-9.2	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
173	Lmax	PLot	-584.2	722.9	81.0	0	517.0	-65.3	-0.1	-10.0	-0.6	0.0		0.0	5.0	0.0	5.0	
174	Lmax	PLot	-584.9	613.4	83.0	0	456.2	-64.2	0.0	-9.7	-0.6	0.0		0.5	8.9	0.0	8.9	
155	Lmax	PLot	-620.7	560.9	73.0	0	401.2	-63.1	0.1	-11.0	-0.5	0.0		0.2	-1.3	0.0	-1.3	
156	Lmax	PLot	-609.5	569.9	77.0	0	415.0	-63.4	0.0	-9.7	-0.6	0.0		0.3	3.7	0.0	3.7	
157	Lmax	PLot	-639.6	518.1	77.0	0	368.1	-62.3	0.1	-12.3	-0.4	0.0		0.0	2.2	0.0	2.2	
154	Lmax	PLot	-584.4	575.6	73.0	0	440.3	-63.9	0.0	-9.3	-0.6	0.0		0.7	-0.1	0.0	-0.1	
151	Lmax	PLot	-670.5	535.5	82.0	0	345.4	-61.8	0.2	-18.0	-0.5	0.0		0.1	2.1	0.0	2.1	
152	Lmax	PLot	-655.5	544.5	86.5	0	362.7	-62.2	0.1	-14.0	-0.4	0.0		0.1	10.2	0.0	10.2	
153	Lmax	PLot	-632.9	563.9	81.0	0	391.2	-62.8	0.1	-12.1	-0.4	0.0		0.0	5.7	0.0	5.7	
162	Lmax	PLot	-744.8	771.7	82.3	0	444.0	-63.9	0.0	-8.4	-0.7	0.0		0.0	9.2	0.0	9.2	
163	Lmax	PLot	-748.2	758.3	82.6	0	430.9	-63.7	0.0	-8.9	-0.6	0.0		0.0	9.4	0.0	9.4	
164	Lmax	PLot	-643.1	771.6	82.2	0	506.9	-65.1	-0.1	-8.3	-0.8	0.0		0.0	7.9	0.0	7.9	
161	Lmax	PLot	-758.0	417.6	84.0	0	231.0	-58.3	0.3	0.0	-1.5	0.0		1.2	25.7	0.0	25.7	
158	Lmax	PLot	-649.1	509.7	77.0	0	356.5	-62.0	0.1	-13.0	-0.4	0.0		0.0	1.7	0.0	1.7	
159	Lmax	PLot	-652.8	495.1	75.0	0	348.7	-61.8	0.2	-14.4	-0.4	0.0		0.0	-1.5	0.0	-1.5	
160	Lmax	PLot	-667.5	433.5	83.0	0	322.6	-61.2	0.2	-13.0	-0.3	0.0		0.0	8.7	0.0	8.7	
Receiver R5 Fl G Lmax,lim dB(A) Lmax 43.7 dB(A)																		
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	226.8	-58.1	1.3	-7.3	-2.5	0.0		2.5	38.9	0.0	38.9	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	228.8	-58.2	1.3	-7.4	-2.5	0.0		2.5	38.8	0.0	38.8	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	231.2	-58.3	1.3	-7.4	-2.5	0.0		2.5	38.7	0.0	38.7	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	217.9	-57.8	1.3	-7.1	-2.5	0.0		2.5	39.5	0.0	39.5	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	220.1	-57.8	1.3	-7.2	-2.5	0.0		2.5	39.3	0.0	39.3	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	224.6	-58.0	1.3	-7.3	-2.5	0.0		2.5	39.1	0.0	39.1	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	114.7	-52.2	0.9	-10.1	-1.2	0.0		2.5	43.0	0.0	43.0	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	114.8	-52.2	0.9	-10.1	-1.2	0.0		2.6	43.0	0.0	43.0	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	114.7	-52.2	0.9	-10.1	-1.2	0.0		2.6	43.0	0.0	43.0	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	233.4	-58.4	1.3	-7.5	-2.5	0.0		2.5	38.5	0.0	38.5	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	235.9	-58.4	1.3	-7.5	-2.5	0.0		3.5	39.4	0.0	39.4	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	238.3	-58.5	1.3	-7.6	-2.5	0.0		4.7	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	216.0	-57.7	1.3	-7.0	-2.5	0.0		2.5	39.6	0.0	39.6	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	199.4	-57.0	1.3	-6.1	-2.6	0.0		2.5	41.1	0.0	41.1	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	200.8	-57.0	1.3	-6.2	-2.6	0.0		2.5	40.9	0.0	40.9	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	202.4	-57.1	1.3	-6.3	-2.6	0.0		2.5	40.8	0.0	40.8	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	195.5	-56.8	1.2	-5.7	-2.7	0.0		3.0	42.1	0.0	42.1	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	196.6	-56.9	1.3	-5.8	-2.6	0.0		2.8	41.7	0.0	41.7	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	198.0	-56.9	1.3	-5.9	-2.6	0.0		2.6	41.4	0.0	41.4	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	210.2	-57.4	1.3	-6.8	-2.5	0.0		2.5	40.1	0.0	40.1	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	212.3	-57.5	1.3	-6.9	-2.5	0.0		2.5	39.9	0.0	39.9	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	214.1	-57.6	1.3	-6.9	-2.5	0.0		2.5	39.8	0.0	39.8	
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	204.0	-57.2	1.3	-6.4	-2.5	0.0		2.5	40.6	0.0	40.6	
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	206.8	-57.3	1.3	-6.6	-2.5	0.0		2.5	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	208.3	-57.4	1.3	-6.7	-2.5	0.0		2.5	40.2	0.0	40.2	
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	140.2	-53.9	1.0	-9.3	-1.5	0.0		2.9	42.2	0.0	42.2	
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	138.4	-53.8	1.0	-9.4	-1.4	0.0		2.9	42.3	0.0	42.3	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	147.8	-54.4	1.1	-9.1	-1.6	0.0		3.0	42.0	0.0	42.0	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	133.4	-53.5	1.0	-9.5	-1.4	0.0		2.7	42.3	0.0	42.3	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	135.9	-53.7	1.0	-9.4	-1.4	0.0		2.7	42.2	0.0	42.2	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	142.5	-54.1	1.1	-9.2	-1.5	0.0		2.9	42.2	0.0	42.2	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	156.8	-54.9	1.1	-8.8	-1.7	0.0		3.0	41.8	0.0	41.8	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	159.5	-55.0	1.1	-8.7	-1.7	0.0		3.0	41.7	0.0	41.7	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	162.1	-55.2	1.1	-8.6	-1.7	0.0		3.1	41.7	0.0	41.7	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	150.1	-54.5	1.1	-9.0	-1.6	0.0		3.0	42.0	0.0	42.0	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	152.0	-54.6	1.1	-8.9	-1.6	0.0		3.0	41.9	0.0	41.9	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	154.7	-54.8	1.1	-8.9	-1.6	0.0		3.0	41.8	0.0	41.8	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	130.9	-53.3	1.0	-9.6	-1.4	0.0		2.7	42.4	0.0	42.4	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	117.7	-52.4	0.9	-10.0	-1.2	0.0		2.6	42.9	0.0	42.9	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	118.5	-52.5	0.9	-10.0	-1.2	0.0		2.6	42.9	0.0	42.9	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	119.8	-52.6	0.9	-9.9	-1.2	0.0		2.6	42.8	0.0	42.8	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	114.9	-52.2	0.9	-10.1	-1.2	0.0		2.6	43.0	0.0	43.0	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	115.2	-52.2	0.9	-10.1	-1.2	0.0		2.6	43.0	0.0	43.0	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	116.6	-52.3	0.9	-10.0	-1.2	0.0		2.6	42.9	0.0	42.9	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	122.8	-52.8	0.9	-9.8	-1.3	0.0		2.6	42.7	0.0	42.7	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	128.0	-53.1	1.0	-9.7	-1.3	0.0		2.7	42.5	0.0	42.5	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	129.1	-53.2	1.0	-9.6	-1.3	0.0		2.7	42.5	0.0	42.5	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	121.3	-52.7	0.9	-9.9	-1.3	0.0		2.6	42.8	0.0	42.8	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	125.3	-53.0	1.0	-9.8	-1.3	0.0		2.6	42.6	0.0	42.6	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	123.8	-52.8	0.9	-9.8	-1.3	0.0		2.6	42.6	0.0	42.6	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	210.0	-57.4	1.3	-4.6	-3.3	0.0		3.1	42.1	0.0	42.1	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	277.4	-59.9	1.4	-4.6	-3.9	0.0		2.8	38.9	0.0	38.9	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	214.0	-57.6	1.3	-4.6	-3.3	0.0		3.1	41.9	0.0	41.9	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	273.7	-59.7	1.4	-4.6	-3.9	0.0		2.8	39.0	0.0	39.0	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	289.6	-60.2	1.4	-4.6	-4.0	0.0		2.8	38.4	0.0	38.4	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	285.4	-60.1	1.4	-4.6	-4.0	0.0		2.8	38.6	0.0	38.6	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	190.2	-56.6	1.2	-4.7	-3.0	0.0		3.1	43.0	0.0	43.0	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	281.3	-60.0	1.4	-4.6	-3.9	0.0		2.8	38.7	0.0	38.7	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	253.7	-59.1	1.4	-4.6	-3.7	0.0		2.8	39.9	0.0	39.9	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	225.8	-58.1	1.3	-4.6	-3.5	0.0		2.9	41.1	0.0	41.1	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	241.8	-58.7	1.3	-4.6	-3.6	0.0		2.9	40.4	0.0	40.4	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	238.0	-58.5	1.3	-4.6	-3.6	0.0		2.9	40.6	0.0	40.6	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	233.8	-58.4	1.3	-4.6	-3.5	0.0		2.9	40.8	0.0	40.8	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	217.8	-57.8	1.3	-4.6	-3.4	0.0		3.1	41.7	0.0	41.7	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	249.4	-58.9	1.4	-4.6	-3.7	0.0		2.8	40.1	0.0	40.1	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	222.2	-57.9	1.3	-4.6	-3.4	0.0		2.9	41.3	0.0	41.3	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	246.0	-58.8	1.4	-4.6	-3.6	0.0		2.9	40.2	0.0	40.2	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	186.4	-56.4	1.2	-4.8	-2.9	0.0		3.5	43.6	0.0	43.6	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	309.9	-60.8	1.4	-4.6	-4.2	0.0		2.7	37.6	0.0	37.6	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	182.2	-56.2	1.2	-5.0	-2.8	0.0		3.5	43.7	0.0	43.7	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	301.4	-60.6	1.4	-4.6	-4.1	0.0		2.7	37.9	0.0	37.9	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	305.5	-60.7	1.4	-4.6	-4.1	0.0		2.7	37.8	0.0	37.8	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	178.4	-56.0	1.2	-5.2	-2.7	0.0		1.5	41.8	0.0	41.8	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	297.3	-60.5	1.4	-4.6	-4.1	0.0		2.7	38.1	0.0	38.1	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	174.3	-55.8	1.2	-5.6	-2.5	0.0		0.5	40.7	0.0	40.7	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	155.5	-54.8	0.5	-7.0	-0.7	0.0		2.8	32.3	0.0	32.3	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	122.0	-52.7	0.4	-7.8	-0.5	0.0		2.4	33.2	0.0	33.2	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	160.8	-55.1	0.6	-6.9	-0.8	0.0		2.8	32.1	0.0	32.1	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	115.8	-52.3	0.4	-8.0	-0.5	0.0		2.4	33.5	0.0	33.5	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	121.0	-52.6	0.4	-7.8	-0.5	0.0		2.4	33.3	0.0	33.3	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	217.5	-57.7	0.7	-4.4	-1.3	0.0		2.5	31.3	0.0	31.3	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	123.6	-52.8	0.4	-7.8	-0.5	0.0		2.4	33.2	0.0	33.2	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	158.2	-55.0	0.6	-7.0	-0.7	0.0		2.8	32.2	0.0	32.2	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	225.5	-58.1	0.7	-4.4	-1.4	0.0		2.4	30.8	0.0	30.8	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	118.0	-52.4	0.4	-7.9	-0.5	0.0		2.4	33.4	0.0	33.4	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	119.5	-52.5	0.4	-7.9	-0.5	0.0		2.4	33.4	0.0	33.4	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	173.9	-55.8	0.6	-4.9	-1.0	0.0		0.3	30.7	0.0	30.7	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	221.9	-57.9	0.7	-4.4	-1.3	0.0		2.5	31.1	0.0	31.1	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	116.7	-52.3	0.4	-8.0	-0.5	0.0		2.4	33.5	0.0	33.5	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	141.0	-54.0	0.5	-7.3	-0.6	0.0		2.6	32.6	0.0	32.6	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	189.9	-56.6	0.6	-4.4	-1.2	0.0		2.8	32.8	0.0	32.8	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	148.7	-54.4	0.5	-7.2	-0.7	0.0		2.7	32.5	0.0	32.5	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	134.3	-53.6	0.5	-7.5	-0.6	0.0		2.5	32.8	0.0	32.8	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	181.8	-56.2	0.6	-4.6	-1.1	0.0		0.4	30.6	0.0	30.6	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	146.4	-54.3	0.5	-7.2	-0.7	0.0		2.7	32.5	0.0	32.5	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	136.8	-53.7	0.5	-7.4	-0.6	0.0		2.6	32.8	0.0	32.8
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	186.0	-56.4	0.6	-4.5	-1.1	0.0		0.8	30.9	0.0	30.9
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	138.7	-53.8	0.5	-7.4	-0.6	0.0		2.6	32.7	0.0	32.7
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	127.4	-53.1	0.4	-7.7	-0.6	0.0		2.5	33.1	0.0	33.1
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	213.7	-57.6	0.7	-4.4	-1.3	0.0		2.6	31.6	0.0	31.6
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	126.3	-53.0	0.4	-7.7	-0.6	0.0		2.5	33.1	0.0	33.1
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	153.4	-54.7	0.5	-7.1	-0.7	0.0		2.8	32.4	0.0	32.4
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	178.0	-56.0	0.6	-4.7	-1.1	0.0		0.3	30.7	0.0	30.7
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	131.7	-53.4	0.4	-7.6	-0.6	0.0		2.5	32.9	0.0	32.9
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	150.6	-54.6	0.5	-7.1	-0.7	0.0		2.8	32.4	0.0	32.4
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	209.7	-57.4	0.7	-4.4	-1.3	0.0		2.6	31.7	0.0	31.7
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	129.2	-53.2	0.4	-7.6	-0.6	0.0		2.5	33.0	0.0	33.0
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	285.2	-60.1	0.8	-4.4	-1.7	0.0		2.3	28.5	0.0	28.5
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	208.5	-57.4	0.7	-5.6	-1.1	0.0		2.4	30.6	0.0	30.6
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	206.5	-57.3	0.7	-5.6	-1.1	0.0		2.4	30.7	0.0	30.7
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	289.3	-60.2	0.8	-4.4	-1.7	0.0		2.3	28.3	0.0	28.3
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	205.0	-57.2	0.7	-5.5	-1.1	0.0		2.4	30.8	0.0	30.8
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	216.3	-57.7	0.7	-5.8	-1.1	0.0		2.5	30.0	0.0	30.0
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	214.4	-57.6	0.7	-5.8	-1.1	0.0		2.5	30.2	0.0	30.2
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	281.0	-60.0	0.8	-4.4	-1.6	0.0		2.3	28.6	0.0	28.6
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	212.4	-57.5	0.7	-5.7	-1.1	0.0		2.4	30.3	0.0	30.3
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	210.6	-57.5	0.7	-5.7	-1.1	0.0		2.4	30.4	0.0	30.4
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	202.2	-57.1	0.7	-5.4	-1.1	0.0		2.4	31.1	0.0	31.1
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	196.2	-56.8	0.7	-5.1	-1.1	0.0		2.5	31.6	0.0	31.6
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	305.3	-60.7	0.8	-4.4	-1.8	0.0		2.3	27.8	0.0	27.8
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	194.8	-56.8	0.7	-5.0	-1.1	0.0		2.7	32.0	0.0	32.0
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	193.6	-56.7	0.7	-5.0	-1.1	0.0		2.9	32.2	0.0	32.2
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	309.7	-60.8	0.8	-4.4	-1.8	0.0		2.3	27.6	0.0	27.6

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	297.1	-60.4	0.8	-4.4	-1.7	0.0		2.3	28.1	0.0	28.1	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	200.6	-57.0	0.7	-5.3	-1.1	0.0		2.4	31.2	0.0	31.2	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	199.1	-57.0	0.7	-5.2	-1.1	0.0		2.4	31.3	0.0	31.3	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	301.1	-60.6	0.8	-4.4	-1.7	0.0		2.3	27.9	0.0	27.9	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	197.6	-56.9	0.7	-5.2	-1.1	0.0		2.4	31.4	0.0	31.4	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	277.1	-59.8	0.8	-4.4	-1.6	0.0		2.3	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	112.8	-52.0	0.3	-8.1	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	241.5	-58.7	0.7	-4.4	-1.4	0.0		2.5	30.3	0.0	30.3	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	112.9	-52.0	0.3	-8.1	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	112.8	-52.0	0.3	-8.0	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	245.7	-58.8	0.8	-4.4	-1.5	0.0		2.4	30.0	0.0	30.0	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	233.5	-58.4	0.7	-4.4	-1.4	0.0		2.4	30.5	0.0	30.5	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	114.7	-52.2	0.4	-8.0	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	113.2	-52.1	0.3	-8.0	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	237.7	-58.5	0.7	-4.4	-1.4	0.0		2.5	30.4	0.0	30.4	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	112.9	-52.0	0.3	-8.0	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	236.8	-58.5	0.7	-6.2	-1.2	0.0		4.6	31.0	0.0	31.0	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	227.3	-58.1	0.7	-6.0	-1.1	0.0		2.4	29.4	0.0	29.4	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	225.2	-58.0	0.7	-6.0	-1.1	0.0		2.4	29.5	0.0	29.5	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	273.4	-59.7	0.8	-4.4	-1.6	0.0		2.3	28.9	0.0	28.9	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	223.1	-58.0	0.7	-6.0	-1.1	0.0		2.5	29.6	0.0	29.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	218.5	-57.8	0.7	-5.9	-1.1	0.0		2.5	29.9	0.0	29.9	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	234.4	-58.4	0.7	-6.1	-1.1	0.0		3.4	30.0	0.0	30.0	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	249.1	-58.9	0.8	-4.4	-1.5	0.0		2.4	29.9	0.0	29.9	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	231.9	-58.3	0.7	-6.1	-1.1	0.0		3.3	30.0	0.0	30.0	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	229.6	-58.2	0.7	-6.1	-1.1	0.0		2.5	29.3	0.0	29.3	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	253.4	-59.1	0.8	-4.4	-1.5	0.0		2.3	29.7	0.0	29.7	
169	Lmax	PLot	-649.5	706.5	87.0	0	287.6	-60.2	0.3	-8.4	-0.5	0.0		0.1	18.3	0.0	18.3	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
170	Lmax	PLot	-641.9	687.2	82.0	0	288.6	-60.2	0.3	-12.7	-0.3	0.0		0.1	9.1	0.0	9.1	
171	Lmax	PLot	-747.5	682.1	80.0	0	187.7	-56.5	0.4	-5.9	-0.7	0.0		0.6	17.9	0.0	17.9	
168	Lmax	PLot	-663.2	719.8	83.0	0	280.1	-59.9	0.3	-4.4	-1.6	0.0		0.1	17.4	0.0	17.4	
165	Lmax	PLot	-649.5	763.5	81.6	0	312.4	-60.9	0.2	-9.8	-0.4	0.0		0.1	10.9	0.0	10.9	
166	Lmax	PLot	-731.2	716.5	84.0	0	218.2	-57.8	0.3	-4.7	-1.2	0.0		2.5	23.1	0.0	23.1	
167	Lmax	PLot	-720.1	706.9	84.0	0	223.2	-58.0	0.3	-4.6	-1.3	0.0		2.0	22.5	0.0	22.5	
176	Lmax	PLot	-803.2	417.6	82.0	0	219.7	-57.8	0.4	-18.1	-0.3	0.0		2.5	8.6	0.0	8.6	
177	Lmax	PLot	-922.5	418.5	82.0	0	186.2	-56.4	0.4	-18.4	-0.3	0.0		0.0	7.3	0.0	7.3	
178	Lmax	PLot	-948.1	483.6	82.6	0	124.6	-52.9	0.3	-6.8	-0.4	0.0		0.1	23.0	0.0	23.0	
175	Lmax	PLot	-791.3	502.8	83.5	0	163.0	-55.2	0.4	-6.1	-0.6	0.0		1.2	23.1	0.0	23.1	
172	Lmax	PLot	-679.5	681.8	71.8	0	251.1	-59.0	0.3	-13.4	-0.3	0.0		0.1	-0.5	0.0	-0.5	
173	Lmax	PLot	-584.2	722.9	81.0	0	354.6	-62.0	0.1	-6.2	-1.1	0.0		0.3	12.2	0.0	12.2	
174	Lmax	PLot	-584.9	613.4	83.0	0	333.7	-61.5	0.2	-4.4	-1.9	0.0		1.7	17.1	0.0	17.1	
155	Lmax	PLot	-620.7	572.9	73.0	0	299.5	-60.5	0.2	-9.4	-0.4	0.0		0.0	2.9	0.0	2.9	
156	Lmax	PLot	-598.6	575.8	77.0	0	321.3	-61.1	0.2	-7.7	-0.6	0.0		0.9	8.6	0.0	8.6	
157	Lmax	PLot	-636.4	546.4	77.0	0	288.1	-60.2	0.3	-12.4	-0.3	0.0		0.0	4.4	0.0	4.4	
154	Lmax	PLot	-584.4	587.5	73.0	0	334.5	-61.5	0.2	-4.4	-1.9	0.0		0.9	6.4	0.0	6.4	
151	Lmax	PLot	-667.5	559.5	82.0	0	255.0	-59.1	0.3	-18.3	-0.4	0.0		0.0	4.5	0.0	4.5	
152	Lmax	PLot	-658.8	583.9	86.5	0	260.5	-59.3	0.3	-4.4	-1.6	0.0		0.0	21.5	0.0	21.5	
153	Lmax	PLot	-639.7	583.8	81.0	0	279.6	-59.9	0.3	-4.4	-1.6	0.0		0.0	15.3	0.0	15.3	
162	Lmax	PLot	-744.8	771.7	82.3	0	241.0	-58.6	0.3	-4.7	-1.3	0.0		1.0	19.0	0.0	19.0	
163	Lmax	PLot	-748.3	758.7	82.6	0	229.5	-58.2	0.3	-5.3	-1.0	0.0		1.0	19.4	0.0	19.4	
164	Lmax	PLot	-647.1	771.6	82.2	0	318.6	-61.1	0.2	-8.2	-0.5	0.0		0.1	12.7	0.0	12.7	
161	Lmax	PLot	-757.9	424.1	84.0	0	241.6	-58.7	0.3	-12.1	-0.3	0.0		0.7	14.0	0.0	14.0	
158	Lmax	PLot	-645.6	509.5	77.0	0	289.0	-60.2	0.3	-13.4	-0.3	0.0		0.0	3.4	0.0	3.4	
159	Lmax	PLot	-659.2	495.3	75.0	0	281.5	-60.0	0.3	-14.9	-0.3	0.0		0.0	0.1	0.0	0.1	
160	Lmax	PLot	-666.3	493.6	83.0	0	275.6	-59.8	0.3	-18.1	-0.4	0.0		0.0	5.0	0.0	5.0	
Receiver R6 FI G Lmax,lim dB(A) Lmax 53.9 dB(A)																		

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	169.1	-55.6	1.2	-5.2	-2.6	0.0		4.0	44.8	0.0	44.8	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	172.7	-55.7	1.2	-5.1	-2.7	0.0		4.1	44.7	0.0	44.7	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	176.3	-55.9	1.2	-5.1	-2.7	0.0		4.2	44.7	0.0	44.7	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	152.9	-54.7	1.1	-5.5	-2.3	0.0		3.5	45.0	0.0	45.0	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	157.0	-54.9	1.1	-5.4	-2.4	0.0		3.5	44.9	0.0	44.9	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	165.1	-55.3	1.2	-5.2	-2.6	0.0		3.7	44.7	0.0	44.7	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	213.0	-57.6	1.3	-4.6	-3.3	0.0		4.5	43.4	0.0	43.4	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	210.6	-57.5	1.3	-4.6	-3.3	0.0		4.5	43.5	0.0	43.5	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	208.3	-57.4	1.3	-4.6	-3.3	0.0		4.5	43.6	0.0	43.6	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	180.3	-56.1	1.2	-5.0	-2.8	0.0		4.3	44.6	0.0	44.6	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	184.3	-56.3	1.2	-5.0	-2.9	0.0		4.5	44.6	0.0	44.6	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	188.2	-56.5	1.2	-4.9	-2.9	0.0		4.6	44.5	0.0	44.5	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	149.2	-54.5	1.1	-5.6	-2.3	0.0		3.4	45.2	0.0	45.2	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	111.4	-51.9	0.9	-20.3	-0.9	0.0		5.7	36.5	0.0	36.5	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	115.3	-52.2	0.9	-19.6	-0.9	0.0		5.6	36.8	0.0	36.8	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	119.0	-52.5	0.9	-19.0	-0.9	0.0		5.5	37.0	0.0	37.0	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	100.6	-51.0	0.8	-22.5	-1.2	0.0		7.2	36.2	0.0	36.2	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	104.2	-51.3	0.8	-21.7	-1.1	0.0		6.8	36.5	0.0	36.5	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	107.8	-51.6	0.8	-20.9	-1.0	0.0		6.5	36.7	0.0	36.7	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	137.6	-53.8	1.0	-5.9	-2.1	0.0		1.5	43.8	0.0	43.8	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	141.7	-54.0	1.1	-5.8	-2.1	0.0		1.7	43.8	0.0	43.8	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	145.4	-54.2	1.1	-5.7	-2.2	0.0		1.9	43.9	0.0	43.9	
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	122.9	-52.8	0.9	-18.3	-0.9	0.0		5.3	37.3	0.0	37.3	
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	130.0	-53.3	1.0	-16.7	-0.8	0.0		6.1	39.3	0.0	39.3	
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	133.7	-53.5	1.0	-14.6	-0.8	0.0		4.9	40.0	0.0	40.0	
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	165.1	-55.3	1.2	-4.7	-2.8	0.0		3.9	45.2	0.0	45.2	
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	167.1	-55.5	1.2	-4.7	-2.8	0.0		3.9	45.1	0.0	45.1	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	161.0	-55.1	1.1	-4.8	-2.7	0.0		3.9	45.5	0.0	45.5	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	171.3	-55.7	1.2	-4.7	-2.9	0.0		3.9	44.9	0.0	44.9	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	169.0	-55.6	1.2	-4.7	-2.8	0.0		3.9	45.0	0.0	45.0	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	163.8	-55.3	1.1	-4.7	-2.8	0.0		3.9	45.3	0.0	45.3	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	156.2	-54.9	1.1	-4.8	-2.6	0.0		3.9	45.7	0.0	45.7	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	155.6	-54.8	1.1	-4.8	-2.6	0.0		3.9	45.8	0.0	45.8	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	154.8	-54.8	1.1	-4.8	-2.6	0.0		3.5	45.4	0.0	45.4	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	159.5	-55.0	1.1	-4.8	-2.7	0.0		3.9	45.5	0.0	45.5	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	158.4	-55.0	1.1	-4.8	-2.7	0.0		3.9	45.6	0.0	45.6	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	157.4	-54.9	1.1	-4.8	-2.7	0.0		3.9	45.7	0.0	45.7	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	173.7	-55.8	1.2	-4.7	-2.9	0.0		3.9	44.7	0.0	44.7	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	194.9	-56.8	1.2	-4.6	-3.1	0.0		4.5	44.3	0.0	44.3	
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	192.4	-56.7	1.2	-4.6	-3.1	0.0		4.6	44.4	0.0	44.4	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	189.3	-56.5	1.2	-4.6	-3.1	0.0		4.6	44.6	0.0	44.6	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	205.4	-57.2	1.3	-4.6	-3.2	0.0		4.5	43.7	0.0	43.7	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	202.9	-57.1	1.3	-4.6	-3.2	0.0		4.5	43.9	0.0	43.9	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	198.0	-56.9	1.3	-4.6	-3.2	0.0		4.5	44.1	0.0	44.1	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	183.7	-56.3	1.2	-4.6	-3.0	0.0		3.9	44.2	0.0	44.2	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	177.1	-56.0	1.2	-4.7	-2.9	0.0		3.9	44.5	0.0	44.5	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	175.7	-55.9	1.2	-4.7	-2.9	0.0		3.9	44.6	0.0	44.6	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	186.3	-56.4	1.2	-4.6	-3.0	0.0		4.3	44.4	0.0	44.4	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	179.3	-56.1	1.2	-4.6	-3.0	0.0		3.9	44.4	0.0	44.4	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	181.2	-56.2	1.2	-4.6	-3.0	0.0		3.8	44.3	0.0	44.3	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	60.9	-46.7	0.7	-10.0	-0.7	0.0		1.5	47.9	0.0	47.9	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	128.8	-53.2	1.0	-18.6	-0.8	0.0		8.3	39.6	0.0	39.6	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	65.0	-47.2	0.7	-9.9	-0.8	0.0		1.6	47.4	0.0	47.4	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	125.1	-52.9	1.0	-17.3	-0.8	0.0		7.4	40.4	0.0	40.4	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	141.1	-54.0	1.0	-19.8	-1.0	0.0		9.5	38.9	0.0	38.9	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	136.9	-53.7	1.0	-19.7	-1.0	0.0		9.4	39.1	0.0	39.1	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	40.8	-43.2	0.8	-10.3	-0.5	0.0		0.0	49.7	0.0	49.7	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	132.7	-53.5	1.0	-19.4	-0.9	0.0		9.0	39.3	0.0	39.3	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	104.9	-51.4	0.8	-9.5	-1.1	0.0		2.4	44.2	0.0	44.2	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	76.9	-48.7	0.7	-9.8	-0.9	0.0		1.9	46.2	0.0	46.2	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	93.0	-50.4	0.7	-9.6	-1.0	0.0		2.1	44.8	0.0	44.8	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	89.1	-50.0	0.7	-9.6	-1.0	0.0		2.1	45.1	0.0	45.1	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	84.9	-49.6	0.7	-9.7	-0.9	0.0		2.0	45.5	0.0	45.5	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	68.8	-47.7	0.7	-9.9	-0.8	0.0		1.7	47.0	0.0	47.0	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	100.6	-51.0	0.8	-9.6	-1.1	0.0		2.2	44.3	0.0	44.3	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	73.2	-48.3	0.7	-9.8	-0.8	0.0		1.8	46.5	0.0	46.5	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	97.2	-50.7	0.7	-9.6	-1.1	0.0		2.2	44.5	0.0	44.5	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	37.0	-42.4	0.8	-10.4	-0.5	0.0		0.0	50.6	0.0	50.6	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	161.6	-55.2	1.1	-19.8	-1.1	0.0		9.9	37.9	0.0	37.9	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	32.7	-41.3	0.8	-10.6	-0.4	0.0		0.0	51.6	0.0	51.6	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	153.0	-54.7	1.1	-19.6	-1.0	0.0		9.5	38.3	0.0	38.3	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	157.1	-54.9	1.1	-19.8	-1.1	0.0		9.8	38.1	0.0	38.1	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	29.0	-40.2	0.9	-10.7	-0.4	0.0		0.0	52.6	0.0	52.6	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	148.9	-54.4	1.1	-19.4	-1.0	0.0		9.3	38.5	0.0	38.5	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	24.8	-38.9	0.9	-10.9	-0.3	0.0		0.0	53.9	0.0	53.9	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	154.3	-54.8	0.5	-4.5	-1.0	0.0		2.9	34.8	0.0	34.8	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	179.5	-56.1	0.6	-4.4	-1.1	0.0		3.4	33.9	0.0	33.9	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	152.8	-54.7	0.5	-4.5	-1.0	0.0		2.8	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	193.3	-56.7	0.7	-4.4	-1.2	0.0		4.1	34.0	0.0	34.0	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	182.1	-56.2	0.6	-4.4	-1.1	0.0		3.4	33.8	0.0	33.8	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	68.8	-47.7	0.3	-7.9	-0.3	0.0		1.6	37.4	0.0	37.4	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	177.6	-56.0	0.6	-4.4	-1.1	0.0		3.4	34.0	0.0	34.0	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	153.7	-54.7	0.5	-4.5	-1.0	0.0		2.9	34.8	0.0	34.8	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	76.9	-48.7	0.2	-7.8	-0.3	0.0		1.7	36.6	0.0	36.6	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	187.7	-56.5	0.6	-4.4	-1.2	0.0		4.1	34.3	0.0	34.3	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	184.7	-56.3	0.6	-4.4	-1.1	0.0		3.8	34.1	0.0	34.1	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	25.0	-39.0	0.6	-8.8	-0.1	0.0		0.0	44.3	0.0	44.3	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	73.3	-48.3	0.2	-7.8	-0.3	0.0		1.7	36.9	0.0	36.9	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	190.8	-56.6	0.7	-4.4	-1.2	0.0		4.1	34.1	0.0	34.1	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	161.9	-55.2	0.6	-4.4	-1.0	0.0		3.2	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	41.0	-43.2	0.4	-8.3	-0.2	0.0		0.0	40.2	0.0	40.2	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	157.6	-54.9	0.6	-4.5	-1.0	0.0		3.2	34.9	0.0	34.9	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	167.2	-55.5	0.6	-4.4	-1.0	0.0		3.4	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	32.9	-41.3	0.5	-8.5	-0.1	0.0		0.0	42.0	0.0	42.0	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	159.2	-55.0	0.6	-4.4	-1.0	0.0		3.2	34.8	0.0	34.8	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	165.3	-55.4	0.6	-4.4	-1.0	0.0		3.3	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	37.1	-42.4	0.5	-8.4	-0.2	0.0		0.0	41.0	0.0	41.0	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	163.2	-55.2	0.6	-4.4	-1.0	0.0		3.2	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	174.0	-55.8	0.6	-4.4	-1.1	0.0		3.4	34.2	0.0	34.2	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	65.0	-47.3	0.3	-7.9	-0.3	0.0		1.6	37.8	0.0	37.8	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	175.3	-55.9	0.6	-4.4	-1.1	0.0		3.4	34.2	0.0	34.2	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	155.5	-54.8	0.5	-4.5	-1.0	0.0		2.9	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	29.2	-40.3	0.6	-8.6	-0.1	0.0		0.0	43.0	0.0	43.0	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	169.5	-55.6	0.6	-4.4	-1.1	0.0		3.4	34.5	0.0	34.5	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	156.5	-54.9	0.6	-4.5	-1.0	0.0		2.9	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	61.0	-46.7	0.3	-8.0	-0.3	0.0		1.5	38.3	0.0	38.3	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	172.0	-55.7	0.6	-4.4	-1.1	0.0		3.4	34.4	0.0	34.4	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	136.9	-53.7	0.5	-7.4	-0.6	0.0		2.0	32.2	0.0	32.2	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	137.1	-53.7	0.5	-5.0	-0.8	0.0		1.3	33.8	0.0	33.8	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	133.1	-53.5	0.5	-5.0	-0.8	0.0		1.2	33.9	0.0	33.9	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	141.1	-54.0	0.5	-7.4	-0.6	0.0		2.0	32.0	0.0	32.0	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	129.4	-53.2	0.4	-5.1	-0.7	0.0		1.1	34.0	0.0	34.0	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	152.4	-54.7	0.5	-4.8	-0.9	0.0		3.3	35.0	0.0	35.0	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	148.7	-54.4	0.5	-4.8	-0.9	0.0		1.9	33.8	0.0	33.8	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	132.7	-53.5	0.5	-7.4	-0.6	0.0		2.0	32.4	0.0	32.4	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	144.9	-54.2	0.5	-4.9	-0.9	0.0		1.5	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	141.2	-54.0	0.5	-4.9	-0.8	0.0		1.4	33.7	0.0	33.7	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	122.4	-52.7	0.4	-14.4	-0.3	0.0		3.6	28.0	0.0	28.0	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	107.1	-51.6	0.3	-17.6	-0.3	0.0		4.4	26.7	0.0	26.7	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	157.1	-54.9	0.6	-7.3	-0.7	0.0		2.1	31.2	0.0	31.2	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	103.5	-51.3	0.3	-18.5	-0.3	0.0		3.5	25.2	0.0	25.2	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	99.9	-51.0	0.2	-19.6	-0.3	0.0		3.5	24.3	0.0	24.3	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	161.6	-55.2	0.6	-7.3	-0.7	0.0		2.1	31.0	0.0	31.0	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	148.9	-54.4	0.5	-7.3	-0.7	0.0		2.1	31.6	0.0	31.6	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	118.4	-52.5	0.4	-15.3	-0.3	0.0		3.8	27.6	0.0	27.6	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	114.7	-52.2	0.4	-16.0	-0.3	0.0		4.0	27.4	0.0	27.4	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	153.0	-54.7	0.5	-7.3	-0.7	0.0		2.1	31.4	0.0	31.4	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	110.7	-51.9	0.3	-16.8	-0.3	0.0		3.9	26.7	0.0	26.7	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	128.8	-53.2	0.4	-7.4	-0.6	0.0		2.1	32.8	0.0	32.8	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	206.9	-57.3	0.7	-4.4	-1.3	0.0		4.1	33.3	0.0	33.3	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	93.0	-50.4	0.2	-7.6	-0.4	0.0		1.9	35.2	0.0	35.2	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	209.1	-57.4	0.7	-4.4	-1.3	0.0		4.1	33.3	0.0	33.3	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	211.6	-57.5	0.7	-4.4	-1.3	0.0		4.1	33.1	0.0	33.1	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	97.2	-50.7	0.2	-7.6	-0.4	0.0		2.0	34.9	0.0	34.9	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	84.9	-49.6	0.2	-7.7	-0.4	0.0		1.8	35.8	0.0	35.8	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	196.5	-56.9	0.7	-4.4	-1.2	0.0		4.1	33.8	0.0	33.8	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	201.4	-57.1	0.7	-4.4	-1.2	0.0		4.1	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	89.1	-50.0	0.2	-7.7	-0.4	0.0		1.9	35.5	0.0	35.5	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	203.9	-57.2	0.7	-4.4	-1.3	0.0		4.1	33.5	0.0	33.5	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	187.9	-56.5	0.6	-4.5	-1.1	0.0		4.4	34.5	0.0	34.5	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	172.3	-55.7	0.6	-4.6	-1.0	0.0		3.9	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	168.7	-55.5	0.6	-4.6	-1.0	0.0		3.8	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	125.1	-52.9	0.4	-7.5	-0.6	0.0		2.2	33.2	0.0	33.2	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	164.7	-55.3	0.6	-4.7	-1.0	0.0		3.6	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	156.5	-54.9	0.6	-4.7	-0.9	0.0		3.3	34.8	0.0	34.8	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	184.0	-56.3	0.6	-4.5	-1.1	0.0		4.3	34.5	0.0	34.5	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	100.6	-51.0	0.3	-7.6	-0.5	0.0		2.0	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	179.9	-56.1	0.6	-4.5	-1.1	0.0		4.2	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	175.9	-55.9	0.6	-4.6	-1.1	0.0		4.0	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	105.0	-51.4	0.3	-7.6	-0.5	0.0		2.2	34.5	0.0	34.5	
169	Lmax	PLot	-663.0	695.2	87.0	0	121.9	-52.7	0.3	-14.5	-0.2	0.0		0.5	20.4	0.0	20.4	
170	Lmax	PLot	-655.5	682.5	82.0	0	123.8	-52.8	0.3	-16.8	-0.2	0.0		0.7	13.2	0.0	13.2	
171	Lmax	PLot	-740.2	687.2	80.0	0	56.3	-46.0	0.0	-16.3	-0.1	0.0		2.9	20.5	0.0	20.5	
168	Lmax	PLot	-663.2	716.8	83.0	0	132.8	-53.5	0.3	-13.4	-0.2	0.0		0.2	16.5	0.0	16.5	
165	Lmax	PLot	-653.8	757.9	81.6	0	166.5	-55.4	0.4	-11.9	-0.2	0.0		0.2	14.7	0.0	14.7	
166	Lmax	PLot	-749.2	716.5	84.0	0	79.1	-49.0	0.2	-5.7	-0.3	0.0		0.9	30.1	0.0	30.1	
167	Lmax	PLot	-750.9	694.9	84.0	0	58.1	-46.3	0.0	-6.1	-0.2	0.0		0.0	31.5	0.0	31.5	
176	Lmax	PLot	-808.5	418.5	82.0	0	225.2	-58.0	0.3	-17.6	-0.3	0.0		0.2	6.5	0.0	6.5	
177	Lmax	PLot	-888.3	417.1	82.0	0	252.1	-59.0	0.3	-17.2	-0.3	0.0		0.1	5.9	0.0	5.9	
178	Lmax	PLot	-952.1	483.6	82.6	0	239.0	-58.6	0.3	-4.4	-1.4	0.0		1.1	19.6	0.0	19.6	
175	Lmax	PLot	-791.3	476.8	83.5	0	165.1	-55.3	0.4	-4.7	-1.0	0.0		2.5	25.4	0.0	25.4	
172	Lmax	PLot	-682.5	681.8	71.8	0	98.5	-50.9	0.3	-17.0	-0.2	0.0		0.6	4.7	0.0	4.7	
173	Lmax	PLot	-584.3	726.1	81.0	0	206.2	-57.3	0.4	-13.2	-0.2	0.0		0.6	11.3	0.0	11.3	
174	Lmax	PLot	-584.9	633.4	83.0	0	187.3	-56.4	0.4	-6.4	-0.6	0.0		0.6	20.6	0.0	20.6	
155	Lmax	PLot	-620.7	572.9	73.0	0	165.8	-55.4	0.4	-6.3	-0.5	0.0		0.2	11.4	0.0	11.4	
156	Lmax	PLot	-613.5	575.8	77.0	0	171.3	-55.7	0.4	-6.3	-0.6	0.0		0.5	15.3	0.0	15.3	
157	Lmax	PLot	-639.4	546.4	77.0	0	162.7	-55.2	0.4	-12.9	-0.2	0.0		0.9	9.9	0.0	9.9	
154	Lmax	PLot	-584.4	583.5	73.0	0	196.1	-56.8	0.4	-6.3	-0.6	0.0		0.7	10.3	0.0	10.3	

Wildomar 29 - Noise
Mean propagation Lmax - Situation 2 - 8' CMU - SP

Source	Time slice	Source type	Xmax m	Ymax m	Lw dB(A)	Ko dB	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	ADI dB	Amisc dB	dLrefl dB(A)	Ls dB(A)	Cmet dB	Lr dB(A)	
151	Lmax	PLot	-666.4	572.0	82.0	0	126.0	-53.0	0.3	-18.5	-0.2	0.0		3.6	14.2	0.0	14.2	
152	Lmax	PLot	-658.8	583.9	86.5	0	126.7	-53.0	0.3	-6.4	-0.4	0.0		0.3	27.4	0.0	27.4	
153	Lmax	PLot	-639.6	583.9	81.0	0	144.1	-54.2	0.4	-6.4	-0.5	0.0		0.4	20.7	0.0	20.7	
162	Lmax	PLot	-744.8	771.7	82.3	0	133.8	-53.5	0.3	-12.3	-0.1	0.0		0.0	16.7	0.0	16.7	
163	Lmax	PLot	-748.3	762.7	82.6	0	124.3	-52.9	0.3	-14.3	-0.1	0.0		0.0	15.6	0.0	15.6	
164	Lmax	PLot	-640.1	771.6	82.2	0	185.8	-56.4	0.4	-11.6	-0.2	0.0		0.0	14.4	0.0	14.4	
161	Lmax	PLot	-747.9	424.1	84.0	0	217.9	-57.8	0.4	-4.5	-1.3	0.0		0.7	21.5	0.0	21.5	
158	Lmax	PLot	-649.1	515.7	77.0	0	175.4	-55.9	0.4	-13.3	-0.2	0.0		0.1	8.1	0.0	8.1	
159	Lmax	PLot	-652.4	507.3	75.0	0	179.2	-56.1	0.4	-14.2	-0.2	0.0		0.1	5.0	0.0	5.0	
160	Lmax	PLot	-671.9	487.6	83.0	0	183.0	-56.2	0.4	-16.9	-0.3	0.0		0.0	10.0	0.0	10.0	

Appendix D:

Construction Modeling Output

Activity	L_{eq} at 810 feet dBA	L_{Max} at 810 feet dBA
Grading	57	58
Building Construction	55	56
Paving	55	58

Equipment Summary	Reference (dBA) 50 ft Lmax
Rock Drills	96
Jack Hammers	82
Pneumatic Tools	85
Pavers	80
Dozers	85
Scrappers	87
Haul Trucks	88
Cranes	82
Portable Generators	80
Rollers	80
Tractors	80
Front-End Loaders	86
Hydraulic Excavators	86
Graders	86
Air Compressors	86
Trucks	86

L_{eq} at 660 feet dBA **L_{Max} at 660 feet dBA**

Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements

No.	Equipment Description	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor[1]	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA) Lmax	Calculated (dBA) Leq	Energy
1	Grader	86	1	40	810	0.5	0	55.8	51.8	150755.253
2	Dozer	85	1	40	810	0.5	0	54.8	50.8	119749.154
3	Excavator	86	1	40	810	0.5	0	55.8	51.8	150755.253
4	Tractor/Backhoe	80	3	40	810	0.5	0	54.5	50.6	113604.023
							Lmax*	**58**	**Leq**	**57**
							Lw	**90**	**Lw**	**89**

Source: MD Acoustics, January 2022.

1- Percentage of time that a piece of equipment is operating at full power.

dBA – A-weighted Decibels

Lmax- Maximum Level

Leq- Equivalent Level

Feet	Meters	Ground Effect	No Shielding Leq dBA	1 dBA Shielding Leq dBA	2 dBA Shielding Leq dBA	3 dBA Shielding Leq dBA	4 dBA Shielding Leq dBA	5 dBA Shielding Leq dBA	6 dBA Shielding Leq dBA	7 dBA Shielding Leq dBA	8 dBA Shielding Leq dBA	9 dBA Shielding Leq dBA	10 dBA Shielding Leq dBA	11 dBA Shielding LeqdBA	12 dBA Shielding Leq dBA	13 dBA Shielding Leq dBA	14 dBA Shielding Leq dBA	15 dBA Shielding Leq dBA
50	**15.2**	**0.5**	**57**	**56**	**55**	**54**	**53**	**52**	**51**	**50**	**49**	**48**	**47**	**46**	**45**	**44**	**43**	**42**
60	18.3	0.5	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40
70	21.3	0.5	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39
80	24.4	0.5	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37
90	27.4	0.5	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36
100	30.5	0.5	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
110	33.5	0.5	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34
120	36.6	0.5	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33
130	39.6	0.5	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
140	42.7	0.5	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
150	45.7	0.5	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
160	48.8	0.5	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
170	51.8	0.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
180	54.9	0.5	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
190	57.9	0.5	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
200	61.0	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
210	64.0	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
220	67.1	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
230	70.1	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
240	73.1	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
250	76.2	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
260	79.2	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
270	82.3	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
280	85.3	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
290	88.4	0.5	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
300	91.4	0.5	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
310	94.5	0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
320	97.5	0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
330	100.6	0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
340	103.6	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
350	106.7	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
360	109.7	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
370	112.8	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

L_{eq} at 660 feet dBA L_{Max} at 660 feet dBA

Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements										
No.	Equipment Description	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor[1]	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA) Lmax	Calculated (dBA) Leq	Energy
1	Cranes	82	1	40	810	0.5	0	51.8	47.8	60016.7474
2	Forklift/Tractor	80	3	40	810	0.5	0	54.5	50.6	113604.023
3	Generator	80	1	40	810	0.5	0	49.8	45.8	37868.0075
4	Tractor/Backhoe	80	3	40	810	0.5	0	54.5	50.6	113604.023
							Lmax*	**56**	**Leq**	**55**
							Lw	**88**	**Lw**	**87**

Source: MD Acoustics, January 2022.

1- Percentage of time that a piece of equipment is operating at full power.

dBA – A-weighted Decibels

Lmax- Maximum Level

Leq- Equivalent Level

Feet	Meters	Ground Effect	No Shielding Leq dBA	1 dBA Shielding Leq dBA	2 dBA Shielding Leq dBA	3 dBA Shielding Leq dBA	4 dBA Shielding Leq dBA	5 dBA Shielding Leq dBA	6 dBA Shielding Leq dBA	7 dBA Shielding Leq dBA	8 dBA Shielding Leq dBA	9 dBA Shielding Leq dBA	10 dBA Shielding Leq dBA	11 dBA Shielding LeqdBA	12 dBA Shielding Leq dBA	13 dBA Shielding Leq dBA	14 dBA Shielding Leq dBA	15 dBA Shielding Leq dBA
50	**15.2**	**0.5**	**55**	**54**	**53**	**52**	**51**	**50**	**49**	**48**	**47**	**46**	**45**	**44**	**43**	**42**	**41**	**40**
60	18.3	0.5	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38
70	21.3	0.5	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36
80	24.4	0.5	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
90	27.4	0.5	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34
100	30.5	0.5	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33
110	33.5	0.5	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
120	36.6	0.5	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
130	39.6	0.5	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
140	42.7	0.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
150	45.7	0.5	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
160	48.8	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
170	51.8	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
180	54.9	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
190	57.9	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
200	61.0	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
210	64.0	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
220	67.1	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
230	70.1	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
240	73.1	0.5	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
250	76.2	0.5	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
260	79.2	0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
270	82.3	0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
280	85.3	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
290	88.4	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
300	91.4	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
310	94.5	0.5	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
320	97.5	0.5	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
330	100.6	0.5	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
340	103.6	0.5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19
350	106.7	0.5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19
360	109.7	0.5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19
370	112.8	0.5	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18

L_{eq} at 660 feet dBA L_{Max} at 660 feet dBA

		Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
No.	Equipment Description	Reference (dBA) 50 ft Lmax	Quantity	Usage Factor[1]	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA) Lmax	Calculated (dBA) Leq	Energy
1	Pavers	86	1	40	810	0.5	0	55.8	51.8	150755.253
2	Rollers	80	2	40	810	0.5	0	52.8	48.8	75736.0151
3	Paving Equipment	80	2	40	810	0.5	0	52.8	48.8	75736.0151
							Lmax*	**58**	**Leq**	**55**
							Lw	**89**	**Lw**	**86**

Source: MD Acoustics, January 2022.

1- Percentage of time that a piece of equipment is operating at full power.

dBA – A-weighted Decibels

Lmax- Maximum Level

Leq- Equivalent Level

Feet	Meters	Ground Effect	No Shielding Leq dBA	1 dBA Shielding Leq dBA	2 dBA Shielding Leq dBA	3 dBA Shielding Leq dBA	4 dBA Shielding Leq dBA	5 dBA Shielding Leq dBA	6 dBA Shielding Leq dBA	7 dBA Shielding Leq dBA	8 dBA Shielding Leq dBA	9 dBA Shielding Leq dBA	10 dBA Shielding Leq dBA	11 dBA Shielding LeqdBA	12 dBA Shielding Leq dBA	13 dBA Shielding Leq dBA	14 dBA Shielding Leq dBA	15 dBA Shielding Leq dBA
50	**15.2**	**0.5**	**55**	**54**	**53**	**52**	**51**	**50**	**49**	**48**	**47**	**46**	**45**	**44**	**43**	**42**	**41**	**40**
60	18.3	0.5	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38
70	21.3	0.5	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36
80	24.4	0.5	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
90	27.4	0.5	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33
100	30.5	0.5	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
110	33.5	0.5	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
120	36.6	0.5	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
130	39.6	0.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
140	42.7	0.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
150	45.7	0.5	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
160	48.8	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
170	51.8	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
180	54.9	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
190	57.9	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
200	61.0	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
210	64.0	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
220	67.1	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
230	70.1	0.5	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
240	73.1	0.5	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
250	76.2	0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
260	79.2	0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
270	82.3	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
280	85.3	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
290	88.4	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
300	91.4	0.5	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
310	94.5	0.5	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
320	97.5	0.5	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
330	100.6	0.5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19
340	103.6	0.5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19
350	106.7	0.5	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19
360	109.7	0.5	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18
370	112.8	0.5	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18

Appendix 4

Wildomar Commerce Center Trip Generation Analysis
City of Wildomar

January 18, 2023

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. Bryan Bentrott
SUMMIT DEVELOPMENT CORPORATION
190 Newport Center Drive, Suite 220
Newport Beach, CA 92660

SUBJECT: Wildomar Commerce Center Trip Generation Analysis, City of Wildomar

Dear Mr. Bentrott,

*TJW Engineering, Inc. (*TJW*)* is pleased to submit this Trip Generation Analysis for Wildomar Commerce Center project located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The purpose of this memorandum is to evaluate the Project's trip generation, compare it to the previously approved Tentative Parcel Map 36492 (July 2013), and determine if further traffic analysis is required.

Project Description

The Project is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The approved Tentative Parcel Map (TPM) 36492 proposed business, office, and retail land uses for a total of 391,140 square feet. Since the approval of the project, modifications have been made to the proposed project. The project is now comprised of retail and industrial uses for a total of 294,080 square feet.

Access will be provided along all adjacent frontage streets including Clinton Keith, Elizabeth Lane, Bunny Trail, and Yamas Drive. The attached site plan illustrates truck access to and from these local streets and on-site turning and circulation.

Site Plan and Trip Generation Comparison

The TPM 36492 proposed site plan (attached for reference) from the Traffic Impact Analysis Report (July 2013) consisted of the following land uses:

- Total area – 391,140 Square Feet (SF)
  - Business Park – 294,900 SF
  - General Office Building – 42,420 SF
  - Medical Dental Office Building – 31,420 SF
  - Shopping Center – 19,400 SF
  - Fast-Food Restaurant with Drive-Through – 3,000 SF

The revised site plan (attached for reference) includes the following land uses:

- Total area – 294,080 SF
  - Retail Building – 32,260 SF
  - Industrial Building – 261,820 SF

To provide consistency, the trip generation for the previously proposed site plan and the revised site plan was determined using the latest edition of the Institute of Transportation Engineers Trip Generation Manual (11th Edition). The attached table provides a summary of the proposed project trips for both the previously proposed land uses and the revised site plan.

It should be noted, the site plan's intended use is shifting from office development to industrial development. The trip patterns and distributions would differ in which industrial development generally provides more heavy truck usage than passenger vehicle usage associated with office developments. As a result, the trip distribution would more heavily utilize truck routes and freeways than local and collector streets. Of particular note, the revised site plan is anticipated to result in heavier trip distribution to and from Highway 15 to the west of the project and Highway 215 to the east of the project and fewer trips to local collector streets.

Summary

The peak hour trip generation decreases by 350 trips in the AM peak hour, decreases by 287 trips in the PM peak hour, and decreases by 3,628 daily trips. As the proposed site plan would result in fewer trips than the previously approved site plan, the revised site plan would not require additional traffic analysis.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

Thomas Wheat, PE, TE
President

Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*





David Chew, PTP
Transportation Planner

Previously Proposed Site Plan (2013)

Proposed Land Use[1]	Qty	Unit[2]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour					Pass-By % Reduction		
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume					
							In	Out	Total			In	Out	Total	AM	PM	Daily
Business Park (770)	294.90	TSF	12.44	3,669	1.35	85:15	339	60	399	1.22	26:74	94	266	360			
General Office Building (710)	42.42	TSF	10.84	460	1.52	88:12	57	8	65	1.44	17:83	11	51	62			
Medical Dental Office Building (720)	31.42	TSF	36.00	1,131	3.10	79:21	77	21	98	3.93	30:70	37	87	124			
Shopping Center (822)	19.40	TSF	54.45	1,056	2.36	60:40	28	18	46	6.59	50:50	64	64	128			
Fast-Food with Drive-Through (934)	3.00	TSF	467.48	1,402	44.61	51:49	68	66	134	33.03	52:48	52	48	100	50%	55%	50%
Sub Total				7,718			570	172	742			257	517	774			
Pass-By Trips				-701			-34	-33	-67			-29	-26	-55			
Net Total				**7,017**			**536**	**139**	**675**			**229**	**490**	**719**			

1: Rates from ITE Trip Generation (11th Edition, 2021)

2: TSF = Thousand Square Feet

Revised Site Plan (2023)

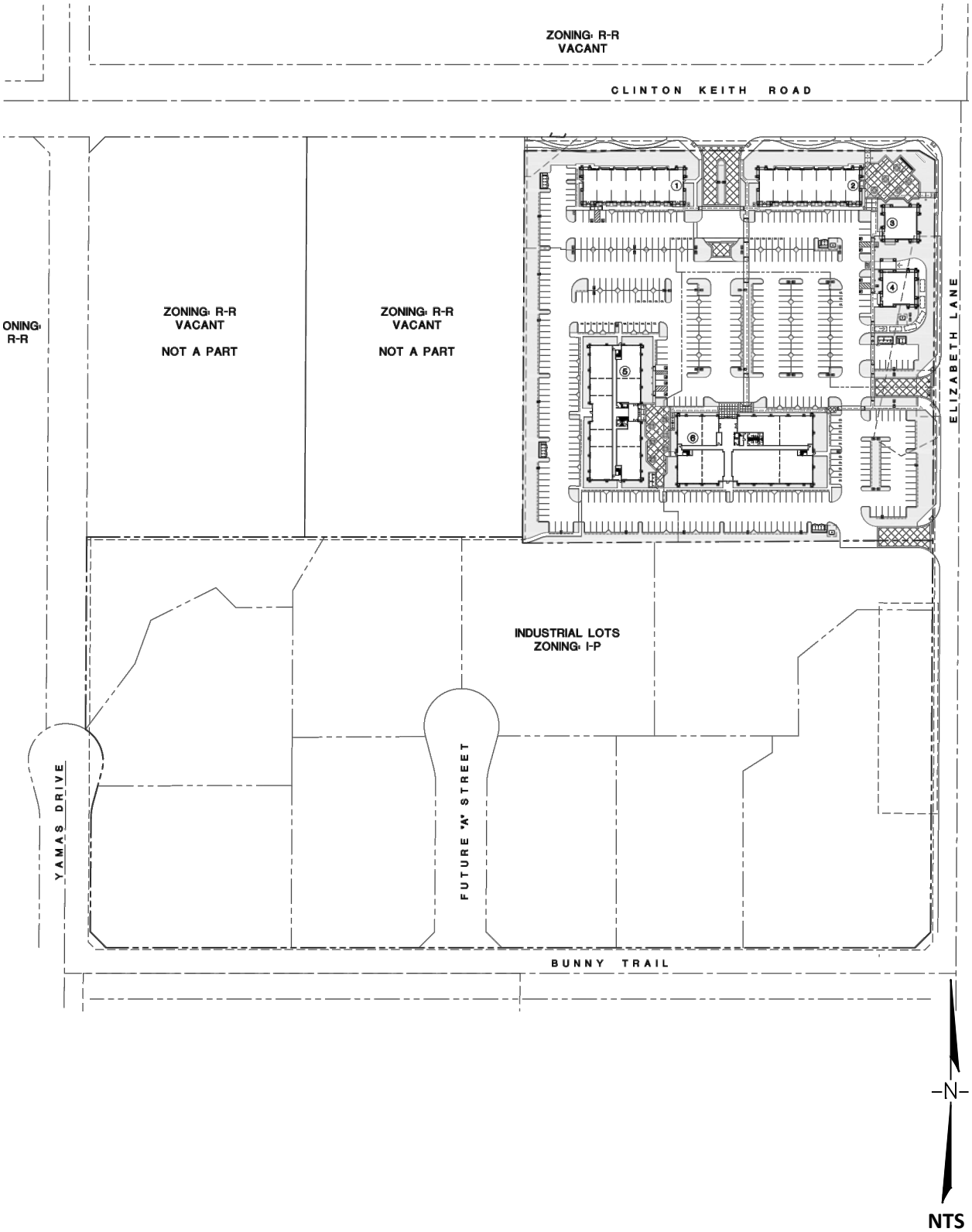
Proposed Land Use[1]	Qty	Unit[2,3]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour					Pass-By % Reduction		
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume					
							In	Out	Total			In	Out	Total	AM	PM	Daily
Shopping Center (822)	32.26	TSF	54.45	1,757	2.36	60:40	46	31	77	6.59	50:50	106	106	212			
General Industrial (110)	261.82	TSF	4.87	1,275	0.74	88:12	171	23	194	0.65	14:86	24	147	171			
Passenger Vehicles (78%)[3]	1.000	PCE[3]		995			133	18	151			19	115	134			
2-Axle Trucks (8%)[3]	1.500	PCE[3]		153			20	3	23			3	18	21			
3-Axle Trucks (4%)[3]	2.000	PCE[3]		102			14	2	16			2	12	14			
4-Axle Trucks (10%)[3]	3.000	PCE[3]		383			51	7	58			7	44	51			
PCE Sub Total				3,389			265	60	325			137	295	432			
Pass-By Trips				0			0	0	0			0	0	0			
PCE Net Total				**3,389**			**265**	**60**	**325**			**137**	**295**	**432**			

1: Rates from ITE Trip Generation (11th Edition, 2021)

2: TSF = Thousand Square Feet

3: PCE=Passenger Car Equivalent; rates based on Fontana Truck Study 2003 for Industrial land use and County of Riverside TIA Guidelines 2020

Figure 2-B – Project Site Plan



CAUTION: IF THIS SHEET IS NOT 30"X42", IT IS A REDUCED PRINT

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

north

1" = 60'
0 60 120 180

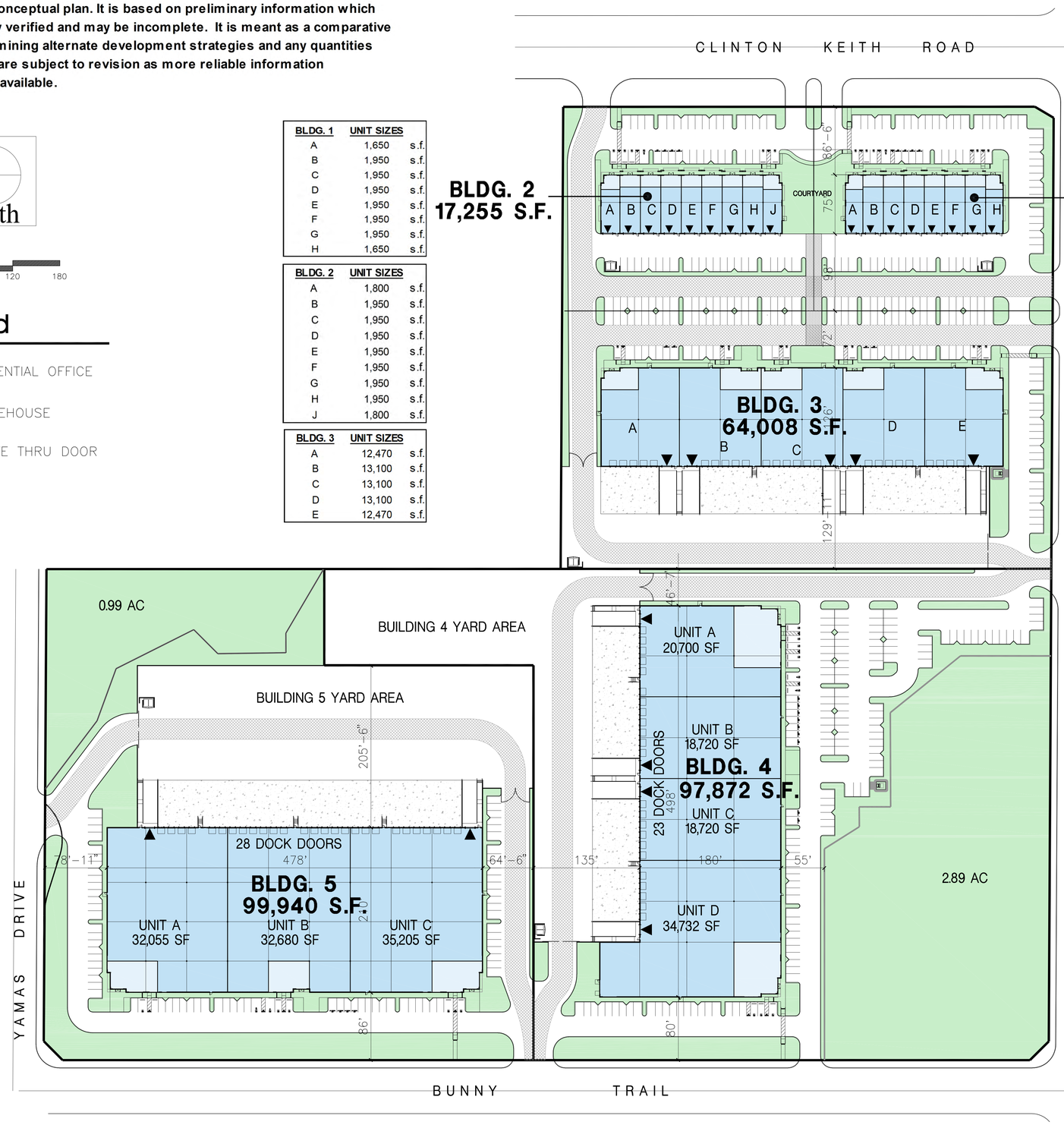
Legend

- POTENTIAL OFFICE
- WAREHOUSE
- ▼ DRIVE THRU DOOR

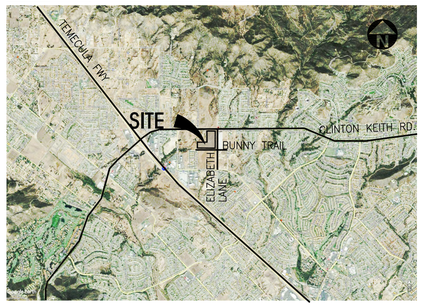
BLDG. 1	UNIT SIZES	
A	1,650	s.f.
B	1,950	s.f.
C	1,950	s.f.
D	1,950	s.f.
E	1,950	s.f.
F	1,950	s.f.
G	1,950	s.f.
H	1,650	s.f.

BLDG. 2	UNIT SIZES	
A	1,800	s.f.
B	1,950	s.f.
C	1,950	s.f.
D	1,950	s.f.
E	1,950	s.f.
F	1,950	s.f.
G	1,950	s.f.
H	1,950	s.f.
J	1,800	s.f.

BLDG. 3	UNIT SIZES	
A	12,470	s.f.
B	13,100	s.f.
C	13,100	s.f.
D	13,100	s.f.
E	12,470	s.f.



Aerial Map



Tabulation

	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	TOTAL	
SITE AREA							
In s.f.	79,025	82,490	203,021	386,612	314,776	1,065,924	s.f.
In acres	1.81	1.89	4.66	8.88	7.23	24.47	ac
BUILDING AREA							
Office	3,000	3,000	5,000	5,000	5,000	21,000	s.f.
Office - Mezzanine	0	0	0	5,000	0	5,000	s.f.
Warehouse	12,005	14,255	59,008	87,872	94,940	268,080	s.f.
TOTAL	15,005	17,255	64,008	97,872	99,940	294,080	s.f.
COVERAGE	19.0%	20.9%	31.5%	25.3%	31.7%	27.6%	
AUTO PARKING REQUIRED							
Office: 1/200 s.f.	15	15	25	50	25	130	stalls
Whse: 1/2,000 s.f.	6	7	30	44	47	134	stalls
TOTAL	21	22	55	94	72	264	stalls
AUTO PARKING PROVIDED							
Standard (9' x 18')	81	88	97	144	76	486	stalls

ZONING ORDINANCE FOR CITY
Zoning Designation - Industrial Park (IP)

MAXIMUM BUILDING HEIGHT ALLOWED
Height - 35', exceed 35' shall setback 2' for each foot. Max. 50'

MAXIMUM FLOOR AREA RATIO
FAR - to be verify

LANDSCAPE REQUIREMENT
Percentage - 15%

LANDSCAPE PROVIDED						
Percentage	23.1%	20.5%	9.7%	41.6%	26.8%	28.2%
In s.f.	18,293	16,927	19,745	160,800	84,463	300,228 s.f.

SETBACKS

Building	Landscape
Front / Street - 25'	10'
Side - 10' (2 sides combine)	
Rear - 15'	
Abutts R zone - 50'	20'

HPA architecture 42 Years

Conceptual Site Plan

Wildomar Commerce Center

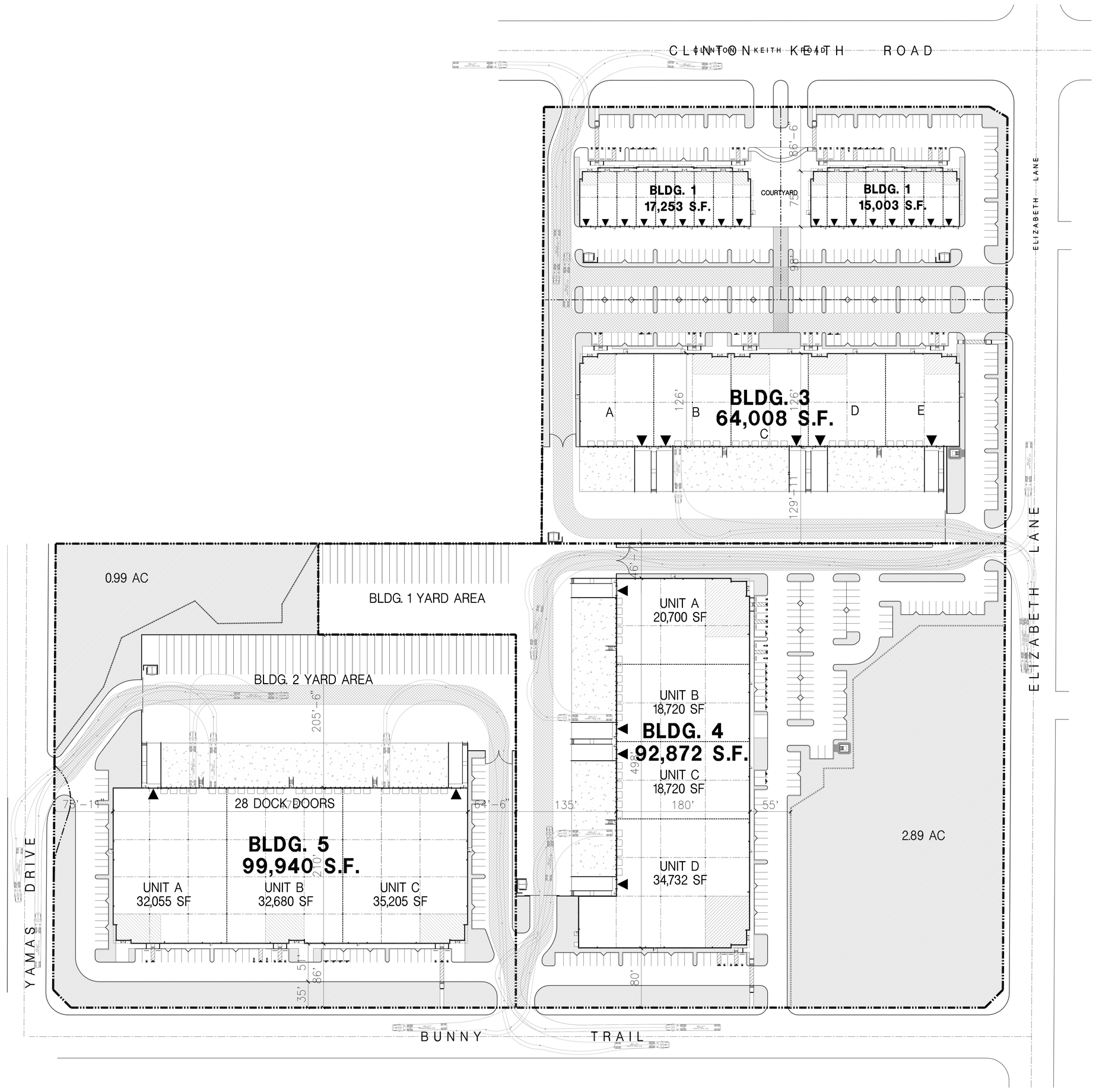
SUMMIT DEVELOPMENT CORPORATION

18831 Bardeen Ave. - Ste. #100
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(949) 863-1770
www.hparchs.com

City of Wildomar, County of Riverside, CA

January 18, 2023 / Job #22227

Scheme 13


CLINTON KEITH ROAD
CLINTON KEITH ROAD
BLDG. 1
17,253 S.F.
COURTYARD
BLDG. 1
15,003 S.F.
86'-6"
73'
98'
BLDG. 3
64,008 S.F.
A
B
C
D
E
126'
126'
129'-11"
ELIZABETH LANE
ELIZABETH LANE
0.99 AC
BLDG. 1 YARD AREA
BLDG. 2 YARD AREA
205'-6"
UNIT A
20,700 SF
UNIT B
18,720 SF
BLDG. 4
92,872 S.F.
UNIT C
18,720 SF
UNIT D
34,732 SF
498'
135'
180'
55'
80'
2.89 AC
73'-11"
28 DOCK DOORS
64'-6"
BLDG. 5
99,940 S.F.
UNIT A
32,055 SF
UNIT B
32,680 SF
UNIT C
35,205 SF
207'
YAMAS DRIVE
35'
51'
86'
BUNNY TRAIL

Appendix 5

Wildomar Commerce Center VMT Screening
City of Wildomar

January 18, 2023

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. Bryan Bentrott
SUMMIT DEVELOPMENT CORPORATION
190 Newport Center Drive, Suite 220
Newport Beach, CA 92660

SUBJECT: Wildomar Commerce Center VMT Screening, City of Wildomar

Dear Mr. Bentrott,

*TJW Engineering, Inc. (*TJW*)* is pleased to submit this VMT Screening for the Wildomar Commerce Center project located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The proposed project includes 32,260 square feet (SF) of retail land use and 261,820 SF of industrial land use. A site plan is attached for reference. The purpose of this memorandum is to summarize the project's VMT Screening.

Proposed Project

The Project is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The Tentative Parcel Map (TPM) 36492 proposed business, office, and retail land uses for a total of 391,140 square feet. Since the approval of the project, modifications have been made to the proposed project. The project is now comprised of retail and industrial uses for a total of 294,080 square feet.

Vehicle Miles Traveled (VMT) Screening

Senate Bill (SB) 743 was adopted in 2013 requiring the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act (CEQA). For land use projects, OPR has identified Vehicle Miles Traveled (VMT) as the new metric for transportation analysis under CEQA. The regulatory changes to the CEQA guidelines that implement SB 743 were approved on December 28th, 2018 with an implementation date of July 1st, 2020 as the new metric.

As the project falls within the City of Wildomar jurisdiction, the City of Wildomar adopted VMT CEQA Threshold Policy Guidelines (June 2020) was consulted. The document outlines guidelines for CEQA analysis including screening criteria and requirements for VMT assessment of land use projects. The VMT guidelines provide several screening criteria for projects.

The City of Wildomar Threshold Policy Guidelines (June 2020) indicates projects generating less than 110 trips per day are assumed to have a "de minimis" effect on VMT and is screened from further VMT analysis. To estimate the project's anticipated trip generation, and to provide consistency, the trip generation for the previously proposed site plan and the revised site plan was determined using the latest edition of the Institute of Transportation Engineers Trip Generation Manual (11th Edition). The attached table provides a summary of the proposed project trips for both the previously proposed land uses and the revised site plan. The proposed project will generate fewer daily trips than the previously approved Tentative Parcel Map 36492 (July 2013) and therefore would generate less than 110 trips per day. As a result, the proposed project is screened from a VMT analysis and is presumed to have a less-than-significant impact.

Summary

This memorandum provides an overview of the trip generation analysis for the proposed project. Based on the City of Wildomar Threshold Policy Guidelines (June 2020), the proposed project generates less than 110 daily trips and is screened from VMT analysis. Consistent with the City guidelines, the proposed project does not require additional VMT analysis.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

Thomas Wheat, PE, TE
President

Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*





David Chew, PTP
Transportation Planner

Previously Proposed Site Plan (2013)

Proposed Land Use[1]	Qty	Unit[2]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour					Pass-By % Reduction		
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume					
							In	Out	Total			In	Out	Total	AM	PM	Daily
Business Park (770)	294.90	TSF	12.44	3,669	1.35	85:15	339	60	399	1.22	26:74	94	266	360			
General Office Building (710)	42.42	TSF	10.84	460	1.52	88:12	57	8	65	1.44	17:83	11	51	62			
Medical Dental Office Building (720)	31.42	TSF	36.00	1,131	3.10	79:21	77	21	98	3.93	30:70	37	87	124			
Shopping Center (822)	19.40	TSF	54.45	1,056	2.36	60:40	28	18	46	6.59	50:50	64	64	128			
Fast-Food with Drive-Through (934)	3.00	TSF	467.48	1,402	44.61	51:49	68	66	134	33.03	52:48	52	48	100	50%	55%	50%
Sub Total				7,718			570	172	742			257	517	774			
Pass-By Trips				-701			-34	-33	-67			-29	-26	-55			
Net Total				**7,017**			**536**	**139**	**675**			**229**	**490**	**719**			

1: Rates from ITE Trip Generation (11th Edition, 2021)

2: TSF = Thousand Square Feet

Revised Site Plan (2023)

Proposed Land Use[1]	Qty	Unit[2,3]	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour					Pass-By % Reduction		
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume					
							In	Out	Total			In	Out	Total	AM	PM	Daily
Shopping Center (822)	32.26	TSF	54.45	1,757	2.36	60:40	46	31	77	6.59	50:50	106	106	212			
General Industrial (110)	261.82	TSF	4.87	1,275	0.74	88:12	171	23	194	0.65	14:86	24	147	171			
Passenger Vehicles (78%)[3]	1.000	PCE[3]		995			133	18	151			19	115	134			
2-Axle Trucks (8%)[3]	1.500	PCE[3]		153			20	3	23			3	18	21			
3-Axle Trucks (4%)[3]	2.000	PCE[3]		102			14	2	16			2	12	14			
4-Axle Trucks (10%)[3]	3.000	PCE[3]		383			51	7	58			7	44	51			
PCE Sub Total				3,389			265	60	325			137	295	432			
Pass-By Trips				0			0	0	0			0	0	0			
PCE Net Total				**3,389**			**265**	**60**	**325**			**137**	**295**	**432**			

1: Rates from ITE Trip Generation (11th Edition, 2021)

2: TSF = Thousand Square Feet

3: PCE=Passenger Car Equivalent; rates based on Fontana Truck Study 2003 for Industrial land use and County of Riverside TIA Guidelines 2020

CAUTION: IF THIS SHEET IS NOT 30"X42", IT IS A REDUCED PRINT

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

north

1" = 60'

0 60 120 180

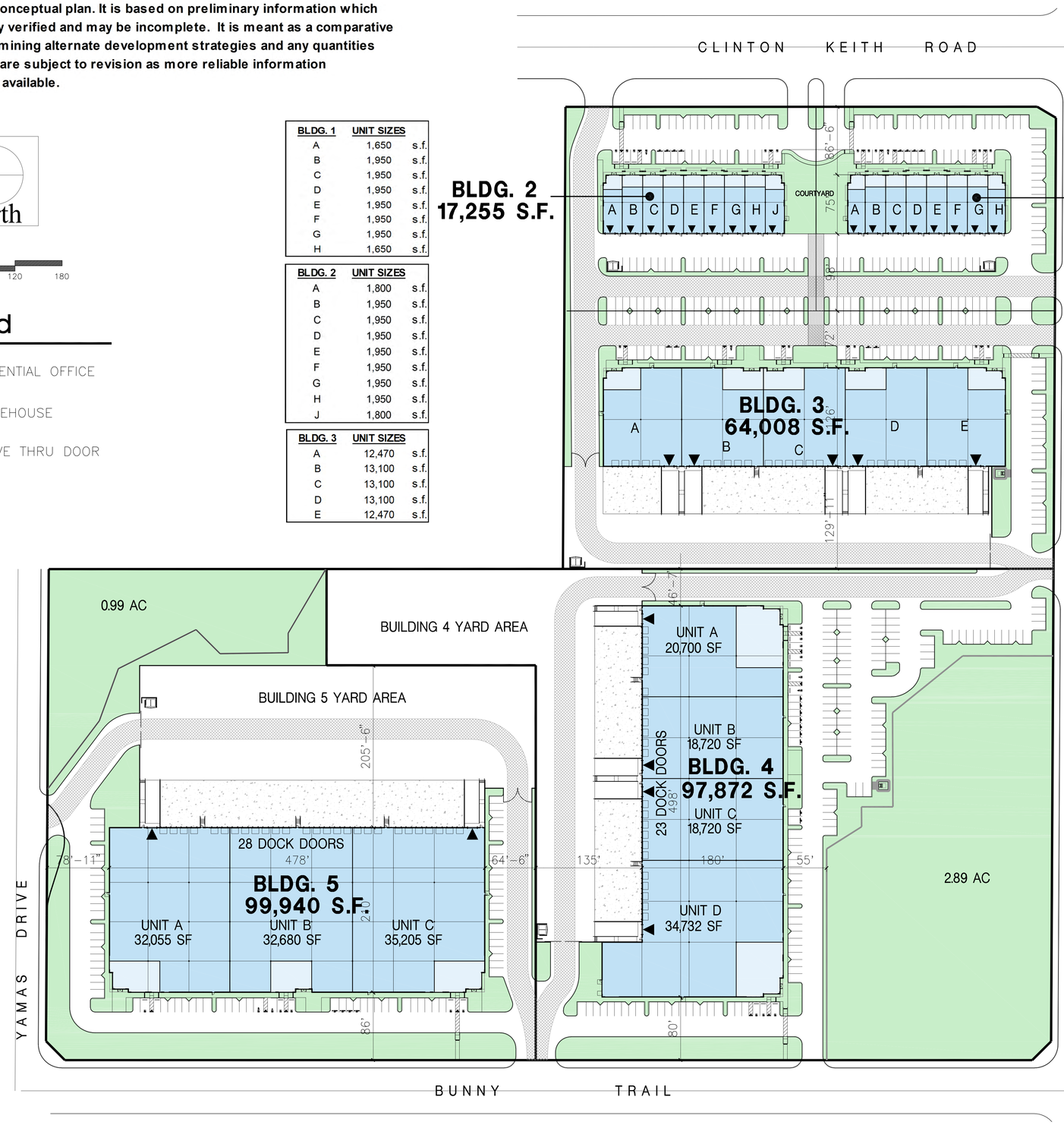
Legend

- POTENTIAL OFFICE
- WAREHOUSE
- ▼ DRIVE THRU DOOR

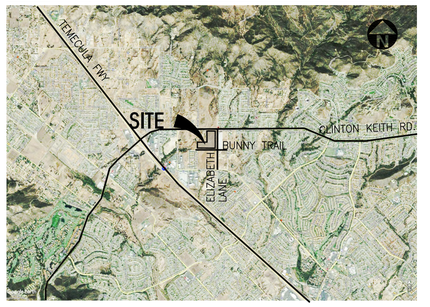
BLDG. 1	UNIT SIZES	
A	1,650	s.f.
B	1,950	s.f.
C	1,950	s.f.
D	1,950	s.f.
E	1,950	s.f.
F	1,950	s.f.
G	1,950	s.f.
H	1,650	s.f.

BLDG. 2	UNIT SIZES	
A	1,800	s.f.
B	1,950	s.f.
C	1,950	s.f.
D	1,950	s.f.
E	1,950	s.f.
F	1,950	s.f.
G	1,950	s.f.
H	1,950	s.f.
J	1,800	s.f.

BLDG. 3	UNIT SIZES	
A	12,470	s.f.
B	13,100	s.f.
C	13,100	s.f.
D	13,100	s.f.
E	12,470	s.f.



Aerial Map



Tabulation

	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	TOTAL	
SITE AREA							
In s.f.	79,025	82,490	203,021	386,612	314,776	1,065,924	s.f.
In acres	1.81	1.89	4.66	8.88	7.23	24.47	ac
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Front / Street - 25'	10'
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Abutts R zone - 50'	20'

HPA architecture 42 Years

Conceptual Site Plan

Wildomar Commerce Center

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City of Wildomar, County of Riverside, CA

January 18, 2023 / Job #22227

Scheme 13

1161

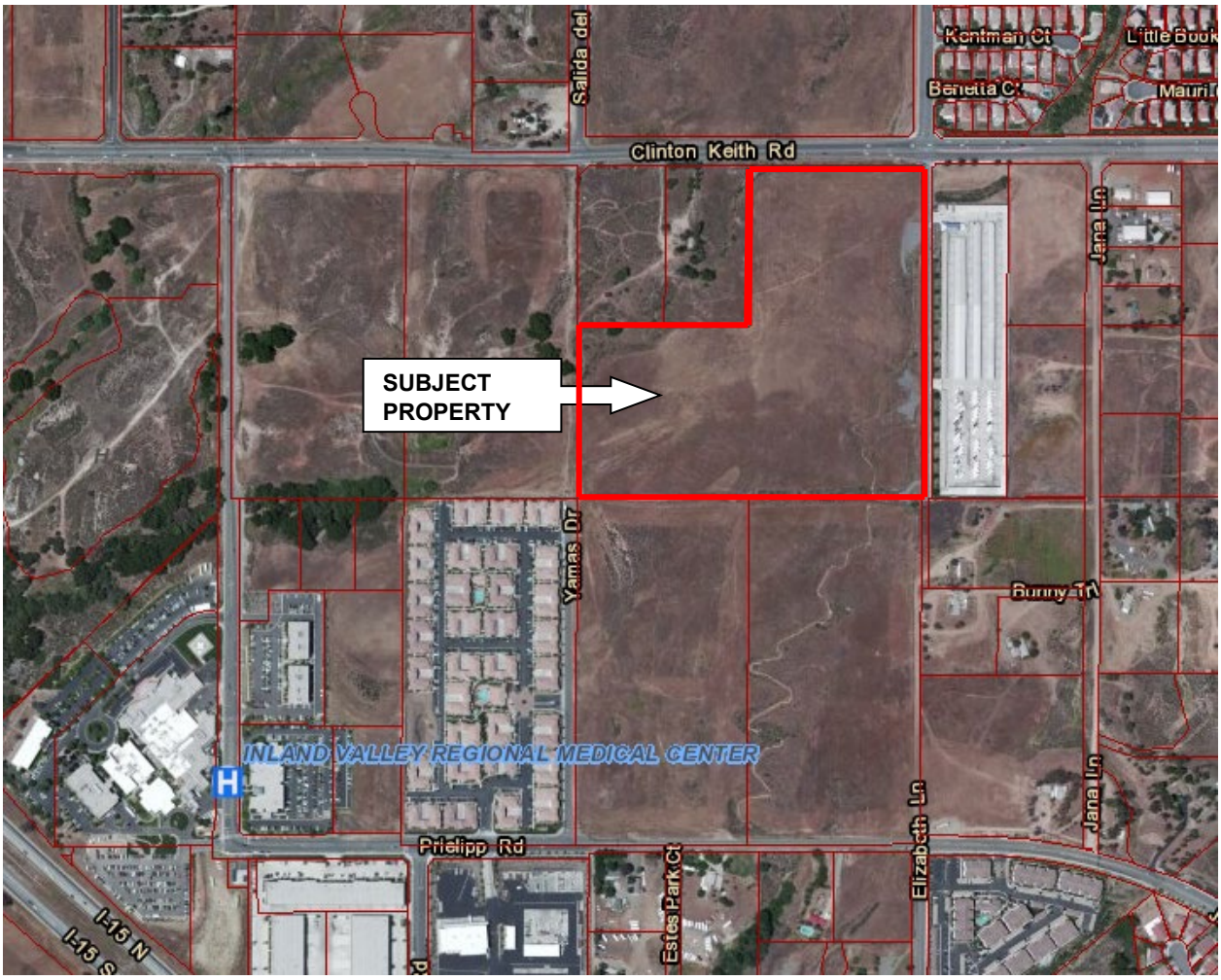
ATTACHMENT E

Project Specifics Aerials & Tables

Project Location/Vicinity:

The project site encompasses approximately 26.8 acres and is located at the SWC of Clinton Keith Road and Elizabeth Lane. The site is currently vacant and is located in the southeast part of the city east of the Inland Valley Hospital complex. The aerial photo below shows the project site and surrounding area.

Vicinity/Location Map

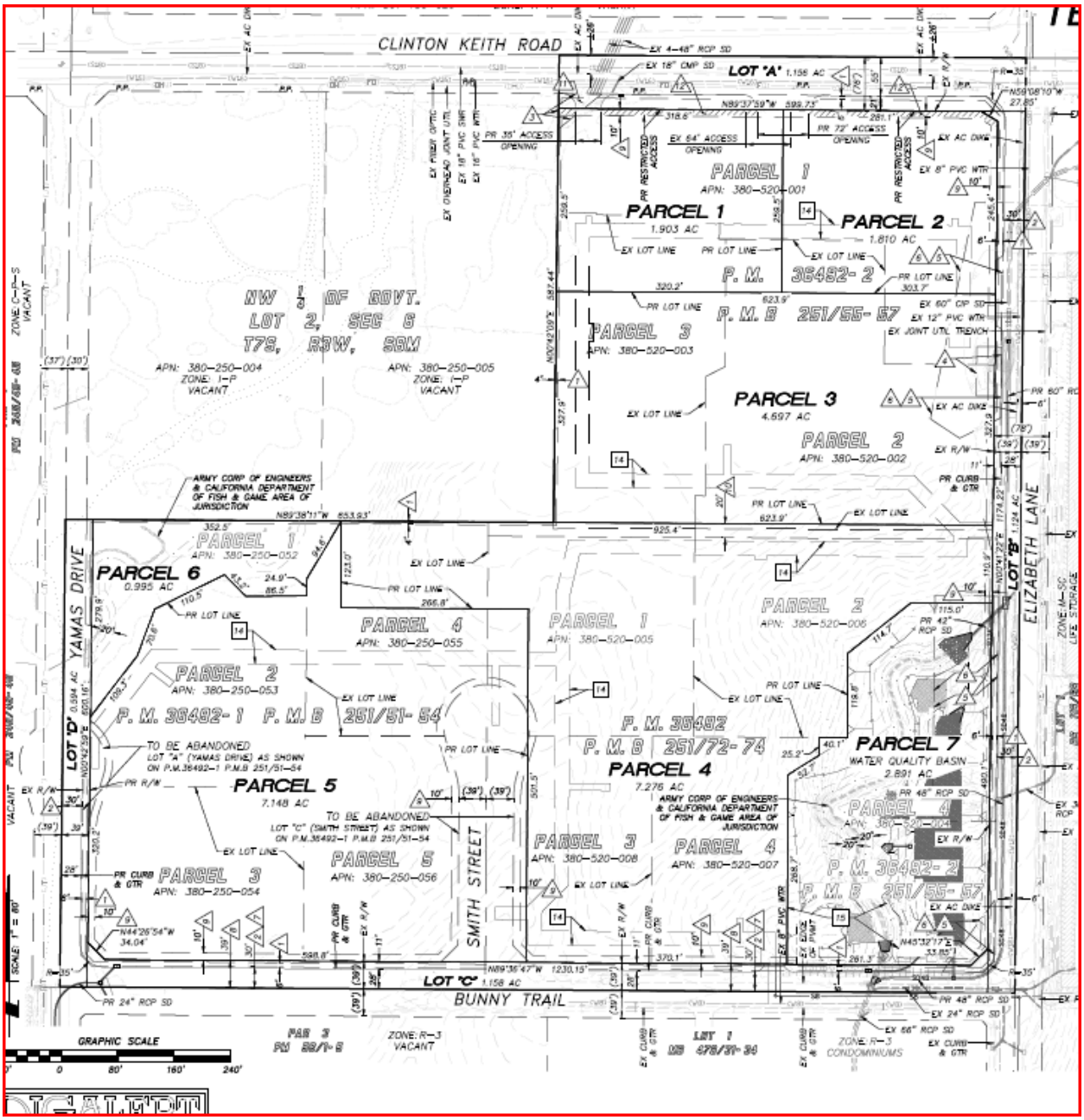


Surrounding Land Uses:

The project site is surrounded primarily by vacant land. There is a self-storage facility to the east and the Santa Rosa Apartments and Inland Valley Hospital to the southwest. The summary table on the following page lists the current land uses, general plan land use, and zoning designations for the site and abutting properties. Staff has also provided two exhibits (on the following pages) showing the general plan land use and zoning designations from our GIS database.

ADJACENT LAND USE, GENERAL PLAN, AND ZONING			
Location	**Current Land Use**	**General Plan Land Use Designation**	**Zoning Designation**
Subject Property	Vacant	Business Park (BP)	I-P (Industrial Park)
North	Vacant	Open Space Recreation OS-R	R-R (Rural Residential)
South	Vacant	High Density Residential (HDR)	R-3 (General Residential)
East	Self-Storage Facility	Business Park (BP)	M-SC (Manufacturing Service Commercial)
West	Vacant	Business Park (BP) & Highest Density Residential (HHDR)	I-P & R-3

Parcel Map No. 38646 Exhibit



Tentative Parcel Map No. 38646:

The proposed Parcel Map is required to meet the minimum development standards outlined in Section 17.88.040.A of the I-P zone related to lot size and width. A summary of the 7-lot parcel map is provided in the table below. In terms of lot size and depth, the parcel map exceeds the minimum development standards of the I-P zone.

Parcel Map No. 38646 Development Standard Table

PARCELS	LOT SIZE (ACRES)	MINIMUM LOT SIZE REQUIRED (S.F.)	MINIMUM LOT WIDTH (FEET)	PROPOSED LOT WIDTH (FEET)	EXCEEDS MINIMUM STANDARDS
1	1.90 AC	20,000	100	320	Yes
2	1.80 AC	20,000	100	303	Yes
3	4.59 AC	20,000	100	623	Yes
4	7.27 AC	20,000	100	370	Yes
5	7.14 AC	20,000	100	598	Yes
6	0.99 AC	20,000	100	100 Ave.	Yes
7	2.80 AC	20,000.	100	115 Min.	Yes

SUBJECT: Capital Improvement Program/General Plan Consistency (FY 2023/24)

SUBMITTED BY: Jason Farag

PREPARED BY: Jason Farag

ACTION:
Adopt a Resolution entitled:

PC RESOLUTION NO. 2023-XX
A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, DETERMINING THAT FISCAL YEAR 2023/24 CIP PROJECTS OF THE FY 2023/24 – 2027/28) FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP) IS IN CONFORMANCE WITH THE CITY OF WILDOMAR GENERAL PLAN

FISCAL IMPACT:
There is no fiscal impact at this time. Funding for the various projects in the CIP will be included in the FY 23/24 and FY 24/25 budget that is presented to the City Council for approval. Some projects will be budgeted for funding in the upcoming budget cycle (FY 23/24 - 24/25) while other projects will be planned for funding, but not yet budgeted, in future years of the CIP.

PROJECT DESCRIPTION:
Sections 65401 and 65402 of the California Government Code require that a local agency's Capital Improvement Program (CIP) be in conformance with the General Plan. State law also mandates that this determination of conformance be made by a designated planning agency. For the City of Wildomar, the designated planning agency is the Planning Commission. The purpose of this staff report is to present the Public Works CIP projects for FY 2023/24 so the Commission can make a determination of consistency with our adopted General Plan. This is an annual review performed by the Commission since incorporation.

PROJECT ANALYSIS:
The City's current CIP program sets out a long-term capital improvement program budget for

the City. The complete CIP document identifies both funding sources and capital projects to be funded each year for the next five (5) fiscal years (FY 2023/24 – 2027/28). The CIP project priorities and projected funding amounts are addressed annually by the City Council. Per Council policy, the Planning Commission does not have authority over CIP projects or their budgets. The Planning Commission's determination that the identified CIP projects and activities proposed for the five-year CIP program are in conformance with the General Plan satisfies state law.

General Plan conformity can be best described as CIP projects furthering the achievement of the goals, policies, and infrastructure in the General Plan. For example, the construction of a particular roadway identified in the General Plan would be considered consistent if the roadway is depicted on the Circulation Element map, identified in the goals and policies, and/or listed as an implementation program/activity.

The CIP Program improvement projects have been categorized by function and type. PC Resolution No. 2023-14 (Attachment A, Exhibit 1) includes the list of capital improvement projects for the five-year CIP by category. Table 1 below identifies the corresponding General Plan Policy that each CIP category addresses. The general scope for each category includes associated activities pertaining to planning, environmental, engineering, design, right of way acquisition, preparation of construction documents, advertisement for construction bids, construction, and administrative/management tasks.

Staff has reviewed the proposed FY 2023/24 capital improvement projects and has determined that the proposed projects are consistent with the goals and policies of the General Plan. As shown in Table 1 below, these activities are consistent with several of the Elements of the General Plan. The specific Circulation, Land Use, and Safety Element policy statements are summarized as follows:

Circulation Element Policies

- Policy 3.1 - Design, construct, and maintain City roadways as specified in the City Road Improvement Standards and Specifications.
- Policy 3.2 - Maintain the existing transportation network, while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.
- Policy 3.12 - Improve highways serving as arterials through mountainous and rural areas to adequately meet travel demands and safety requirements while minimizing the need for excessive cut and fill.
- Policy 3.13 - Design street intersections, where appropriate, to assure the safe, efficient passage of through-traffic and the negotiation of turning movements.
- Policy 3.15 - Provide adequate sight distances for safe vehicular movement at a road's design speed and at all intersections.
- Policy 4.1 - Provide facilities for the safe movement of pedestrians within developments.

- Policy 4.2 - Maximize visibility and access for pedestrians and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Special emphasis should be placed on the needs of disabled persons considering Americans with Disabilities Act (ADA) regulations.
- Policy 4.4 - Plan for pedestrian access that is consistent with road design standards while designing street and road projects. Provisions for pedestrian paths or sidewalks and timing of traffic signals to allow safe pedestrian street crossing shall be included.
- Policy 4.5 - Collaborate with local communities to ensure that school children have adequate transportation routes available such as local pedestrian or bike path, or local bus service.
- Policy 4.7 - Encourage safe pedestrian walkways that comply with the American Disabilities Act (ADA) requirements within commercial, office, industrial, mixed use, residential, and recreational developments.

Land Use Element Policies

- Policy 3.2 - Use open space, greenways, recreational lands, and watercourses as community separators.
- Policy 8.3 - Incorporate open space, community greenbelt separators, and recreational amenities into Community Development areas in order to enhance recreational opportunities and community aesthetics and improve the quality of life.
- Policy 19.1 - The City shall develop and maintain a regional park system that provides recreational opportunities for residents and visitors of Riverside County.
- Policy 25.1 - Accommodate the development of public facilities in areas appropriately designated by the General Plan and area plan land use maps.
- Policy 25.5 - Require that public facilities be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area.

Safety Element Policies

- Policy 4.6 - Direct flood control improvement measures toward the protection of existing and planned development.

As demonstrated, the activities in the draft Capital Improvement Program to be reviewed by the City Council are consistent with the General Plan. Therefore, the Staff is recommending that the Planning Commission adopt PC Resolution No. 2023-14 making a finding that the FY 2023/24 Capital Improvement Program project and activities are consistent with the General Plan.

Table 1 - Scope of Capital Projects in the 5-Year CIP

Capital Improvement Project Category	Project Scope	General Plan Element

Transportation - Roads	Road and intersection improvements based on standard plans and/or engineered design including pavement, drainage, walkways, bike lanes, landscape	Circulation Element
Transportation - Signals	Intersection improvements for traffic signals including safety lighting, signing, striping, controllers, detectors, pedestrian crosswalk improvements, and associated improvements	Circulation Element, Safety Element
Transportation - Maintenance	Remove, replace, repair public works facilities within the public right of way including paving, curb and gutter, sidewalk, ramps, signing, striping, drainage	Circulation Element, Safety Element
Drainage	Drainage improvements associated with regional or local master planned drainage facilities	Circulation Element, Safety Element
Parks	Park Land Acquisition and Park Improvements to existing parks or future master planned parks	Land Use Element
Trails	Improvement of multi-use facilities generally identified in the adopted Active Transportation Plan and/or at locations providing alternate transportation options	Circulation Element
Cemetery	Improvements to the Wildomar Cemetery, in conformance with the Wildomar Cemetery Master Plan.	Land Use Element

ATTACHMENTS:

PC Resolution No. 2023-14-CIP LIst.pdf

ATTACHMENT A

PC Resolution No. 2023-14

PC RESOLUTION NO. 2023-14

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF WILDOMAR, CALIFORNIA, DETERMINING THAT FISCAL YEAR 2023/24 CIP PROJECTS OF THE FY 2023/24 – 2027/28) FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP) IS IN CONFORMANCE WITH THE CITY OF WILDOMAR GENERAL PLAN

WHEREAS, the City of Wildomar adopted its General Plan on July 1, 2008; and

WHEREAS, the General Plan contains a Circulation Element which describes the future layout and configuration of the road network within the City; and

WHEREAS, the City Council of the City of Wildomar has designated the City Planning Commission as the planning agency for the City of Wildomar; and

WHEREAS, State Law requires that designated planning agencies review the capital improvement program to ensure compliance with the adopted General Plan; and

WHEREAS, the City has identified a number of project priorities for implementation during the five year period of the capital improvement program included in Exhibit 1 – Project List; and

WHEREAS, the Planning Commission examined the capital construction projects identified in the capital improvement program; and

WHEREAS, the Planning Commission compared these future projects with the projected roadway improvements identified in the adopted Circulation Element; and

WHEREAS, the Planning Commission also examined the ongoing capital improvement program and determined that these projects are specifically supported by Circulation Element Policies 3.1, 3.2, 3.12, 3.13, 3.15, 4.1, 4.2, 4.4, 4.5, and 4.7; and

WHEREAS, the Planning Commission also examined the ongoing capital improvement program and determined that these projects are specifically supported by Land Use Element Policies 3.2, 8.3, 19.1, 25.1, and 25.5; and

WHEREAS, the Planning Commission also examined the ongoing capital improvement program and determined that these projects are specifically supported by Safety Element Policy 4.6; and

WHEREAS, the Planning Commission further determines that the programs in the multi-year CIP are specifically supported by Circulation Element Policies 3.1, 3.2, 3.12, 3.13, and 3.15; and

WHEREAS, on May 3, 2023 the Planning Commission, during a regularly scheduled meeting, took public testimony and considered the projects and programs identified for Fiscal Year 2023/24 – 2027/28 Capital Improvement Program (CIP) for consistency with the City's adopted General Plan.

NOW THEREFORE, the Planning Commission of the City of Wildomar, does hereby resolve, determine and order as follows:

SECTION 1. PLANNING COMMISSION FINDING

In accordance with Sections 65401 and 65402 of the California Government Code, the Planning Commission, in light of the whole record before it, including but not limited to the Planning Department's staff report and all documents incorporated by reference therein, and the City's General Plan, hereby finds and determines as follows:

A. The proposed FY 2023/24 capital improvement projects of the 2023/24– 2027/28 Capital Improvement Program are consistent with the City of Wildomar General Plan.

Evidence: The FY 2023/24 capital improvement projects and ongoing program activities that are contained in FY 2023/24 of the 2023/24 - 2027/28 Capital Improvement Program (CIP) are consistent with the adopted General Plan by furthering the goals and policies of the Circulation Element, including Policies 3.1, 3.2, 3.12, 3.13, 3.15, 4.1, 4.2, 4.4, 4.5, and 4.7; Land Use Element, including Policies 3.2, 8.3, 19.1, 25.1, and 25.5; and Safety Element Policy 4.6 as discussed in the May 3, 2023 staff report.

SECTION 2. PLANNING COMMISSION ACTION

The Planning Commission hereby adopts PC Resolution No. 2023-14 determining that the Fiscal Year 2023/24 CIP projects of the Fiscal Year 2023/24 – 2027/28 Capital Improvement Program, as outlined in Exhibit 1 of this Resolution, are in conformance with the City of Wildomar General Plan.

PASSED, APPROVED AND ADOPTED this 3rd day of May, 2023 by the following vote:

AYES.

NOES:

ABSENT:

ABSTAINED:

_____
Kim L. Strong
Planning Commission Chair

ATTEST:

_____
Matthew C. Bassi
Community Development Director/Minutes Secretary

APPROVED AS TO FORM:

_____
Stephanie Gutierrez
Assistant City Attorney

Exhibit 1

FY 23/24-27/28 Project List

Transportation - Roads	Transportation - Signals
• Bundy Canyon Rd. (east) Widening (I-15 to Sunset) • Clinton Keith Rd. Widening (I-15 to Copper Craft Dr.) • Palomar St. Widening (Mission Trail to Jefferson Ave.) • Mission Trail Improvements (Elberta Rd. to Malaga Dr.) • Bundy Canyon Rd./I-15 Interchange Project Study Report (PSR) • Wildomar Trail/I-15 Interchange Project Study Report (PSR) • Monte Vista Dr. Widening (Bundy Canyon Rd. to Canyon Dr.) • Bundy Canyon Rd. (west) Widening (Mission Trail to I-15) • Sedco Blvd. Roadway Safety Improvement Project	• Bundy Canyon Rd./Oak Circle Dr. Traffic Signal • Bundy Canyon Rd./The Farm Rd. Traffic Signal • Bundy Canyon Rd./Orchard St. Traffic Signal • Bundy Canyon Rd./Almond St. Traffic Signal • Bundy Canyon Rd./Sellers Rd. Traffic Signal • Bundy Canyon Rd./Monte Vista Dr. Traffic Signal • Bundy Canyon Rd./Harvest Way (west) Traffic Signal • Grand Ave. and Sheila Ln. Roundabout • Traffic Signal Retrofits and Upgrades (various locations) • Pedestrian Crosswalk Enhancement Project (various locations)
Transportation - Maintenance	**Drainage**
• Citywide Maintenance Program • Pavement Rehabilitation Program • Slurry Seal Program • Right-of-Way Enhancement Program • Streetlight Maintenance Program • Traffic Signal Maintenance Program • Accessibility Improvement Program	• Master Drainage Plan (MDP) Update • Line C Basin and Storm Drain (Monte Vista Dr./Bundy Canyon Rd.) • Citywide Drainage Improvements • Wildomar Channel/McVicar St. Crossing (culverts) • Sedco MDP Line F-2 Storm Drain (Lost Rd. to Sedco MDP Basin) • Catch Basin Filter Retrofit • Line G Storm Drain (Stages 1 and 2 – Canyon Dr. to Corydon St.) • Murrieta Creek/Wildomar Channel Right-of-Way Improvements
Trails	**Parks**
• Bundy Canyon Rd. Active Transportation Corridor (Monte Vista Dr. to The Farm Rd.) • Murrieta Creek Regional Trail (Gates and Signage) • Mission Trail/Sedco Sidewalk (Phase 3) (Elberta Rd. to Malaga Dr.) • Palomar St./Bryant Street Trail • Bundy Canyon Rd. Sidewalk and Bike Lanes (Almond St. to Canyon Ranch Rd.)	• Regency Heritage Park Rehabilitation • 27-Acre Park (to be named) (La Estrella/Peggy Ln./Susan Dr.) • 11-Acre Park (to be named) (Grand Ave./Leslie St.)
Buildings	**Cemetery**
• Fire Station 61 Site Improvements • New Wildomar Fire Station #2 (East of I-15) • Interim Field Operations Center	• Cemetery Improvements (Phase 1)